



# Exeter Airport Airspace Change Proposal

## Design Principles Evaluation

## Document Details

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# Glossary

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Acronym	Meaning
aal	Above Aerodrome Level
ACP	Airspace Change Proposal
AMS	Airspace Modernisation Strategy
amsl	Above Mean Sea Level
ATC	Air Traffic Control
ATZ	Aerodrome Traffic Zone
CAA	Civil Aviation Authority
CAP	Civil Aviation Publication
CAS	Controlled Airspace
CAT	Commercial Air Transport
CTA	Control Area
CTR	Control Zone
ft	feet
GA	General Aviation
ILS	Instrument Landing System
IAF	Initial Approach Fix
IF	Intermediate Fix
nm	nautical mile
RMZ	Radio Mandatory Zone
RNP	Required Navigation Performance
SID	Standard Instrument Departure
TMZ	Transponder Mandatory Zone

Acronym	Meaning
VFR	Visual Flight Rules

# 1 Introduction

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## 1.1 Background

The Exeter Airport Airspace Change Proposal (ACP) is currently at Stage 2 – Develop and Assess – of the Civil Aviation Publication (CAP) 1616 Airspace Design process. Step 2A requires the change sponsor to develop a comprehensive list of options that each address the Statement of Need and that align with the Design Principles developed in Stage 1. As the change sponsor, Exeter Airport has tested these options with those stakeholders that were invited to contribute to the development of the Design Principles. The Design Principle Evaluation shows to what extent the options meet the Design Principles.

This document articulates the evaluation of each of the options against each of the Design Principles developed during Stage 1, and forms part of the document set required as evidence to satisfy the Stage 2 Develop and Assess Gateway. This document should be read alongside the Exeter Airport Airspace Change Proposal Options Development document which has also been uploaded to the Civil Aviation Authority (CAA) airspace portal at Step 2A:

<https://airspacechange.caa.co.uk/PublicProposalArea?pID=62>

## 1.2 Prioritised List of Design Principles

The work undertaken during Stage 1 helped to establish a prioritised shortlist of Design Principles to act as a framework against which Design Options have been drawn up. The prioritised list of Design Principles is shown in Table 1 below.

Prioritised DP	Design Principle
1	SAFETY – Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area
2	HARMONISATION – Airspace design must accord with the CAA’s published Airspace Modernisation Strategy (AMS) and any future plans associated with it
3	PROTECTION – New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport
4	ACCESS – Any new airspace should facilitate fair access to all airspace users
5	MINIMISE IMPACT – Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area

Prioritised DP	Design Principle
6	DIMENSIONS – The size and categorisation of any new controlled airspace should be proportionate to the requirement
7	CONNECTIVITY – Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport
8	ENVIRONMENT – Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace

Table 1 – Prioritised Design Principles

### 1.3 Step 2B – Options Appraisal

The second part of Stage 2 (Step 2B) involves the development of a short list of options that can be taken forward to Stage 3 (Consultation). Options Appraisal is used as a tool throughout the CAP 1616 process to help refine the options from an initial long list, down to a shortlist and a final set of preferred options. The process is iterative with an Initial Options Appraisal used to whittle down the longlist in Step 2B, a Full Options Appraisal of the shortlist taking place in Stage 3 (Step 3A) prior to consultation, and the Final Options Appraisal supporting the submission of the ACP application to the CAA.

The Initial Options Appraisal, carried out at Step 2B, will be a qualitative assessment of the impacts of each of the individual procedure options. During Consultation preparation in Stage 3, each of the individual procedure designs will be considered in combination with other procedures to create an ‘operational picture’ of where aircraft arriving at and departing from Exeter Airport will fly. These combined options will be the subject of the Full Options Appraisal, which will be a quantitative assessment that will determine the costs and benefits of each alternative.

At the end of Step 2B, Exeter Airport will submit details of the options developed and the Initial Options Appraisal to the CAA for assessment at the Stage 2 Develop and Assess Gateway.

## 2 Design Principles Evaluation – Do Nothing

### 2.1 Evaluation of the Do Nothing Option against the Design Principles

The Do Nothing option has been assessed against the prioritised list of Design Principles shown in Table 1 in Section 1 above.

The table below gives an overview of how the Do Nothing option aligns to each Design Principle; it shows a summary of the analysis conducted for the option with a high-level assessment of whether the Design Principle is either not met, partially met or fully met, as follows:

- A **green** box indicates that the Design Principle has been **met** by the specified option.
- An **orange** box means that the Design Principle has been **partially met** by the specified option.
- A **red** box indicates that the Design Principle has **not been met** by the specified option.

The assessment criteria in Table 3 below have been used to determine whether each design option has Met, Partially Met or Not Met each of the Design Principles. If a design option does not meet any of Design Principles, it will be rejected and not taken forward to Step 2B, Initial Options Appraisal.

Design Principle	Assessment Criteria		
	Not Met	Partially Met	Met
SAFETY – Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	There is evidence to suggest that this option might be detrimental to safety, and that suitable mitigation may not be possible.	Indicative evidence suggests that the introduction of robust safety mitigations may be necessary.	There is no evidence to suggest that this option would be unsafe.



Design Principle	Assessment Criteria		
	Not Met	Partially Met	Met
HARMONISATION – Airspace design must accord with the CAA’s published Airspace Modernisation Strategy (AMS) and any future plans associated with it.	This option does not meet the known outcomes of the AMS.	With minor modification, this option would meet the known outcomes of the AMS  This option does not meet some of the known requirements of the AMS but will have low impact.	This option meets the known outcomes of the AMS.
PROTECTION – New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	This option does not create a known traffic environment or protect the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.	This option creates a known traffic environment for some operations only that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.	This option creates a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.
ACCESS – Any new airspace should facilitate fair access to all airspace users.	Other airspace users will be denied access to any new airspace.	This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace.	Access to any new airspace is permitted without any additional requirements.
MINIMISE IMPACT – Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	This option will impose restrictions on other airspace users that will have no suitable mitigation and will have an impact on their operations.	This option does not impose any restrictions on other airspace users but may have an impact on their operations. Exeter Airport is committed to introducing suitable mitigation to minimise any impact.	This option will have little or no impact on other airspace users.

Design Principle	Assessment Criteria		
	Not Met	Partially Met	Met
<p><b>DIMENSIONS</b> – The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	<p>This option does not fully protect the final approach and climb out paths or contain SID or Transition procedures.</p> <p>SID or Transition procedures are not all contained and the amount of Controlled Airspace is considered excessive to protect the final approach and initial climb out paths.</p> <p>The SIDs can be contained but the amount of Controlled Airspace to do so would be large.</p>	<p>This option protects the final approach and initial climb out paths but does not contain SID or Transition procedures.</p>	<p>This option protects the final approach and climb out paths and contains the SID and Transition procedures.</p> <p>The procedure can be contained in a small amount of airspace.</p>
<p><b>CONNECTIVITY</b> – Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	<p>This option does not connect to the airways structure.</p> <p>This option provides connectivity to the airways structure but does not ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	N/A	<p>This option provides connectivity to the airways structure. Commercial Air Transport can remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>

Design Principle	Assessment Criteria		
	Not Met	Partially Met	Met
ENVIRONMENT – Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	Up to 4,000 ft, this option is expected to significantly increase any adverse impacts of noise compared to current operations <sup>1</sup> .  Aircraft emissions up to 7,000 ft are expected to increase significantly compared to current operations with this option.	Up to 4,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. Between 4,000 ft and 7,000 ft, this option is expected to increase any adverse impacts of noise compared to current operations.  Aircraft emissions up to 7,000 ft are expected to be similar compared to current operations with this option.	Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations.  This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations.

Table 2 – Design Principles Assessment Criteria

When assessing the options against Design Principle 8 (ENVIRONMENT), the potential environmental impact of the changes were considered in line with the Air Navigation Guidance 2017 and the government laid-out altitude based priorities. That is, the environmental priority from the ground to 4,000 ft would be to limit and, where possible, reduce the total adverse effects of aviation noise on people. Between 4,000 ft and 7,000 ft, the environmental priority would continue to be minimising the impact of aviation noise, unless that would create a disproportionate increase in CO<sub>2</sub> emissions. In the airspace above 7,000 ft, the priority will be the reduction of CO<sub>2</sub> emissions. Exeter Airport is only responsible for the airspace changes up to 7,000 ft.

The minimum requirement for protection of aircraft on the final approach would be for protection from the Intermediate Fix (IF) or on the ILS approach where they are lined up in the direction of the runway, prior to commencing the descent.

The minimum requirement for protection of aircraft on the initial climb out path would be for protection until 2,000 ft above the aerodrome level, at which point the transition from take-off to en-route configuration is completed. For SID procedures, the point at which aircraft reach 2,000 ft will be based on a climb gradient of 8% (4.6°), which has been used for procedure design as this is a suitable profile for all commercial aircraft that operate from Exeter Airport.

<sup>1</sup> If an option is expected to significantly increase any adverse impacts of noise up to 4,000 ft, the Environmental Design Principle will be NOT MET, irrespective of the noise impact between 4,000 ft and 7,000 ft.

