

NATS Departure Route Proposal at London Stansted Airport



Feedback Report

Issue 1: 14th November 2014

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1 Introduction

- 1.1 Earlier this year NATS, supported by Stansted Airport, conducted a 12-week consultation on proposed changes to flight allocation between Stansted departure routes to the east and south. The consultation closed on 8th September 2014. This report summarises the feedback to the consultation.
- 1.2 The proposal is led by NATS which has responsibility for providing a safe and efficient airspace network, and is supported by Stansted Airport which has a focus on low altitude routes in the vicinity of the airport.
- 1.3 The consultation document, describing the proposal can be found at **www.nats.aero/lampstansted**. The consultation document describes the proposed change, its benefits and impacts, and its context as part of the Future Airspace Strategy (FAS); this is a strategy that has been developed by the CAA with the support of the aviation industry. It is assumed that the reader is familiar with the consultation material – this feedback document does not repeat the description of the airspace or the definition of terms.

2 Consultation Objective and Analysis Process

- 2.1 When we propose changes to airspace arrangements we take into account Government and CAA guidance (found in references 1 and 2 respectively – see Appendix A). These highlight a number of factors that must be considered and balanced in the development of a proposal, ranging from safety and delay management, through to CO₂ efficiency and noise mitigation.
- 2.2 The CAA process for airspace change (ref 2) states that consultation is about ‘confirming and attaining opinions about the impacts of a proposed change’. The former is covered in Section 3 where we summarise the main themes raised in the consultation. The latter is covered in Section 4 which lists the suggestions we have identified through analysis of the consultation response; this section also describes how each has been considered. There were also a number of questions raised in the consultation response – these are covered in Section 6.
- 2.3 When interpreting Sections 3 and 4 it is important to note that the CAA has indicated that the aim of airspace consultation processes is not to gauge the popularity of a proposal *per se*; rather it is a process for identifying new and relevant information that should be taken into account in the proposal alongside the existing guidance (refs 1 & 2). All relevant issues are therefore considered equally whether they are raised by a single respondent or a majority; consultation is not a voting process.
- 2.4 Appendix A details the guidance documents that we observe for all proposed airspace changes.

3 Response Overview

Summary of Outreach/Publicity

- 3.1 As no new departure routes are proposed, the CAA has advised that this consultation should be conducted through the Stansted Airport Consultative Committee and the National Air Traffic Management Advisory Committee (NATMAC); we have encouraged these bodies to cascade information to their members.
- 3.2 By request of Stansted Airport and its Consultative Committee we have gone beyond these requirements to extend the consultation to the public so they could respond if they wished through our website at www.nats.aero/lampstansted
- 3.3 We also contacted local media to ensure that the consultation was publicised. News releases were issued at the start and midpoint of the consultation; in total this generated 89 media items through the Essex, Kent, Cambridgeshire, Suffolk, and Hertfordshire regions including:
 - a) 2 TV interviews and 2 radio interviews, each of which were repeated several times throughout the days they were broadcast
 - b) 38 newspaper articles
 - c) 47 online articles.
- 3.4 As a consequence the website had approximately 5,000 visitors.

Response statistics

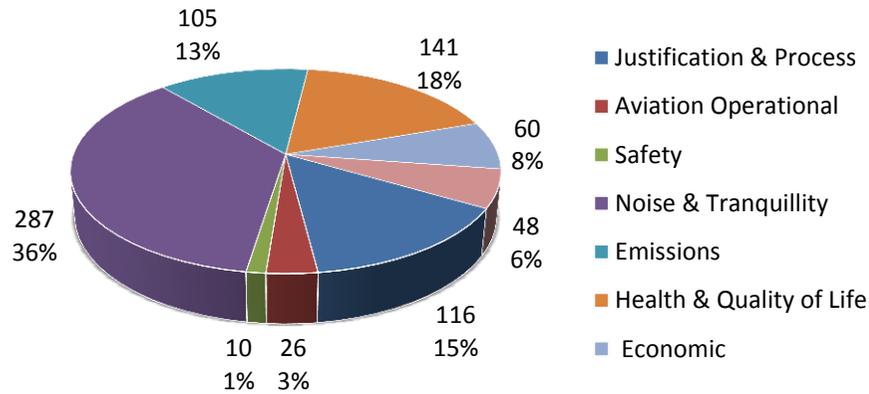
- 3.5 This section provides a statistical overview of the themes raised through the consultation response.
- 3.6 We have applied a consistent approach to our analysis of responses. However, determining areas of interest or 'themes' from responses is, to a degree, subjective. This is because respondents have different views and articulate them in different ways. Respondents also often cited more than one theme in a response; hence the number of themes identified exceeds the number of individual responses.
- 3.7 CAA guidance states that consultation is about confirming stakeholder opinions (ref 2).
- 3.8 In this section we consider the generic 'themes' raised by respondents to our consultation. The aim is to make a broad assessment of whether the Stansted stakeholder group as a whole has demonstrably different views from those represented in the Government guidance (see para 2.2).