The Policy for the Design of Controlled Airspace Structures, published in August 2022, covers the requirements for airspace design and the containment of procedures. Current UK policy is that a SID provides a specified Instrument Flight Rules (IFR) departure procedure that remains wholly within CAS and permits connectivity with the en-route Air Traffic Service (ATS) route system. For this reason, a SID must originate at an aerodrome that is also within CAS. The policy also covers the requirements for Standard Arrival Routes (STARs), which are deemed to incorporate RNAV Transitions to Final Approach procedures. An RNAV Transitions to Final Approach procedure is the UK terminology to describe the RNAV initial approach segment from an RNAV Hold Fix to the Final Approach Fix which includes both lateral and vertical guidance and is designed in accordance with PANS-OPS 8168. The Policy for the Design of Controlled Airspace Structures states that these procedures should also be contained in CAS. An omnidirectional departure is a method of providing an obstacle-cleared instrument departure at aerodromes outside CAS and as such, there are no requirements to contain an omnidirectional departure within CAS.

## 2.2 Do Nothing (Departures) Evaluation

Design Principle Evaluation	OPTION NO: Do Nothing (Departures)		
<i>Option Name:</i> Do Nothing (Departures)	ACCEPT		
<i>Description of Option:</i> The Do Nothing (Departures) option represents the current operating procedures for aircraft departing from Exeter Airport. The airport has an Aerodrome Traffic Zone (ATZ), 2.5 nm radius from surface to 2,000 ft above aerodrome level (aal). Departing aircraft follow the Noise Abatement Procedures before routing direct as flight planned to join the en-route airways network.			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> ATC monitoring would continue to be required to provide safe separation from known or unknown traffic. Although Exeter ATC handles the current operational issues safely and effectively on a tactical basis, the busy air traffic environment may result in overload situations as controllers try to control aircraft in a limited volume of airspace. Evidence suggests that robust safety mitigations in the form of new airspace (this ACP) may be necessary to provide protection for aircraft operating in the vicinity of Exeter Airport.			
<b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Some key outcomes of Airspace Modernisation (enabling integration and avoiding flight delays by better managing the airspace network) may not be met. However, the impact is expected to be low. Exeter Airport's location means that there will be few, if any, interactions with other airports that require resolving and improvements to the airspace above 7,000 ft should facilitate better access to the network, improving integration and reducing the chance of flight delays.			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option creates a known traffic environment for some operations only. ATC monitoring would be required to provide protection for aircraft on initial climb-out paths.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> There are no current restrictions to access of the airspace around Exeter Airport, other than the requirements of the ATZ.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will have no impact on other airspace users.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not require Controlled Airspace as there is no containment requirement.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport (CAT) remain inside Controlled Airspace (CAS) when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option relates only to the current departure procedures in place at Exeter Airport and not the airspace. Therefore, this Design Principle has not been assessed for this option.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will maintain the current environmental impacts.			

### 2.2.1 Do Nothing (Departures) Option

The Do Nothing (Departures) option represents the current situation where there are no published departure Instrument Flight Procedures. Departing aircraft follow the Noise Abatement Procedures before routing direct as flight planned, through Class G airspace, to join the en-route airways network. ATC monitoring is required to provide safe separation from known or unknown traffic.

## 2.3 Do Nothing (Arrivals) Evaluation

Design Principle Evaluation	OPTION NO: Do Nothing (Arrivals)		
<i>Option Name:</i> Do Nothing (Arrivals)	ACCEPT		
<i>Description of Option:</i> The Do Nothing (Arrivals) option represents the current operating procedures for aircraft arriving at Exeter Airport. The airport has an Aerodrome Traffic Zone (ATZ), 2.5 nm radius from surface to 2,000 ft above aerodrome level (aal). Aircraft arriving at the airport will follow ATC instructions for vectoring to the required approach procedure. Instrument Approach Procedures, including ILS and RNP, are available for both runway directions.			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> ATC monitoring would continue to be required to provide safe separation from known or unknown traffic. Although Exeter ATC handles the current operational issues safely and effectively on a tactical basis, the busy air traffic environment may result in overload situations as controllers try to control aircraft in a limited volume of airspace. Evidence suggests that robust safety mitigations in the form of new airspace (this ACP) may be necessary to provide protection for aircraft operating in the vicinity of Exeter Airport.			
<b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Some key outcomes of Airspace Modernisation (enabling integration and avoiding flight delays by better managing the airspace network) may not be met. However, the impact is expected to be low. Exeter Airport's location means that there will be few, if any, interactions with other airports that require resolving and improvements to the airspace above 7,000 ft should facilitate better access to the network, improving integration and reducing the chance of flight delays.			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option creates a known traffic environment for some operations only. ATC monitoring would be required to provide protection for aircraft on the final approach paths.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> There are no current restrictions to access of the airspace around Exeter Airport, other than the requirements of the ATZ.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will have no impact on other airspace users.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not require Controlled Airspace as there is no containment requirement.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport (CAT) remain inside Controlled Airspace (CAS) when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option relates only to the current arrival and departure procedures in place at Exeter Airport and not the airspace. Therefore, this Design Principle has not been assessed for this option.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will maintain the current environmental impacts.			

### 2.3.1 Do Nothing (Arrivals) Option

The Do Nothing (Arrivals) option represents the current situation where there are no published arrival procedures. Aircraft will leave the en-route network and receive ATC vectors to transit through Class G airspace. ATC monitoring is required to provide safe separation from known or unknown traffic. Aircraft arriving at the airport will follow ATC instructions for vectoring to the required approach procedure.



## 2.4 Do Nothing (Airspace) Evaluation

Design Principle Evaluation	OPTION NO: Do Nothing (Airspace)		
<i>Option Name:</i> Do Nothing (Airspace)	REJECT		
<i>Description of Option:</i> The Do Nothing (Airspace) option represents the airspace that is currently in operation at Exeter Airport. The airport has an Aerodrome Traffic Zone (ATZ), 2.5 nm radius from surface to 2,000 ft above aerodrome level (aal).			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> ATC monitoring would continue to be required to provide safe separation from known or unknown traffic. Although Exeter ATC handles the current operational issues safely and effectively on a tactical basis, the busy air traffic environment may result in overload situations as controllers try to control aircraft in a limited volume of airspace. This option does not address the potential operational safety risks associated with the lack of protection currently afforded to aircraft flying final approach and initial departure routes outside the ATZ.			
<b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> A key outcome of Airspace Modernisation, specifically maintaining and enhancing high aviation safety standards, will not be met. Other outcomes of Airspace Modernisation (efficient use of airspace and enabling integration, avoiding flight delays by better managing the airspace network and improving environmental performance by reducing emissions) are also unlikely to be met.			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option creates a known traffic environment for some operations only. ATC monitoring would be required to provide protection for aircraft on the final approach or initial climb-out paths.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> There are no current restrictions to access of the airspace around Exeter Airport, other than the requirements of the ATZ.			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will have no impact on other airspace users.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport (CAT) remain inside Controlled Airspace (CAS) when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not connect to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will maintain the current environmental impacts.			

#### 2.4.1 Do Nothing (Airspace) Option

The Do Nothing (Airspace) option represents the current situation where the only form of airspace established to give protection to aerodrome traffic around the airport is an Air Traffic Zone (ATZ). The Exeter Airport ATZ is the airspace extending from the surface to a height of 2,000 ft above the level of the aerodrome within the area bounded by a circle centred on the mid-point of the runway and having a radius of 2.5 nm. Outside of this circle, the airspace is Class G airspace which means anyone can fly there without talking to Exeter Airport ATC. This means that when an airliner is coming in to land, another aircraft could (and indeed there are recorded instances) cut straight across the Final Approach requiring ATC to intervene to ensure safety margins are maintained. This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ and is therefore rejected.

## 3 Design Principles Evaluation - Procedures

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### 3.1 Evaluation of the Options against the Design Principles

Each option has been assessed against the prioritised list of Design Principles shown in Table 1 in Section 1 above.

Table 3 below, and the individual 'Option' tables that follow, give an overview of how well each option aligns to each Design Principle; it shows a summary of the analysis conducted for each option with a high-level assessment of whether the Design Principle is either not met, partially met or fully met, as follows:

- A **green** box indicates that the Design Principle has been **met** by the specified option.
- An **orange** box means that the Design Principle has been **partially met** by the specified option.
- A **red** box indicates that the Design Principle has **not been met** by the specified option.

The assessment criteria shown in Table 2 in Section 2 above have been used to determine whether each design option has met, partially met or not met each of the Design Principles. If a design option does not meet any of Design Principles, it will be rejected and not taken forward to Step 2B, Initial Options Appraisal.

### 3.2 Individual Aspects of Options That Do Not Meet Design Principles

#### 3.2.1 Runway 26 Departures – Design Principle 8

As explained in the Options Development document, the design of a SID must conform to the internationally agreed criteria for flight procedure design, set down in the International Civil Aviation Organisation (ICAO) document PANS-OPS 8168 Volume 2 – Construction of Visual and Instrument Flight Procedures (PANS-OPS 8168). These criteria will mean that aircraft departing from Runway 26 on one of the SID options described in the Options Development document, will fly over the built-up area of the City of Exeter before reaching 1,000 ft above aerodrome level (aal) and being able to commence a turn in accordance with the extant noise abatement procedures for the airport. As a result, up to 4,000 ft, these options are expected to significantly increase any adverse impacts of noise, including noise levels and numbers overflown, compared to current operations. This would not be in line with the Air Navigation Guidance 2017 and the government laid-out altitude based priorities and as such, Design Principle 8 would be Not Met.

Amending the noise abatement procedures to allow aircraft to commence a turn on reaching 500 ft aal, whilst not being favoured by the airport, has also been considered and investigated. Although the position at which the aircraft can commence a turn will not be over any built-up areas, the aircraft will overfly built-up areas of the City of Exeter as they turn, and could be lower than currently due to commencing the turn at a lower height. As

a result, up to 4,000 ft, these options also are expected to significantly increase any adverse impacts of noise, including noise levels and numbers overflown, compared to current operations. This would not be in line with the Air Navigation Guidance 2017 and the government laid-out altitude based priorities and as such, Design Principle 8 would be Not Met.

Although the design criteria dictate where an aircraft will be able to commence the first turn after take-off, PANS-OPS 8168 does allow for procedures to contain a track adjustment at an earlier point. This track adjustment allows a turn of up to a maximum of 15 degrees from the runway direction. However, applying this design to the options described above would still result in aircraft overflying built-up areas of the City of Exeter, and therefore Design Principle 8 would still be Not Met.

An omnidirectional departure is a method of providing an obstacle-cleared instrument departure at aerodromes outside CAS and are designed on the basis that an aircraft maintains runway direction to a minimum height of 500 ft aal before commencing a turn. Although the position at which the aircraft can commence a turn will not be over any built-up areas, the aircraft will overfly built-up areas of the City of Exeter as they turn, and could be lower than currently due to commencing the turn at a lower height. As a result, up to 4,000 ft, these options also are expected to significantly increase any adverse impacts of noise, including noise levels and numbers overflown, compared to current operations. This would not be in line with the Air Navigation Guidance 2017 and the government laid-out altitude based priorities and as such, Design Principle 8 would be Not Met.


For these reasons, implementing any departure procedures from Runway 26 is not a viable option as Design Principle 8 would be Not Met and the airport would be unable to meet the Air Navigation Guidance 2017 and the government laid-out altitude based priorities. Therefore, all Runway 26 departure options are rejected and are not considered further in the Design Principles Evaluation.

<b>Design Principle Evaluation</b>	<b>OPTION NO: S0</b>		
<i>Option Name:</i> Omnidirectional Departures – Runway 08	ACCEPT		
<p><i>Description of Option:</i> An omnidirectional departure will provide an obstacle-cleared instrument departure at Exeter Airport. On reaching the specified height to ensure obstacle clearance (which will not be below 500 ft aal), a turn in any direction may be made to join the en-route phase of flight. An omnidirectional departure may also require specific restrictions to be applied as part of the procedure including avoidance of specific sectors, or altitude or design-gradient limitations such that the procedure could be designed to perform in a similar way to the Standard Instrument Departure procedure options that are being considered. The actual track heading and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC monitoring would continue to be required to provide safe separation from known or unknown traffic. Although Exeter ATC handles the current operational issues safely and effectively on a tactical basis, the busy air traffic environment may result in overload situations as controllers try to control aircraft in a limited volume of airspace. Evidence suggests that robust safety mitigations in the form of new airspace (this ACP) may be necessary to provide protection for aircraft operating in the vicinity of Exeter Airport.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Some key outcomes of Airspace Modernisation (enabling integration and avoiding flight delays by better managing the airspace network) may not be met. However, the impact is expected to be low. Exeter Airport's location means that there will be few, if any, interactions with other airports that require resolving and improvements to the airspace above 7,000 ft should facilitate better access to the network, improving integration and reducing the chance of flight delays.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option creates a known traffic environment for some operations only. ATC monitoring would be required to provide protection for aircraft on initial climb-out paths.</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> There are no current restrictions to access of the airspace around Exeter Airport, other than the requirements of the ATZ.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will have no impact on other airspace users.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not require Controlled Airspace as there is no containment requirement.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport (CAT) remain inside Controlled Airspace (CAS) when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option relates only to the introduction of omnidirectional departure procedures at Exeter Airport and not the airspace. Therefore, this Design Principle has not been assessed for this option.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflown. Aircraft emissions up to 7,000 ft are expected to be similar compared to current operations with this option. There is no change expected to any consequential impacts caused by the displacement of other air traffic with this option.			

### 3.2.2 Omnidirectional Departures

This option provides an obstacle-cleared IFR departure at Exeter Airport, which may include specific restrictions to be applied as part of the procedure including avoidance of specific sectors, or altitude or design-gradient limitations such that the procedure could be designed to perform in a similar way to the Standard Instrument Departure procedure options that are being considered. The actual track heading and joining point will depend on the new airways configuration above 7,000 ft. Aircraft will continue to route through Class G airspace, to join the en-route airways network and ATC monitoring will be required to provide safe separation from known or unknown traffic.


<b>Design Principle Evaluation</b>	<b>OPTION NO: S1</b>		
<i>Option Name:</i> Runway 08 SID (north – direct)	ACCEPT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn left onto a north-north-westerly heading, climbing to 7,000 ft to join the en-route airways network. The actual track heading and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with General Aviation (GA) aircraft to the north of the airport is mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need CAS to contain the procedure but this will be the minimum necessary to contain the procedure.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflowed. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by introducing better climb profiles and reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.3 Runway 08 SID (north – direct)

This procedure represents the most direct routing for aircraft departing to the north. However, the route passes close to the west of North Hill and Dunkeswell aerodromes as aircraft climb. This option would require the introduction of CAS to contain the procedure which could have an impact on other airspace users in the local area, which would require mitigation.




<b>Design Principle Evaluation</b>	<b>OPTION NO: S2</b>		
<i>Option Name:</i> Runway 08 SID (north – dogleg)	ACCEPT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn left onto a north-north-westerly heading initially before turning further left onto a north-westerly heading. Aircraft will then turn right onto a northerly heading, climbing to 7,000 ft, to join the en-route airways network. The actual track positions and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with GA aircraft to the north of the airport is mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need CAS to contain the procedure but this will be the minimum necessary to contain the procedure.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflown. Aircraft emissions up to 7,000 ft are expected to be similar compared to current operations with this option; increased emissions caused by additional track miles is expected to be offset by introducing better climb profiles and reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.4 Runway 08 SID (north – dogleg)


This procedure would route aircraft further west than the previous option, increasing the lateral distance from North Hill and Dunkeswell aerodromes as aircraft climb. By extending the track miles, aircraft would be slightly higher as they pass abeam these airfields. This option would require the introduction of CAS to contain the procedure which could have an impact on other airspace users in the local area, which would require mitigation.

<b>Design Principle Evaluation</b>	<b>OPTION NO: S3</b>		
<i>Option Name:</i> Runway 08 SID (north-west)	REJECT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn left onto a north-north-westerly heading initially before turning further left onto a north-westerly heading. Aircraft will continue on this heading, routing towards STRUMBLE to join the en-route airways network. The actual track positions and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with GA aircraft to the north of the airport is be mitigated by the introduction of CAS.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration and avoiding flight delays by better managing the airspace network) are unlikely to be met.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The SID can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflowed. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by introducing better climb profiles and reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.5 Runway 08 SID (north-west)

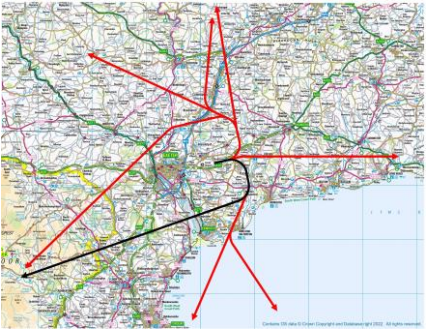
This procedure represents the most direct routing for aircraft departing to the north-west. However, this option would require the introduction of a large volume of CAS to contain the procedure through the current Class G airspace up to FL195. This is disproportionate to the requirement and would have a severe impact on other airspace users in the area; therefore this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: S4</b>		
<i>Option Name:</i> Runway 08 SID (south-west, left turn)	REJECT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn left onto a north-north-westerly heading initially before turning further left onto a westerly heading. When clear of the City of Exeter, aircraft will then turn south-west, routing to the south of the D011 Danger Area complex to route towards LANDS' END to join the en-route airways network. The actual track positions and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. There is no evidence to suggest that this option would be unsafe.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration and avoiding flight delays by better managing the airspace network) are unlikely to be met.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The SID can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflown. Aircraft emissions up to 7,000 ft are expected to be similar compared to current operations with this option; better climb profiles and a reduction in traffic avoidance should lessen the increased impact caused by the greater number of track miles flown. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.6 Runway 08 SID (south-west, left turn)

This option would require the introduction of a large volume of CAS to contain the procedure through the current Class G airspace up to FL195. This is disproportionate to the requirement and would have a severe impact on other airspace users in the area; therefore this option is rejected.


Design Principle Evaluation	OPTION NO: S5		
<i>Option Name:</i> Runway 08 SID (south-west, right turn)	REJECT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn right onto a south-south-easterly heading initially before turning further right onto a south-westerly heading to route towards LANDS' END to join the en-route airways network. The actual track positions and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with General Aviation (GA) and military aircraft to the south of the airport is mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration and avoiding flight delays by better managing the airspace network) are unlikely to be met.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The SID can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflowed. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by introducing better climb profiles and reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.7 Runway 08 SID (south-west, right turn)

This procedure represents the most direct routing for aircraft departing to the south-west. However, this option would require the introduction of a large volume of CAS to contain the procedure through the current Class G airspace up to FL195. This is disproportionate to the requirement and would have a severe impact on other airspace users in the area; therefore this option is rejected.