Assessment of Themes

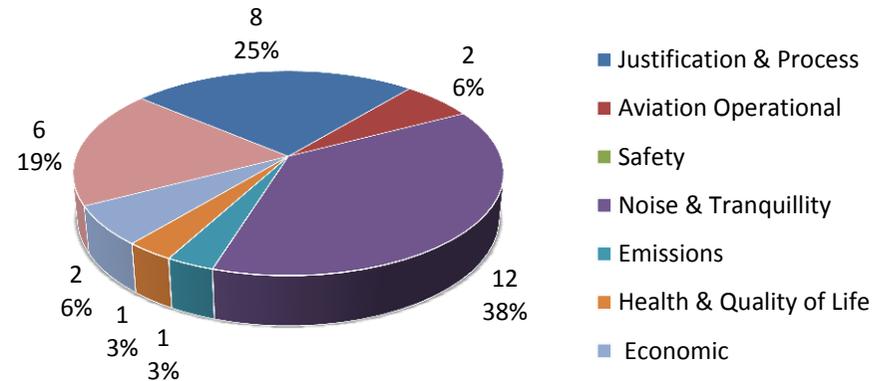
- 3.9 Government guidance indicates that local noise impacts are a key consideration for proposals affecting airspace below 4,000ft, and to a lesser extent between 4,000ft and 7,000ft; above 7,000ft local impacts (ie noise) are not a priority (ref 1). The pie charts on pages 6-8 show that this is in line with the general response to our consultation, with a predominance of objections from respondents who would experience more over-flights at relatively low altitudes. A large proportion of these objections cite noise and its perceived effect on quality of life as the reasons for objecting (37% and 20% of comments respectively).
- 3.10 The pie charts on page 6 show a proportion of comments from objectors citing emissions (12%). Government guidance states that changes to flight paths above 1,000ft are unlikely to affect local air quality (ref 1); almost all aircraft at Stansted have climbed above 1,000ft before the Dover and Clacton departure routes split from one another; therefore this proposal would have no discernible effect on local air quality. Furthermore the proposal would mean less CO₂ would be emitted by Stansted flights than if we did not make the change (for details of the CO₂ benefits see para 5.16). As such we have not attached weight to the objections relating to emissions.
- 3.11 The charts on page 8 show a majority of 'local Government/MOD submissions' objecting to the proposal. The objections registered in this category were principally from Parish Councils representing areas where there would be an increase in over-flights. It is natural that such organisations focus on local impact rather than on an overall balance of benefits across communities and industry. Of the larger Council bodies (district and county level), one objected, one supported and 3 were non-committal. The MOD has not objected to this proposal.
- 3.12 There were not many positive responses from areas which would have fewer over-flights, ie the areas to the south of Stansted shown in the postcode map overleaf. This is in line with our experience from previous consultations which suggests that people are more likely to respond in order to object than to support.
- 3.13 Analysis also indicated that a number of respondents from areas such as Great Dunmow objected on the grounds of increased over flights, when in fact the proposal will reduce the number (see para 5.5).