<b>Design Principle Evaluation</b>	<b>OPTION NO: S6</b>		
<i>Option Name:</i> Runway 08 SID (south – direct)	ACCEPT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn right onto a south-south-easterly heading initially before turning further right onto a south-south-westerly heading to route towards BERRY HEAD to join the en-route airways network. The actual track positions and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with General Aviation (GA) and military aircraft to the south of the airport is mitigated by the introduction of CAS.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option meets the known outcomes of the AMS.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need CAS to contain the procedure but this will be the minimum necessary to contain the procedure.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflowed. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by introducing better climb profiles and reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.8 Runway 08 SID (south – direct)


This procedure represents the most direct routing for aircraft departing to the south. This option would require the introduction of CAS to contain the procedure which could have an impact on other airspace users in the local area, which would require mitigation.

<b>Design Principle Evaluation</b>	<b>OPTION NO: S7</b>		
<i>Option Name:</i> Runway 08 SID (south – dogleg)	ACCEPT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn right onto a south-south-easterly heading initially before turning further right onto a south-south-westerly heading to route towards BERRY HEAD before turning left onto a south-easterly heading to route towards NOTRO to join the en-route airways network. The actual track positions and joining point will depend on the new airways configuration above 7,000 ft. This option will only be available on a weekend when D012 and D013 Danger Areas are inactive.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with General Aviation (GA) and military aircraft to the south of the airport is mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need CAS to contain the procedure but this will be the minimum necessary to contain the procedure.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflowed. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by introducing better climb profiles and reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.9 Runway 08 SID (south – dogleg)

This procedure represents a more direct routing for aircraft departing to the south-east. This option would require the introduction of CAS to contain the procedure which could have an impact on other airspace users in the local area, which would require mitigation. This option would only be available for use on a weekend when Danger Areas D012 and D013 are inactive; any airspace introduced to contain this procedure should also only be activated when the procedure is available for use.

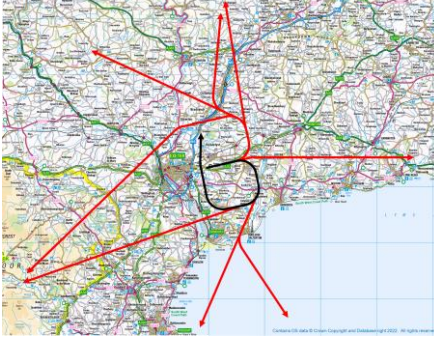
<b>Design Principle Evaluation</b>	<b>OPTION NO: S8</b>		
<i>Option Name:</i> Runway 08 SID (east)	REJECT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn right onto an easterly heading to route towards GIBSO to join the en-route airways network. The actual track positions and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with military and GA aircraft to the east of the airport in an Area of Intense Air Activity would be mitigated by the introduction of CAS.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration and avoiding flight delays by better managing the airspace network) are unlikely to be met.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The SID can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflowed. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by introducing better climb profiles and reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.10 Runway 08 SID (east)

This procedure represents the most direct routing for aircraft departing to the east. However, this option would require the introduction of a large volume of CAS to contain the procedure through the current Class G airspace up to FL195. This is disproportionate

to the requirement and would have a severe impact on other airspace users in the area; therefore this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: PE1</b>		
<i>Option Name:</i> Runway 08 SID (south-to-go-north)	ACCEPT		
<p><i>Description of Option:</i> On reaching 1,500 ft aal to comply with noise abatement procedures, aircraft turn right onto a southerly heading initially, before turning right and right again onto a northerly heading, back through the airfield overhead, climbing to 7,000 ft to join the en-route airways network. The actual track heading and joining point will depend on the new airways configuration above 7,000 ft.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. It is a UK requirement that all SIDs must be wholly contained within CAS in accordance with CAP 778 and the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with General Aviation (GA) and military aircraft to the south of the airport is mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			




<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need CAS to contain the procedure but this will be the minimum necessary to contain the procedure.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations, although different populations may be overflown. Between 4,000 ft and 7,000 ft, this option may increase any adverse impacts of noise compared to current operations due to possible overflight of the City of Exeter as aircraft approach 7,000 ft. It is unclear at this stage whether overflight will occur; a detailed quantitative analysis will be undertaken at Stage 3 to determine what, if any, the impact will be. Aircraft emissions up to 7,000 ft are expected to be similar compared to current operations with this option; increased emissions caused by additional track miles is expected to be offset by introducing better climb profiles and reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.11 Runway 08 SID (south-to-go-north)

This procedure represents an alternative route for aircraft departing to the north. By routing south initially after take-off, aircraft would be at 7,000 ft and able to join CAS prior to passing north of the airport. This would minimise the impact on North Hill and Dunkeswell aerodromes. This option would require the introduction of CAS to contain the


procedure which could have an impact on other airspace users in the local area, which would require mitigation. However, the CAS could be biased to the south of the airport, minimising any impact to the north of the airport.

Design Principle Evaluation	OPTION NO: T1		
<i>Option Name:</i> Runway 08 Transition (north)	ACCEPT		
<p><i>Description of Option:</i> Aircraft will leave the en-route airways structure in the vicinity of the current reporting point MULIT, heading south-west to route direct to join the approach procedure.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will need to be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Approach Transition procedures should be contained in CAS in accordance with the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. There is no evidence to suggest that this option would be unsafe.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need CAS to contain the procedure but this will be the minimum necessary to contain the procedure.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.12 Runway 08 Transition (north)


This option represents the most direct routing to the approach procedure from the north. This option would require the introduction of CAS to contain the procedure which could have an impact on other airspace users in the local area, which would require mitigation. Further development of the procedure with regard to interactions with the ATS routes, design requirements for STAR procedures and ATS management and responsibilities will be conducted later in the process to ensure procedures comply with the relevant technical criteria.

Design Principle Evaluation	OPTION NO: T2		
<i>Option Name:</i> Runway 08 Transition (north-west)	REJECT		
<p><i>Description of Option:</i> Aircraft will leave the en-route airways structure at STRUMBLE, heading south-east to route direct to join the approach procedure.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure need to will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Approach Transition procedures should be contained in CAS in accordance with the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. There is no evidence to suggest that this option would be unsafe.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration) are unlikely to be met.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The Approach Transition can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

**3.2.13 Runway 08 Transition (north-west)**

This option would require the introduction of a large volume of CAS to contain the procedure through the current Class G airspace up to FL195. This is disproportionate to the requirement and would have a severe impact on other airspace users in the area; therefore this option is rejected.


Design Principle Evaluation	OPTION NO: T3		
<i>Option Name:</i> Runway 08 Transition (west)	REJECT		
<p><i>Description of Option:</i> Aircraft will leave the en-route airways structure at LANDS END, heading east-north-east to route direct to join the approach procedure.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will need to be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Approach Transition procedures should be contained in CAS in accordance with the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. There is no evidence to suggest that this option would be unsafe.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration) are unlikely to be met.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The Approach Transition can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

**3.2.14 Runway 08 Transition (west)**

This option would require the introduction of a large volume of CAS to contain the procedure through the current Class G airspace up to FL195. This is disproportionate to the requirement and would have a severe impact on other airspace users in the area; therefore this option is rejected.




Design Principle Evaluation	OPTION NO: T4		
<i>Option Name:</i> Runway 08 Transition (south)	ACCEPT		
<p><i>Description of Option:</i> Aircraft will leave the en-route airways structure at BERRY HEAD, heading north-west to route direct to join the approach procedure.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will need to be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Approach Transition procedures should be contained in CAS in accordance with the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with GA aircraft transiting along the coast at low level is mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need CAS to contain the procedure but this will be the minimum necessary to contain the procedure.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.15 Runway 08 Transition (south)


This option represents the most direct routing to the approach procedure from the south. This option would require the introduction of CAS to contain the procedure which could have an impact on other airspace users in the local area, which would require mitigation. Further development of the procedure with regard to interactions with the ATS routes, design requirements for STAR procedures and ATS management and responsibilities will be conducted later in the process to ensure procedures comply with the relevant technical criteria.

<b>Design Principle Evaluation</b>	<b>OPTION NO: T5</b>		
<i>Option Name:</i> Runway 08 Transition (east)	REJECT		
<p><i>Description of Option:</i> Aircraft will leave the en-route airways structure at the current reporting point GIBSO. Aircraft will initially route west-south-west until south abeam of the airport, before heading west-north-west to route direct to join the approach procedure.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will need to be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Approach Transition procedures should be contained in CAS in accordance with the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Creating CAS coincident with Danger Area D012 would not be acceptable. Possible conflict with GA and military traffic to the south of the airport would be mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration) are unlikely to be met.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure would need to be coincident with the Danger Area D012, which is not a feasible solution. .			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The Approach Transition can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.16 Runway 08 Transition (east)

To contain this procedure, the airspace required would not only be too excessive and disproportionate but would conflict with Danger Area D012; therefore this option is rejected.


<b>Design Principle Evaluation</b>		<b>OPTION NO: T6</b>		
<i>Option Name:</i> Runway 26 Transition (north)		ACCEPT		
<p><i>Description of Option:</i> Aircraft will leave the en-route airways structure in the vicinity of the current reporting point EXMOR, heading south-east to route direct to join the approach procedure.</p>				
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET	
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will need to be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Approach Transition procedures should be contained in CAS in accordance with the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with GA aircraft to the north of the airport is mitigated by the introduction of CAS.</p>				
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET	
<p><i>Summary of Qualitative Assessment:</i> This option meets the known outcomes of the AMS.</p>				
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET	
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>				
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET	
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>				

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need CAS to contain the procedure but this will be the minimum necessary to contain the procedure.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.17 Runway 26 Transition (north)

This option represents the most direct routing to the approach procedure from the north. This option would require the introduction of CAS to contain the procedure which could have an impact on other airspace users in the local area. The nominal route crosses an area between Dunkeswell and Merryfield airfields and although this is similar to the route currently flown, the introduction of CAS to contain the procedure could have an impact on both airfields which would require mitigation. The base height of any CAS would need to be as high as possible to minimise the impact whilst containing the procedure. Further development of the procedure with regard to interactions with the ATS routes, design requirements for STAR procedures and ATS management and responsibilities will be

conducted later in the process to ensure procedures comply with the relevant technical criteria.


Design Principle Evaluation	OPTION NO: T7		
<i>Option Name:</i> Runway 26 Transition (west)	REJECT		
<p><i>Description of Option:</i> Aircraft will leave the en-route airways structure at LANDS END, heading east-north-east to route direct to join the approach procedure.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will need to be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Approach Transition procedures should be contained in CAS in accordance with the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with General Aviation (GA) and military aircraft to the south of the airport is mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration) are unlikely to be met.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			



<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The Approach Transition can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.18 Runway 26 Transition (west)

This option would require the introduction of a large volume of CAS to contain the procedure through the current Class G airspace up to FL195. This is disproportionate to the requirement and would have a severe impact on other airspace users in the area; therefore this option is rejected.

Design Principle Evaluation	OPTION NO: T8		
<i>Option Name:</i> Runway 26 Transition (east)	REJECT		
<p><i>Description of Option:</i> Aircraft will leave the en-route airways structure at the current reporting point GIBSO heading west-north-west direct to join the approach procedure.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The procedure will be designed to meet acceptable levels of flight safety. The procedure will need to be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Approach Transition procedures should be contained in CAS in accordance with the Policy for the Design of Controlled Airspace Structures. Implementation of this procedure will require the necessary CAS to ensure lateral and vertical containment. Possible conflict with military and GA aircraft to the east of the airport in an Area of Intense Air Activity would be mitigated by the introduction of CAS.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA's published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Key outcomes of Airspace Modernisation (efficient use of airspace and enabling integration) are unlikely to be met.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> The introduction of controlled airspace to contain this procedure will create a known traffic environment, although Class E airspace would provide a known environment for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option may require additional requirements, such as ATC permission, radio or transponder, to access any new airspace but access to airspace will not routinely be denied.</p>			

<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> The introduction of airspace to contain this procedure is likely to have some impact on other airspace users in the local area. The level of impact would vary depending on the classification of airspace being introduced. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option routes through Class G airspace up to FL195. The Approach Transition can be contained but the amount of CAS to do so would be large.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will need to be contained in CAS, providing connectivity to the airways structure.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing the requirement for ATC intervention and avoiding action. There may be a change to any consequential impacts caused by the displacement of other air traffic with this option but this is not expected to be significant.			

### 3.2.19 Runway 26 Transition (east)

This option would require the introduction of a large volume of CAS to contain the procedure through the current Class G airspace up to FL195. This is disproportionate to the requirement and would have a severe impact on other airspace users in the area; therefore this option is rejected.

### 3.3 Consolidated Design Principles Evaluation

When assessed in isolation, SID options S1, S2, S6, S7 PE1 and Transition options T1, T4 and T6 have been accepted for further consideration and would be progressed to Step2B – Initial Options Appraisal.

However, when assessed as part of the combined operational requirement for Exeter Airport, Exeter Airport considers that Design Principle 6 would be Not Met if these procedures were to be implemented. All of the above options, except Transition T6, have been designed for operations from Runway 08. As described in the baseline, Runway 26 is the dominant runway, used approximately 67% of the time, due to the prevailing weather conditions. This would mean that Controlled Airspace would need to be introduced in order to contain the SID and Transition procedures that would only be used approximately 33% of the time. Exeter Airport considers that this would not be proportionate to the requirement of the airport.

Similarly, the introduction of Controlled Airspace to contain the single progressed Transition procedure to Runway 26 would also not be proportionate to the requirement of the airport.

Therefore, these options are now being discounted and Exeter Airport will not progress SID or Transition procedures any further in this ACP.

## 4 Design Principles Evaluation - Airspace

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### 4.1 Evaluation of the Options against the Design Principles

Each option has been assessed against the prioritised list of Design Principles shown in Table 1 in Section 1 above.

Table 4 below, and the individual 'Option' tables that follow, give an overview of how well each option aligns to each Design Principle; it shows a summary of the analysis conducted for each option with a high-level assessment of whether the Design Principle is either not met, partially met or fully met, as follows:

- A **green** box indicates that the Design Principle has been **met** by the specified option.
- An **orange** box means that the Design Principle has been **partially met** by the specified option.
- A **red** box indicates that the Design Principle has **not been met** by the specified option.

The assessment criteria shown in Table 2 in Section 2 above have been used to determine whether each design option has been met, partially met or not met each of the Design Principles. If a design option does not meet any of Design Principles, it will be rejected and not taken forward to Step 2B, Initial Options Appraisal. A full quantitative environmental assessment of the environmental impact will be conducted at Stage 3 (if the options gets accepted to this stage) to determine the full impact of the option.

### 4.2 Individual Aspects of Options That Do Not Meet Design Principles

As explained in the Options Development document, each of the airspace design options contained options that considered the airspace classification and vertical extent of the airspace. The following paragraphs describe some of those options that do not meet specific Design Principles, therefore these sub-options have been rejected for all airspace options shown in Appendix A4 of the Options Development document.

#### 4.2.1 Airspace Vertical Extent – Design Principle 7

Design Principle 7 states that airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport. In order to provide connectivity to the airways structure, any new airspace would require a minimum top level of FL65 and connect to the airway N864, which routes overhead Exeter Airport. Airspace design options that do not consist of a layered structure (options 1-9) could not therefore have a maximum top height of 3,000 ft or 4,000 ft since Design Principle 7 would be Not Met. Therefore these options will only be considered in the Design Principles Evaluation as having a top level of FL65.

#### **4.2.2 Class D Airspace – Design Principle 6**


Design Principle 7 states the size and categorisation of any new controlled airspace should be proportionate to the requirement. Exeter Airport considers that the implementation of Class D airspace would only be warranted to protect the final approach and initial climb-out paths at Exeter Airport. The nominal top height of any Class D airspace should be a maximum of 3,000 ft in order to achieve this protection. The implementation of Class D airspace outside of this parameter is considered to be disproportionate to the requirement and hence Design Principle 6 would be Not Met. Therefore, design options A1 – A9, which do not consist of a layered structure and feature Class D airspace up to FL65 are rejected and are not considered further in the Design Principles Evaluation. In addition, any options that include layered airspace with Class D airspace as the upper zone(s) are also rejected and will not be considered further in the Design Principle Evaluation.

#### **4.2.3 Transponder Mandatory Zone – Design Principle 3**

Design Principle 3 states that new airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport. Implementation of a Transponder Mandatory Zone (TMZ) only would not create a known environment. Unknown, but transponding aircraft flying VFR in the local area have resulted in a number of reportable safety events between these unknown aircraft and aircraft arriving at or departing from Exeter Airport where ATC have had to intervene by delaying or halting departures, providing avoidance instructions and extending departure and arrival routes. For this reason, implementation of a TMZ only is not a viable option in any of the airspace design options as Design Principle 3 would be Not Met.

#### **4.2.4 Radio Mandatory Zone – Design Principle 6**

Design Principle 7 states that airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport. The creation of a Radio Mandatory Zone (RMZ) allows for enhanced situational awareness for all users and for ATC but allows the airspace to retain its original airspace classification. Therefore, designs that include an RMZ for the upper airspace option that connects to the airways structure would not ensure Commercial Air Transport remain inside CAS when arriving at or departing from the airport. For this reason, implementation of an RMZ only for the upper airspace of the layered design options is not viable as Design Principle 7 would be Not Met; therefore, these options are rejected and are not considered further in the Design Principles Evaluation. Additionally, designs that include an RMZ for the stubs would also not ensure Commercial Air Transport remain inside CAS when arriving at or departing from the airport. For this reason, implementation of an RMZ only for the stubs is not viable as Design Principle 7 would be Not Met; therefore, these options are rejected and are not considered further in the Design Principles Evaluation.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A10a</b>		
<i>Option Name:</i> Airspace Option 10a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			



#### **4.2.5      Airspace Option 10a**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. The proximity of the airspace, specifically Class D, to local airfields caused stakeholder concern. Some stakeholders considered that this option would be feasible with some amendments. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A10b</b>		
<i>Option Name:</i> Airspace Option 10b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths .</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.6      Airspace Option 10b**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. The proximity of the airspace, specifically Class D, to local airfields caused stakeholder concern. Some stakeholders considered that this option would be feasible with some amendments. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A10c</b>		
<i>Option Name:</i> Airspace Option 10c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.7      Airspace Option 10c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. The proximity of the airspace, specifically Class D, to local airfields caused stakeholder concern. Some stakeholders considered that this option would be feasible with some amendments. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A10d</b>		
<i>Option Name:</i> Airspace Option 10d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			




<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.8 Airspace Option 10d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. The proximity of the airspace, specifically Class D, to local airfields caused stakeholder concern. Some stakeholders considered that this option would be feasible with some amendments. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A10e</b>		
<i>Option Name:</i> Airspace Option 10e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR</p>			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.9      Airspace Option 10e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. The proximity of the airspace, specifically Class D, to local airfields caused stakeholder concern. Some stakeholders considered that this option would be feasible with some amendments. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A10f</b>		
<i>Option Name:</i> Airspace Option 10f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p> 			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.10     Airspace Option 10f**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. The proximity of the airspace, specifically Class D, to local airfields caused stakeholder concern. Some stakeholders considered that this option would be feasible with some amendments. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.