- 3.14 The response analysis confirms our understanding of general stakeholder concerns; it does not provide evidence to suggest that the generic views of the Stansted community group are different from those of the wider population. Those who would be over-flown more are primarily concerned with noise/quality of life issues and question the process; those in support are generally less vocal, but also highlight operational and CO₂ emissions benefits alongside noise reduction and its perceived positive effects with respect to quality of life.
- 3.15 Therefore, on the basis of this evaluation of the general consultation themes raised by consultees, there does not appear to be strong grounds for deviating from the generic guidance on airspace change objectives laid out in the Government guidance (ref 1). The following sections consider whether there are specific local issues that need special consideration.

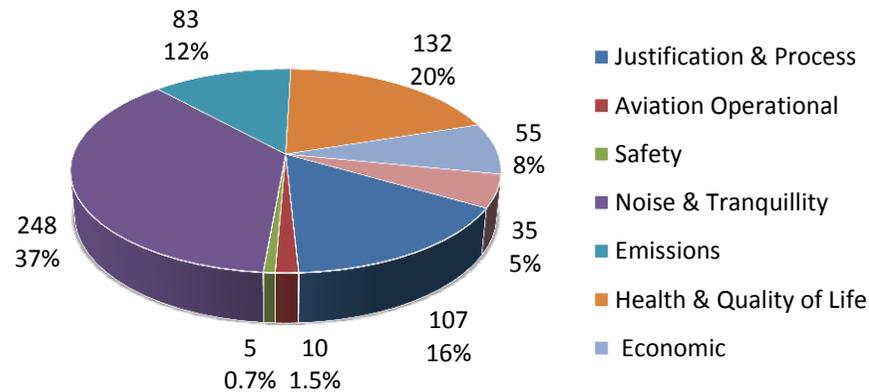
Overall Themes: 793 Comments



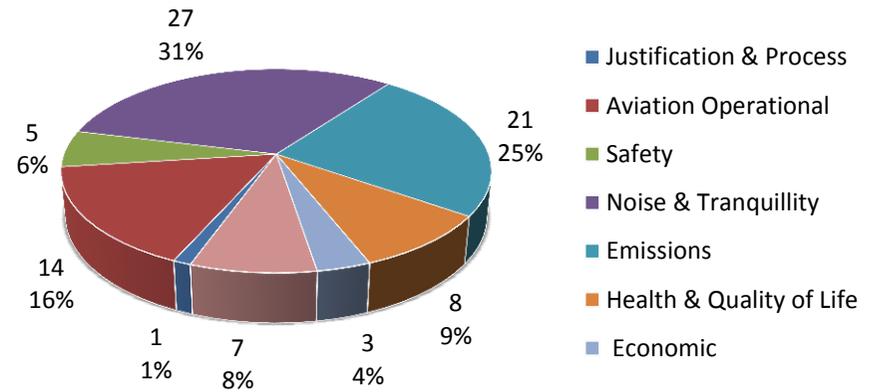
No objection or unclear: 32 Comments

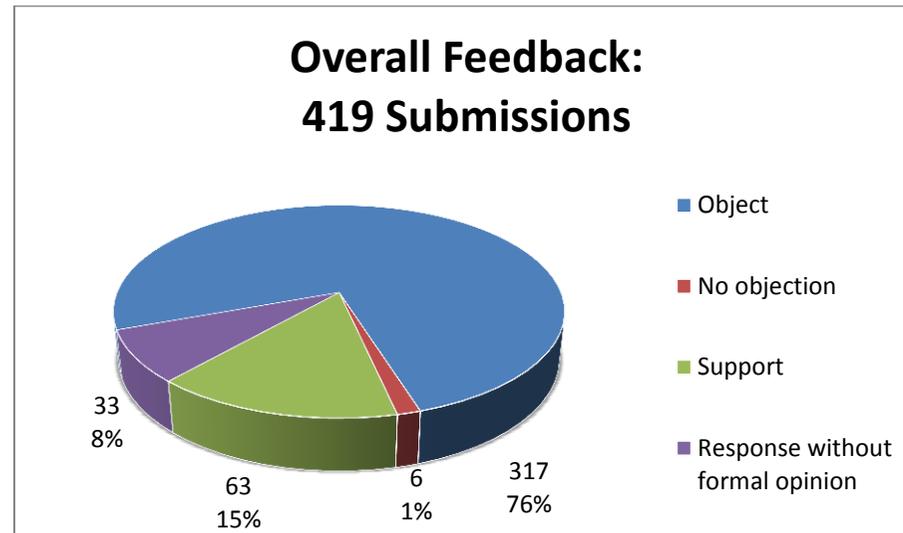


Objection: 675 Comments

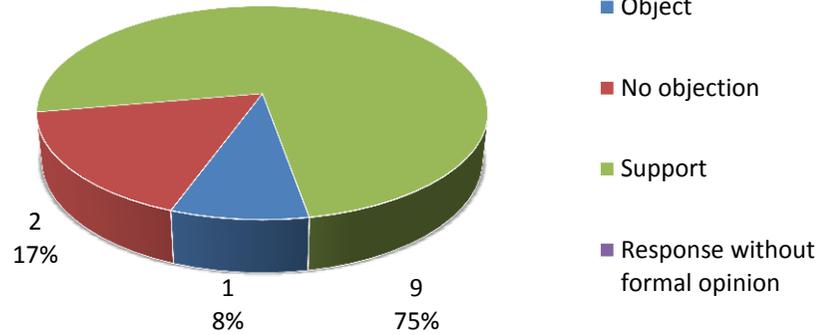


Support: 86 Comments

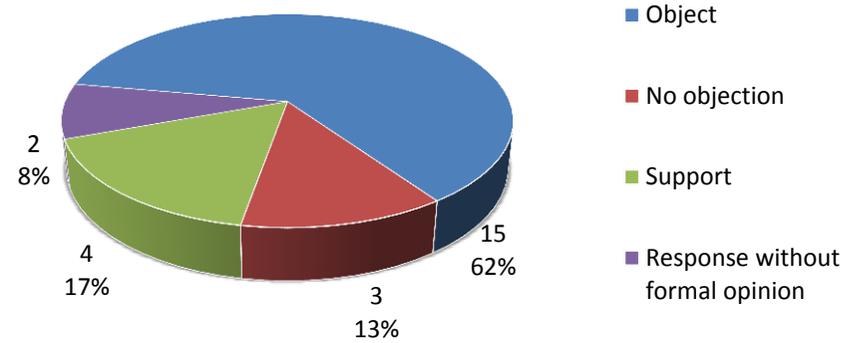




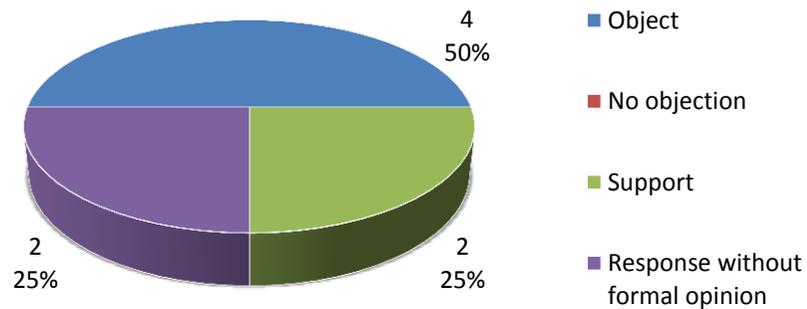
Feedback from Aviation: 12 Submissions



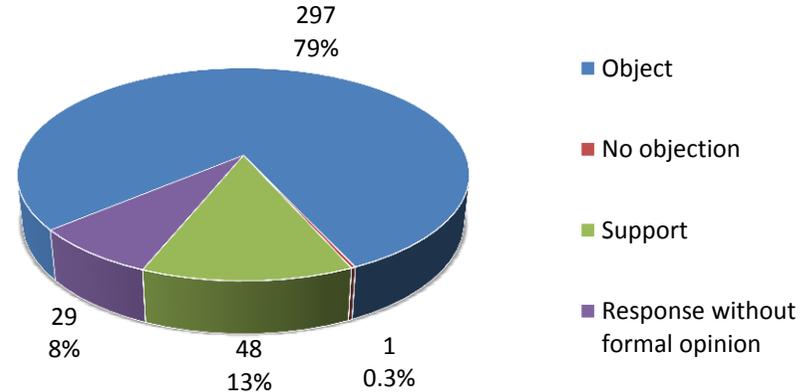
Feedback from Govt / MoD: 24 Submissions



Feedback from Local Organisations: 8 Submissions



Feedback from Members of Public: 375 Submissions



4 Considerations

4.1 An aim of consultation is to identify whether there are relevant issues that we have not considered sufficiently in developing our proposal.