<b>Design Principle Evaluation</b>	<b>OPTION NO: A11a</b>		
<i>Option Name:</i> Airspace Option 11a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone and including protection of the IFs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields and partly extends into the airspace around Dunkeswell and North Hill Airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.11     Airspace Option 11a**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A11b</b>		
<i>Option Name:</i> Airspace Option 11b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone and including protection of the IFs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields and partly extends into the airspace around Dunkeswell and North Hill Airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.12     Airspace Option 11b**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A11c</b>		
<i>Option Name:</i> Airspace Option 11c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone and including protection of the IFs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p> 			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields and partly extends into the airspace around Dunkeswell and North Hill Airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.			



#### **4.2.13     Airspace Option 11c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A11d</b>		
<i>Option Name:</i> Airspace Option 11d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone and including protection of the IFs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields and partly extends into the airspace around Dunkeswell and North Hill Airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.14     Airspace Option 11d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A11e</b>		
<i>Option Name:</i> Airspace Option 11e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone and including protection of the IFs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR</p>			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields and partly extends into the airspace around Dunkeswell and North Hill Airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.15     Airspace Option 11e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A11f</b>		
<i>Option Name:</i> Airspace Option 11f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone and including protection of the IFs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p> 			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET



<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields and partly extends into the airspace around Dunkeswell and North Hill Airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.16     Airspace Option 11f**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A12a</b>		
<i>Option Name:</i> Airspace Option 12a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). This option extends over Farway Common and Branscombe airfields. Although the lower section of airspace has been amended to avoid Dunkeswell and North Hill airfields, the upper section of airspace partly extends over these airfields. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.17      Airspace Option 12a**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A12b</b>		
<i>Option Name:</i> Airspace Option 12b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			


<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. Although the lower section of airspace has been amended to avoid Dunkeswell and North Hill airfields, the upper section of airspace partly extends over these airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.18      Airspace Option 12b**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.




<b>Design Principle Evaluation</b>	<b>OPTION NO: A12c</b>		
<i>Option Name:</i> Airspace Option 12c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. Although the lower section of airspace has been amended to avoid Dunkeswell and North Hill airfields, the upper section of airspace partly extends over these airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.19      Airspace Option 12c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A12d</b>		
<i>Option Name:</i> Airspace Option 12d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. Although the lower section of airspace has been amended to avoid Dunkeswell and North Hill airfields, the upper section of airspace partly extends over these airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			

<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	<p>NOT MET</p>	<p>PARTIAL</p>	<p>MET</p>
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

**4.2.20 Airspace Option 12d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A12e</b>		
<i>Option Name:</i> Airspace Option 12e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET


<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to ‘standby’, unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to ‘stand by’. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. Although the lower section of airspace has been amended to avoid Dunkeswell and North Hill airfields, the upper section of airspace partly extends over these airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			



<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	<p>NOT MET</p>	<p>PARTIAL</p>	<p>MET</p>
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

**4.2.21 Airspace Option 12e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A12f</b>		
<i>Option Name:</i> Airspace Option 12f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. Although the lower section of airspace has been amended to avoid Dunkeswell and North Hill airfields, the upper section of airspace partly extends over these airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.22     Airspace Option 12f**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A13a</b>		
<i>Option Name:</i> Airspace Option 13a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.23      Airspace Option 13a**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfields was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A13b</b>		
<i>Option Name:</i> Airspace Option 13b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET




<i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.24      Airspace Option 13b**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A13c</b>		
<i>Option Name:</i> Airspace Option 13c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p> 			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.25      Airspace Option 13c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A13d</b>		
<i>Option Name:</i> Airspace Option 13d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET


<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			

<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	<p>NOT MET</p>	<p>PARTIAL</p>	<p>MET</p>
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

**4.2.26 Airspace Option 13d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.




<b>Design Principle Evaluation</b>	<b>OPTION NO: A13e</b>		
<i>Option Name:</i> Airspace Option 13e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.27      Airspace Option 13e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A13f</b>		
<i>Option Name:</i> Airspace Option 13f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs extended to 10 nm wide to the lateral extent of the zone to the west. Southern boundary to the east in line with the southern boundary of the zone. Northern boundary of eastern stub moved south to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of western stub. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.28     Airspace Option 13f**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A14a</b>		
<i>Option Name:</i> Airspace Option 14a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs. Upper airspace northern boundary in line with the northern edge of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			



#### **4.2.29      Airspace Option 14a**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfields was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A14b</b>		
<i>Option Name:</i> Airspace Option 14b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs. Upper airspace northern boundary in line with the northern edge of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p> 			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.30     Airspace Option 14b**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A14c</b>		
<i>Option Name:</i> Airspace Option 14c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs. Upper airspace northern boundary in line with the northern edge of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.31 Airspace Option 14c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A14d</b>		
<i>Option Name:</i> Airspace Option 14d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs. Upper airspace northern boundary in line with the northern edge of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			




<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.32      Airspace Option 14d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A14e</b>		
<i>Option Name:</i> Airspace Option 14e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs. Upper airspace northern boundary in line with the northern edge of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.33      Airspace Option 14e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A14f</b>		
<i>Option Name:</i> Airspace Option 14f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs. Upper airspace northern boundary in line with the northern edge of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p> 			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.34     Airspace Option 14f**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.




<b>Design Principle Evaluation</b>	<b>OPTION NO: A15a</b>		
<i>Option Name:</i> Airspace Option 15a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the western part of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.35     Airspace Option 15a**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfields was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A15b</b>		
<i>Option Name:</i> Airspace Option 15b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the western part of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.36     **Airspace Option 15b****

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A15c</b>		
<i>Option Name:</i> Airspace Option 15c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the western part of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			


<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET



*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.37      Airspace Option 15c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A15d</b>		
<i>Option Name:</i> Airspace Option 15d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the western part of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.38     Airspace Option 15d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A15e</b>		
<i>Option Name:</i> Airspace Option 15e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the western part of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR</p>			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.39      Airspace Option 15e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A15f</b>		
<i>Option Name:</i> Airspace Option 15f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the western part of the lower airspace. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET



<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area, specifically Dunkeswell and North Hill Airfields. This option will have an impact on their operations but with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option also extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.40     Airspace Option 15f**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Exeter Airport considers that with suitable mitigation in place allowing freedom of movement for airspace users from these locations, this option may have a positive impact on operations by providing protection from other airspace users. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A16a</b>		
<i>Option Name:</i> Airspace Option 16a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.			

#### **4.2.41     Airspace Option 16a**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfields was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A16b</b>		
<i>Option Name:</i> Airspace Option 16b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.			

#### **4.2.42     Airspace Option 16b**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.




<b>Design Principle Evaluation</b>	<b>OPTION NO: A16c</b>		
<i>Option Name:</i> Airspace Option 16c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.			

#### **4.2.43     Airspace Option 16c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A16d</b>		
<i>Option Name:</i> Airspace Option 16d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			

<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	<p>NOT MET</p>	<p>PARTIAL</p>	<p>MET</p>
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

**4.2.44 Airspace Option 16d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A16e</b>		
<i>Option Name:</i> Airspace Option 16e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			


<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET



*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.45      Airspace Option 16e**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A16f</b>		
<i>Option Name:</i> Airspace Option 16f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace northern boundary in line with the northern edge of the lower airspace, also avoiding Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. This option extends over Farway Common and Branscombe airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.			

#### **4.2.46     Airspace Option 16f**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A17a</b>		
<i>Option Name:</i> Airspace Option 17a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields and the upper airspace extends over Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.47     Airspace Option 17a**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfields was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A17b</b>		
<i>Option Name:</i> Airspace Option 17b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET



<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields and the upper airspace extends over Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.48     Airspace Option 17b**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A17c</b>		
<i>Option Name:</i> Airspace Option 17c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields and the upper airspace extends over Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out path.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.			

#### **4.2.49     **Airspace Option 17c****

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A17d</b>		
<i>Option Name:</i> Airspace Option 17d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p> 			
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			


<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields and the upper airspace extends over Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out path.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.50      Airspace Option 17d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.




<b>Design Principle Evaluation</b>	<b>OPTION NO: A17e</b>		
<i>Option Name:</i> Airspace Option 17e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields and the upper airspace extends over Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.51      Airspace Option 17e**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A17f</b>		
<i>Option Name:</i> Airspace Option 17f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields and the upper airspace extends over Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **4.2.52     Airspace Option 17f**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A18a</b>		
<i>Option Name:</i> Airspace Option 18a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to north western IAF but amended to the north east to avoid Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields. Although the upper airspace is not over Dunkeswell and North Hill airfields, it does cover airspace around the airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.			



#### **4.2.53      Airspace Option 18a**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfields was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A18b</b>		
<i>Option Name:</i> Airspace Option 18b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to north western IAF but amended to the north east to avoid Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields. Although the upper airspace is not over Dunkeswell and North Hill airfields, it does cover airspace around the airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.54      Airspace Option 18b**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A18c</b>		
<i>Option Name:</i> Airspace Option 18c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to north western IAF but amended to the north east to avoid Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields. Although the upper airspace is not over Dunkeswell and North Hill airfields, it does cover airspace around the airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.			

#### **4.2.55      Airspace Option 18c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.

Design Principle Evaluation	OPTION NO: A18d		
<i>Option Name:</i> Airspace Option 18d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to north western IAF but amended to the north east to avoid Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET




<i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields. Although the upper airspace is not over Dunkeswell and North Hill airfields, it does cover airspace around the airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			

<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	<p>NOT MET</p>	<p>PARTIAL</p>	<p>MET</p>
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

**4.2.56 Airspace Option 18d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: A18e</b>		
<i>Option Name:</i> Airspace Option 18e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to north western IAF but amended to the north east to avoid Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET

<i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.			
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields. Although the upper airspace is not over Dunkeswell and North Hill airfields, it does cover airspace around the airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			

<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	<p>NOT MET</p>	<p>PARTIAL</p>	<p>MET</p>
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

**4.2.57 Airspace Option 18e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: A18f</b>		
<i>Option Name:</i> Airspace Option 18f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Outer area expanded to lozenge shape that includes protection of the IAFs, but adjusted to the north to avoid Dunkeswell and North Hill airfields. Upper airspace extended to the north to contain aircraft leaving airways structure to north western IAF but amended to the north east to avoid Dunkeswell and North Hill airfields. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. Lower airspace extends over Farway Common and Branscombe airfields. Although the upper airspace is not over Dunkeswell and North Hill airfields, it does cover airspace around the airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **4.2.58      Airspace Option 18f**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Some stakeholders expressed concern regarding the proximity of Class D airspace to other airfields in the local area and considered that having airspace overhead local airfield was unacceptable. Some stakeholders also expressed concern over airspace that is excessively complex; the non-linear northern boundary of this option may be considered too complicated. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.



## 5 Updated Designs Following Engagement

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### 5.1 Stakeholder Evaluation of Design Options

Following a review of the design options by the stakeholders that had contributed to the development of the Design Principles, 2 alternate Post-Engagement (PE) options have been developed and included in the Design Principle Evaluation.

#### 5.1.1 Airspace Option PE1

Some stakeholders considered that the large, lozenge airspace around the airport was excessive and that a circle, radius 5 nm, was more acceptable. It was suggested that amendments to Option 3 which included extending the stubs so that they encompass the IFs could be viable and acceptable.

As stated in paragraph 4.2.2, design options which do not consist of a layered structure and feature Class D airspace up to FL65 are rejected and are not considered further in the Design Principles Evaluation. Therefore, this option is rejected and will not be considered further in the Design Principle Evaluation.

#### 5.1.2 Airspace Option PE2


The size, position and complexity of some of the later options were considered by some stakeholders to be unviable. The options that included layered airspace that provided connectivity and containment were important to some stakeholders. This option reduces the size of the lower airspace structure to reduce the impact on other airspace users, whilst the upper airspace provides connectivity and containment for protection of commercial traffic.

As stated in paragraph 4.2.2, options that include layered airspace with Class D airspace as the upper zone(s) are also rejected and will not be considered further in the Design Principle Evaluation.

#### 5.1.3 Airspace Option PE3

The size, position and complexity of some of the later options were considered by some stakeholders to be unviable. The options that included layered airspace that provided connectivity and containment were important to some stakeholders. This option reduces the size of the lower airspace structure to reduce the impact on other airspace users and restricts the upper airspace to the south of the airport to provide connectivity and containment for protection of commercial traffic.


As stated in paragraph 4.2.2, options that include layered airspace with Class D airspace as the upper zone(s) are also rejected and will not be considered further in the Design Principle Evaluation.

<b>Design Principle Evaluation</b>	<b>OPTION NO: PE2a</b>		
<i>Option Name:</i> Airspace Option PE2a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe, Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **5.1.4      **Airspace Option PE2a****


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>		<b>OPTION NO: PE2b</b>		
<i>Option Name:</i> Airspace Option PE2b		ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>				
<b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.	NOT MET	PARTIAL	MET	
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>				
<b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.	NOT MET	PARTIAL	MET	
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>				
<b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.	NOT MET	PARTIAL	MET	
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>				
<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET	

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe, Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

### **5.1.5      **Airspace Option PE2b****

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved


<b>Design Principle Evaluation</b>	<b>OPTION NO: PE2c</b>		
<i>Option Name:</i> Airspace Option PE2c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET



<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe, Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

### **5.1.6      **Airspace Option PE2c****

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: PE2d</b>		
<i>Option Name:</i> Airspace Option PE2d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe, Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

### **5.1.7 Airspace Option PE2d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.

<b>Design Principle Evaluation</b>	<b>OPTION NO: PE2e</b>		
<i>Option Name:</i> Airspace Option PE2e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			


<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe, Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

#### **5.1.8 Airspace Option PE2e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.




<b>Design Principle Evaluation</b>	<b>OPTION NO: PE2f</b>		
<i>Option Name:</i> Airspace Option PE2f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace lozenge shaped zone, circular portion 6 nm radius, truncated 5 nm laterally parallel to the runway centreline. Stubs 5 nm wide extended to include protection of the IFPs. Upper airspace extended to the north to contain aircraft leaving airways structure to northern IAFs. Southern boundary extended to contain aircraft leaving airway structure to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe, Dunkeswell and North Hill airfields. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure and would ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

### **5.1.9      **Airspace Option PE2f****


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option extends new airspace to the north of the airport into Class G airspace, which was a cause of concern to stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: PE3a</b>		
<i>Option Name:</i> Airspace Option PE3a	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace a circular zone, radius 5 nm. Stubs 4 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E or Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

### **5.1.10     Airspace Option PE3a**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.


<b>Design Principle Evaluation</b>	<b>OPTION NO: PE3b</b>		
<i>Option Name:</i> Airspace Option PE3b	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace a circular zone, radius 5 nm. Stubs 4 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace for the CTR and stubs would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			



### **5.1.11     Airspace Option PE3b**


This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved

<b>Design Principle Evaluation</b>	<b>OPTION NO: PE3c</b>		
<i>Option Name:</i> Airspace Option PE3c	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace a circular zone, radius 5 nm. Stubs 4 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E or Class E+TMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E/Class E+TMZ airspace (if operating under IFR). Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

### **5.1.12     Airspace Option PE3c**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: PE3d</b>		
<i>Option Name:</i> Airspace Option PE3d	REJECT		
<p><i>Description of Option:</i> Layered airspace, lower airspace a circular zone, radius 5 nm. Stubs 4 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E/Class E+TMZ for the stubs and Class E+RMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport. Class E/Class E+TMZ airspace would create a known traffic environment that protects the critical stages of flight for IFR operations only.</p>			

<b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option does not fully protect the final approach and initial climb out paths.</p>			
<b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.	NOT MET	PARTIAL	MET

*Summary of Qualitative Assessment:* Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.

### **5.1.13      Airspace Option PE3d**

This option does not address the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ; there is the potential for conflict from aircraft operating VFR in Class E/Class E+TMZ airspace, where ATC separation is not provided. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. As this option does not fully protect the final approach and initial climb out paths, this option is rejected.


<b>Design Principle Evaluation</b>	<b>OPTION NO: PE3e</b>		
<i>Option Name:</i> Airspace Option PE3e	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace a circular zone, radius 5 nm. Stubs 4 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR, Class E+RMZ for the stubs and Class E/Class E+TMZ for the upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. ATC separation would not be provided to aircraft operating VFR in Class E/Class E+TMZ airspace; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET



<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E/Class E+TMZ /Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'. Carriage and operation of pressure-altitude reporting transponders is mandatory in Class E+TMZ airspace. There will be no restrictions to access of Class E airspace for aircraft operating VFR.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E/Class E+TMZ/Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have, which would include the use of alternative forms of electronic conspicuity within the TMZ.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

#### **5.1.14     Airspace Option PE3e**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

<b>Design Principle Evaluation</b>	<b>OPTION NO: PE3f</b>		
<i>Option Name:</i> Airspace Option PE3f	ACCEPT		
<p><i>Description of Option:</i> Layered airspace, lower airspace a circular zone, radius 5 nm. Stubs 4 nm wide extended to include protection of the IFPs. Upper airspace northern boundary in line with northern edge of stubs. Southern boundary extended to contain aircraft leaving airway structure to the south of the airport to southern IAFs for approach procedures. The zone around the airport nominally from the surface to 3,000 ft with the stubs nominally 1,500 ft base height to 3,000 ft. The upper airspace top height FL65. Airspace classification for this sub-option would be Class D for the CTR and Class E+RMZ for the stubs and upper zone.</p>			
<p><b>Design Principle 1:</b> Airspace design must at least maintain, and ideally enhance, aviation safety for all airspace users in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option will be designed to meet acceptable levels of flight safety. The design will be compliant with the required technical criteria and will be consistent and compatible with the appropriate regulatory requirements. Although ATC separation would not be provided to aircraft operating VFR in Class E+RMZ airspace, ATC would provide traffic information; responsibility for maintaining separation would be the responsibility of the aircraft captain. Although this option should enhance the safety of aircraft operating to and from Exeter Airport due to the increased level of protection, it has the potential to create choke points resulting in the funnelling of aircraft displaced by and operating outside of any new airspace.</p>			
<p><b>Design Principle 2:</b> Airspace design must accord with the CAA’s published Airspace Modernisation Strategy and any future plans associated with it.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment</i> This option meets the known outcomes of the AMS.</p>			
<p><b>Design Principle 3:</b> New airspace should create a known traffic environment to protect the final approach and climb-out paths at Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Class D and Class E+RMZ airspace would create a known traffic environment that protects the critical stages of flight, the final approach and initial climb-out paths, at Exeter Airport.</p>			
<p><b>Design Principle 4:</b> Any new airspace should facilitate fair access to all airspace users.</p>	NOT MET	PARTIAL	MET