4.2 This section lists considerations raised by stakeholders through the consultation, and outlines how they have been considered in the proposal.

4.3 **The alignment of the Clacton route should be changed to avoid my town/village/school/hospital etc...**

The consultation document describes how the Clacton route exists today and could be used by more aircraft anyway, regardless of this proposed change.

We are proposing to make the changes outlined in the consultation document in 2015. Changing route alignments is, however, a more complicated process which will take much longer to complete and is therefore beyond the scope of this proposal.

We will be considering the case for changing route alignments in a second phase of development, which we expect will take until at least 2019 to complete. This second phase, referred to as 'LAMP Phase 2', has a much wider scope because it considers the wider route network around London and the South East. Please see the consultation document for detail on LAMP phasing and what is to be included in Phase 2, but in summary, its scope includes all routes into and out of Stansted, Heathrow and Luton.

The proximity of these airports to one another means that their routes are linked in air traffic control terms. This is because they all have to weave through the congested airspace above London and the South East whilst being kept safely separated from one another. Moving one route may therefore have an impact on those around it.

As a consequence route realignment is a relatively complicated process involving the whole system of routes, whereas the change being proposed here only involves existing route usage.

The changes we are proposing now will enable us to secure the operational and environmental benefits discussed in the consultation material. We believe there is a case for seeking this net benefit to be realised as soon as possible hence we are proposing this change for 2015 and not waiting for LAMP Phase 2.

The phasing of LAMP is described in further detail in the consultation document; in particular see Section 1 and para 3.4 onwards of the consultation document for more details.

4.4 **Put flights over towns instead of the countryside which has less ambient noise**

Avoiding populated areas is in line with Government guidance (ref 1) and national policy (ref 3).

The proposal applies to existing designated routes rather than seeking to design new ones (see para 4.3), and therefore moving flights over towns is beyond the scope of the proposal.

4.5 **You should introduce respite routes**

Respite routes would mean establishing new route alignments, which is outside the scope of this proposal (see para 4.3).

4.6 **The proposal should not go ahead because the current use of the Dover route minimises aircraft concentration on the Clacton route**

Concentrating departures is in line with Government guidance (ref 1) and national policy (ref 3).

4.7 **The proposal should not go ahead because the current use of the Dover route provides respite for the Clacton route**

The current division of traffic between the Clacton and Dover routes does not constitute respite because each route is permanently available and could be flown at any time.

In airspace design terms providing respite involves establishing more than one route heading in a particular direction, each of which is only active for a defined time period. The principle is to allow people to plan around a known schedule.

4.8 **Fly higher over my town/village/school/hospital etc...**

Flights are more fuel/CO₂ efficient when flying at higher altitudes. It is therefore operationally and environmentally beneficial for aircraft to climb continuously to their cruising altitudes.

Continuous climb is already achieved by the majority of aircraft on the Clacton route, which means that these efficient altitudes can be reached much earlier than on the Dover route. This is part of the rationale behind this proposal.

The altitude of aircraft at any point along the Clacton route is therefore dictated by aircraft performance, not the airspace design; both NATS and the airport will continue to work with airlines to ensure performance of aircraft is maximised on this and other Stansted routes.

5 Questions and Concerns Raised, and NATS' Response

- 5.1 This section presents the questions and concerns raised through the consultation, and our response. Many of these were addressed in the consultation material, which remains available for your information (see paragraph 1.3).
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General Questions

5.2 Why are you doing this consultation?

We propose switching most of the flights from the pair of existing Stansted Airport departure routes heading south onto the existing pair of routes heading east (there is a pair in each instance because there is one route from each end of the runway). At the moment, flights towards the south are being kept at lower altitudes in order to pass through particularly congested airspace, and in particular to stay safely below Heathrow arrivals from the east over Essex and Kent.

Under this proposal, most daytime flights would initially follow the route to the east, therefore avoiding the congested area and climbing continuously, so that the majority are above 7,000ft before crossing the A131 (south of Braintree). Making this change will mean some areas are over-flown more, others less, and some will see no change.