<p><i>Summary of Qualitative Assessment:</i> This option will require ATC clearance to access Class D airspace or Class E+RMZ airspace (if operating under IFR) but access to airspace will not routinely be denied. The carriage and operation of radio equipment is mandatory Class E+RMZ airspace for aircraft operating VFR. Exeter ATC would not unnecessarily delay information transmissions by requesting pilots to 'standby', unless for urgent operational reason. Communications with pilots will be established as soon as possible after having instructed them to 'stand by'.</p>			
<p><b>Design Principle 5:</b> Airspace designs should, where possible, minimise the impact on non-Exeter Airport aviation in the local area.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Any additional airspace is likely to have some impact on other airspace users in the local area. The stubs extend over Farway Common airfield and the upper airspace extends over Branscombe airfield. ATC clearance will be required to enter Class D or Class E+RMZ airspace (if operating under IFR). Aircraft operating VFR will require two-way communications prior to entering Class E+RMZ airspace. Exeter Airport is committed to introducing suitable mitigation to minimise any impact that the introduction of new airspace may have.</p>			
<p><b>Design Principle 6:</b> The size and categorisation of any new controlled airspace should be proportionate to the requirement.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option protects the final approach and initial climb out paths.</p>			
<p><b>Design Principle 7:</b> Airspace should connect to the airways structure to ensure Commercial Air Transport remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> This option provides connectivity to the airways structure. Commercial Air Transport would be able to remain inside Controlled Airspace when arriving or departing from Exeter Airport.</p>			
<p><b>Design Principle 8:</b> Airspace should be designed to minimise the adverse impact of aircraft noise and emissions, including any consequential impacts caused by the displacement of other air traffic outside of the Controlled Airspace.</p>	NOT MET	PARTIAL	MET
<p><i>Summary of Qualitative Assessment:</i> Up to 4,000 ft and 7,000 ft, this option is expected to maintain or reduce any adverse impacts of noise compared to current operations. This option is expected to reduce aircraft emissions up to 7,000 ft compared to current operations by reducing delays both in the air and on the ground caused by the requirement for ATC intervention and avoiding action. There may be an increase in noise caused by the funnelling of aircraft displaced by and operating outside of any new airspace with this option but this is not expected to be significant.</p>			

### **5.1.15     Airspace Option PE3f**

This option addresses the basic requirement of providing protection to aircraft flying final approach and initial departure routes outside the ATZ. This option biases new airspace to the south of the airport to alleviate stakeholder issues with Class G airspace to the north, which was supported by some stakeholders. This option connects to the airways structure and would allow aircraft to remain inside Controlled Airspace when arriving at or departing from the airport. Although this option has been included following stakeholder feedback, the concern regarding the proximity of Class D airspace to other airfields in the local area still exists. Stakeholders considered that having airspace overhead local airfields was unacceptable. This option will be taken forward and further design work will be undertaken to potentially address some of the stakeholder concerns, specifically the size of the CTR and base height of the outer zone. To ensure the protection of commercial traffic on the final approach, the use of an expanded CTR may be required to allow higher base levels for the stubs. Exeter Airport will look to introduce solutions to mitigate the effects of introducing new airspace in order to optimise the outcome for parties involved.

# 6 The Design Technical Criteria Evaluation of Design Options

## 6.1 Technical Criteria Evaluation

The technical criteria detailed in Appendix F to CAP 1616, and shown in Table 4 below, form the basic structure on which the change sponsor builds a formal airspace change proposal. The option that is eventually chosen must be compliant with these technical criteria. The options taken forward to Stage 3 will be assessed so that any operational, technical or training critical interdependencies are identified and plans will be established to resolve any identified issues that arise.

<b>Operational Impact</b>	
	<b>An analysis of the impact of the change on all airspace users, airfields and traffic levels must be provided, and include an outline concept of operations describing how operations within the new airspace will be managed. Specifically, consideration should be given to:</b>
a	Impact on IFR general air traffic and operational air traffic or on VFR General Aviation (GA) traffic flow in or through the area
b	Impact on VFR operations (including VFR routes where applicable)
c	Consequential effects on procedures and capacity, i.e. on SIDs, STARs, and/or holding patterns. Details of existing or planned routes and holds
d	Impact on aerodromes and other specific activities within or adjacent to the proposed airspace
e	Any flight planning restrictions and/or route requirements
<b>Supporting Infrastructure/Resources</b>	
<b>General Requirements</b>	
a	Evidence to support RNAV and conventional navigation as appropriate
b	Evidence to support primary and secondary surveillance radar (SSR)
c	Evidence of communications infrastructure including R/T coverage
d	The effects of failure of equipment, procedures and/or personnel with respect to the overall management of the airspace must be considered
e	Effective responses to the failure modes that will enable the functions associated with airspace to be carried out
f	A clear statement on SSR code assignment requirements
g	Evidence of sufficient numbers of suitably qualified staff required to provide air traffic services following the implementation of a change
<b>Airspace and Infrastructure</b>	

<b>General Requirements</b>	
a	The airspace structure must be of sufficient dimensions with regard to expected aircraft navigation performance and manoeuvrability to fully contain horizontal and vertical flight activity in both radar and non-radar environments
b	Where an additional airspace structure is required for radar control purposes, the dimensions shall be such that radar control manoeuvres can be contained within the structure, allowing a safety buffer.
c	The Air Traffic Management system must be adequate to ensure that prescribed separation can be maintained between aircraft within the airspace structure and safe management of interfaces with other airspace structures
d	Air traffic control procedures are to ensure required separation between traffic inside a new airspace structure and traffic within existing adjacent or other new airspace structures
e	Within the constraints of safety and efficiency, the airspace classification should permit access to as many classes of user as practicable
f	There must be assurance, as far as practicable, against unauthorised incursions. This is usually done through the classification and promulgation
g	Pilots shall be notified of any failure of navigational facilities and of any suitable alternative facilities available and the method of identifying failure and notification should be specified
h	There must be sufficient R/T coverage to support the Air Traffic Management system within the totality of proposed controlled airspace
i	If the new structure lies close to another airspace structure or overlaps an associated airspace structure, the need for operating agreements shall be considered
j	Should there be any other aviation activity (low flying, gliding, parachuting, microlight site, etc) in the vicinity of the new airspace structure and no suitable operating agreements or air traffic control procedures can be devised, the change sponsor shall act to resolve any conflicting interests
<b>ATS Route Requirements</b>	
a	There must be sufficient accurate navigational guidance based on in-line VOR/DME or NDB or by approved RNAV derived sources, to contain the aircraft within the route to the published RNP value in accordance with ICAO/Eurocontrol standards
b	Where ATS routes adjoin terminal airspace there shall be suitable link routes as necessary for the ATM task
c	All new routes should be designed to accommodate P-RNAV navigational requirements
<b>Terminal Airspace Requirements</b>	
a	The airspace structure shall be of sufficient dimensions to contain appropriate procedures, holding patterns and their associated protected areas
b	There shall be effective integration of departure and arrival routes associated with the airspace structure and linking to designated runways and published instrument approach procedures (IAPs)
c	Where possible, there shall be suitable linking routes between the proposed terminal airspace and existing en-route airspace structure

d	The airspace structure shall be designed to ensure that adequate and appropriate terrain clearance can be readily applied within and adjacent to the proposed airspace
e	Suitable arrangements for the control of all classes of aircraft (including transits) operating within or adjacent to the airspace in question, in all meteorological conditions and under all flight rules, shall be in place or will be put into effect by the change sponsor upon implementation of the change in question (if these do not already exist)
f	The change sponsor shall ensure that sufficient visual reference points are established within or adjacent to the subject airspace to facilitate the effective integration of VFR arrivals, departures and transits of the airspace with IFR traffic
g	There shall be suitable availability of radar control facilities
h	All new procedures should, wherever possible, incorporate Continuous Descent Approach (CDA) profiles after aircraft leave the holding facility associated with that procedure
<b>Off-Route Airspace Requirements</b>	
a	If the new structure lies close to another airspace structure or overlaps an associated airspace structure, the need for operating agreements shall be considered
b	Should there be any other aviation activity (military low flying, gliding, parachuting, microlight site etc) in the vicinity of the new airspace structure and no suitable operating agreements or air traffic control procedures can be devised, the change sponsor shall act to resolve any conflicting interests

Table 3 – Technical Criteria Requirements for Submission of a Formal Proposal