5.3 Why are you doing this now?

This consultation is part of the first phase of the London Airspace Management Programme (LAMP) to deliver the Future Airspace Strategy (FAS), developed by the CAA with the support of the aviation industry. The FAS is the UK's vehicle to deliver the benefits of a Single European Sky. This proposal would improve the efficiency and overall environmental performance of the airspace associated with Stansted Airport, and also the wider system of routes over East London and parts of Essex and Kent. We are seeking to realise both the local and wider benefits as early as possible.

5.4 Does this proposal involve a new departure route?

No, we are proposing a different usage of existing departure routes.

Location-Specific Questions

5.5 Will this proposal mean more flights over Great Dunmow?

There are two Runway 04¹ departure flight paths near Great Dunmow - an eastbound route that passes northeast of the town, and a southbound route that passes to the west of the town. Departure noise currently experienced in Great Dunmow is mostly from flights following the southbound route that passes west of the town. This is because it is generally the closer of the two routes, and more significantly, some flights making the turn towards the south swing out wide directly over-flying the town. It is this route that would have far fewer daytime flights, so if our proposal goes ahead people in central and western Great Dunmow would benefit.

The eastbound route that passes northeast of the town would be flown more, which means people northeast of the town may notice an increase in flights. However, flights on the eastbound route are not turning as they pass Great Dunmow and are therefore predictably 1-2km to the northeast of Church End rather than directly overhead. The maps in our consultation document can be used to determine the effect on your particular location.

5.6 Will this proposal mean more flights over Hatfield Heath?

This proposal would have little effect on the number of flights over Hatfield Heath in general; however, this depends on where you live or work within the village or surrounding area.

Two Runway 22 departure flight paths currently pass over Hatfield Heath - an eastbound route and a southbound route. While these routes ultimately head off in separate directions, they do not diverge significantly until after passing Hatfield Heath. Therefore switching flights from one to the other will make little difference to the village itself.

As the routes diverge after Hatfield Heath, areas to the east and south of the village may notice a difference: areas to the south would experience a reduction in daytime departure over-flights, while those areas directly to the east would experience an increase. The maps in our consultation document can be used to determine the effect on your particular location.

5.7 Will this proposal mean more flights over Braintree and Great Notley?

The Runway 04 departure route to Clacton already passes to the south of Braintree, rather than directly overhead. Air traffic control can sometimes instruct aircraft routing to the northeast to leave the route, causing them to over-fly Braintree (they are allowed to do this as part of the day to day management of the safety and efficiency of the system). However, this only happens for flights heading ultimately to the northeast; these flights are on the Clacton route today and would therefore not be affected by this proposal.

¹ The consultation document provides more background on the use of runways and their naming conventions. It is assumed that the reader is familiar with the consultation material.

New flights that route east due to this proposal would not over-fly Braintree. Ultimately they would turn towards the southeast when they get near the east coast - to direct them northeast over Braintree would be routing them in the opposite direction from where they wish to go.

The new flights on the Runway 04 Clacton departure route would mean more over-flight of Great Notley, typically at around 7,000ft. However, this route is historically used only 30% of the time; this percentage is not expected to change as it is the consequence of the prevailing westerly wind direction. Therefore whilst the proposal would mean more flights on this route for 30% of the time, there would be no change for the remaining 70% of the time when there is no route overhead.

The consultation material shows the area for flights below 7,000ft extends to the A12, but it should be noted that this allows for worst-case climb profiles. Aircraft typically reach 7,000ft well before this; aircraft over Great Notley are typically approaching 7,000ft with many having climbed above 7,000ft before passing over the town. 7,000ft is the threshold in the Government guidance above which changes are deemed to have no significant local impact and therefore local consultation is not usually required.

Questions relating to impacts

5.8 **Will it mean more flights overhead? Will I see/hear more flights?**

Overall this proposal would reduce the geographic area exposed to noise from flights below 7,000ft. However, some areas would be over-flown more often than today, others less, and some would not notice any significant change. Stakeholders can use the consultation document to determine how the number of over-flights of their area would change in the future.

5.9 **Have you considered the impact on my house/village/town/school or other location?**

The proposed design is in line with Government and CAA Guidance on airspace change (refs 1 and 2). This guidance indicates the environmental impacts that must be considered in the design of airspace.

5.10 **Will more areas be over-flown by low altitude departures?**

There are no new departure routes and so no new areas would be over-flown at low altitudes as a result of this proposal².

This proposal aims to move most of the daytime flights from the routes to the south off each runway and put them onto the equivalent route heading to the east (ie the flights that currently head south from Runway 22 would be put on the Runway 22 eastbound route and likewise for Runway 04). The existing routes heading west would be unaffected.

The proposal would therefore mean that fewer people overall would be over-flown by Stansted departures in the daytime, but those that are would

² Connecting routes are being proposed which are largely over the sea and only for traffic above 15,000ft

experience an increase in over-flight (see para 5.18 for more detail on population figures, and para 5.21 for the traffic patterns at higher levels).

5.11 Why don't you stop the number of flights from growing?

The number of flights allowed at Stansted is managed through the Town and Country Planning system. This limit is currently set at 264,000 air traffic movements and 35 million passengers per annum. Stansted airport has planning permission for the airport to grow to this number; the planning permission also defines the noise controls that allow for this growth.

It is NATS' responsibility to manage flights safely and efficiently.

5.12 Will you be compensating those that would get more traffic as a result of your proposals?

The existing noise insulation schemes for Stansted Airport remain in place for those affected by a high level of noise; ie within the 63 dBA 'leq' contour (see the consultation document for more detail on noise measures). However this proposal does not change the size or shape of this contour.

Neither the CAA or Government guidance require any form of compensation for areas with a lesser noise impact, ie areas outside the 63dBA contour. This is equally the case for either existing or changed noise impacts. NATS are not considering any deviation from the existing guidance (refs 1 and 2).

5.13 Why should some communities suffer with more traffic for air route benefits that add to profits for the airports and NATS?

Our view is that the proposal provides an overall benefit both environmentally and operationally. It is important to note that the increase in over-flights for some areas is offset by a reduction for others. There are also wider benefits in terms of reduced CO₂ per flight (see the consultation document and Para 5.16 to 5.18 of this document for details of the package of benefits).

5.14 Have you made these changes already? Why has there been a recent increase in noise since your consultation?

No - there have been no changes already implemented as part of this proposal.

NATS, like any other airspace change sponsor, is required to follow the airspace change process documented in the CAA's airspace change guidance (ref 2), when proposing permanent changes to the airspace design.

Permanent airspace changes cannot be implemented until a formal proposal has been submitted to, and approved by, the CAA.

Exceptions to this include trial procedures, designed to test technical airspace design aspects. There have been no changes during the consultation period and therefore any recent changes to the perceived behaviour of aircraft in your vicinity will be the result of variations in flight profiles that are part of normal operations.

In normal operations, air traffic controllers consider a range of factors when determining where aircraft fly, such as other traffic in the area, aircraft types, wind direction and other weather conditions. This means that the way in which

airspace is used varies from day to day, and even flight by flight (hence the wide swathes in which aircraft may be seen in the route and flight path maps in the consultation document). This variation may lead people to believe that airspace usage has changed when in fact it hasn't.

Specifically, the consultation ran during summer 2014 which also saw some relatively unusual weather conditions. This may lead to the perception that changes have already occurred. These weather conditions affect the direction in which the runway is used, because for a safe operation aircraft take off and land facing into the wind. The prevailing wind in the UK is from a west or southwesterly direction, leading to a generally more common use of 'Runway 22' at Stansted.

The historical average use of Runway 22 approximates to 70% of the year, but this can vary quite significantly from year to year, and within the year itself.

Due to the unusual wind direction throughout summer 2014, encompassing the consultation period, we saw sustained periods of Runway 04 (northeasterly) operations. The average from May to September was unusually 44% Runway 04 and 56% Runway 22. Therefore people under the Runway 04 routes would have had more flights as a consequence of the weather, and not due to any changes to airspace management.

Experience from previous consultations indicates that the consultation process itself often leads people to take more notice of the flights that were already above them. It may therefore seem like a change has occurred when in fact the communities have become more sensitive to existing flight paths as a consequence of the discussion about flight paths.

Questions regarding existing airspace policy should be directed to the CAA.

5.15 **Why have you used 2012+20% and 2012+40% for traffic as the basis of your calculations?**

We are required by the airspace change process to report on the expected effects of the proposal at the year of implementation and for a future year. For this proposal the first full year would be 2016 and we also present a forecast for 2020.

To ensure our analyses are as accurate as possible we use recorded data from a previous period as a baseline for noise and CO₂ analysis. At the time of preparing this consultation the latest available data for the noise analysis was from 2012, and so we used that as the base year for the noise analysis. For consistency we used the same baseline period for CO₂ analysis and the forecast flight numbers presented in the consultation document.

However since 2012 there has already been growth at Stansted airport and we expect this trend to continue as the economic conditions improve. Considering the latest figures: in September 2014 there were 14,290 Stansted flights compared to 12,691 in September 2012; a 13% rise. We expect this trend to continue from 2014 to 2016 hence the assumption of 2012+20%.

Stansted's passenger numbers were particularly affected during the recession, not least because of the national economy but also because of commercial decisions taken by previous owners of the airport at the same time. In 2007 there were a total of c. 208,000 flights whereas in 2012 there were only

143,000. Given the change in national economy and the new ownership of the airport, we believe it is a reasonable assumption that the recovery trend will continue and that Stansted traffic will return to the previous levels by c. 2020, ie an increase of 40%+ on 2012 levels (the monthly and annual figures presented above are from the UK flight database).

It is important to note that because we use the same baseline period for all our analyses, underestimating the number of flights for the CO₂ analysis would result in an underestimation of the number of flights for the noise analysis, and also for the figures for the number of flights per day expected on each route. If we underestimated these we would be criticised for trying to downplay the local impacts.

The consultation document makes it clear that the actual traffic in 2016 and 2020 may differ from the assumptions used for this proposal as we accept that they are subject to a number of unpredictable factors. However, for the reasons laid out above we are confident that the 2012+20% and 2012+40% scenarios are reasonable assumptions that present a fair estimation of future impacts for noise, CO₂ and the number of over-flights. The CAA will assess all the information we provide as part of our case for change.

5.16 **How can you justify the change based on CO₂ savings that are only 1% of overall emissions produced by flights to and from Stansted?**

The 1% value published by the media and some pressure groups considers all Stansted flights, not just those that are affected by the proposal. It also considers the whole length of the flight, only a small proportion of which is within UK airspace and for which we are responsible.

This proposal only affects one third of departures, approximately one sixth of Stansted's overall movements. If we consider only the saving for these flights, the equivalent percentage value immediately increases to c. 6%.

NATS is responsible for the efficiency of the route within UK airspace only, not the whole of the route. The proportion of time that flights via Dover are within UK airspace is relatively small as they pass out of UK airspace over the English Channel.

For example, a flight to a relatively close European designation such as Frankfurt would be within UK airspace only for approximately one quarter of its journey; for Athens it would be only one fifteenth and for destinations further south or east this figure would be even less.

Taking into account only the proportion of the flight within UK airspace would increase the 6% figure by a factor relating to the proportion of overall fuel spent compared to that spent within UK airspace.

This is a complex calculation that we have not attempted for a number of reasons:

- the airspace change process (ref 2) requires that the proposal's contribution to global CO₂ reduction should be expressed in absolute terms (ie kg rather than a percentage).
- we believe that expressing it in terms of kg is the simplest way to express the benefit (avoiding the complexities associated with

percentages and their interpretation described in the previous paragraphs).

- it allows for comparison with other non-aviation metrics and targets that may be of interest to the stakeholder.

All the figures we present will be part of the justification presented to the CAA and will be independently checked by their experts – for more details see the answer to the question ‘Why should we believe what you say?’ at para 5.25.

5.17 **Your flight delay figures are already low, what difference will this make?**

NATS’ performance in managing flight delay is good specifically because we continually improve the efficiency of the UK’s airspace by making changes such as this; this type of change keeps air traffic related delays for the travelling public to a minimum.

If we did not make such changes, delays would increase rapidly as traffic grows. We do not wait for the system to become inefficient before acting.

5.18 **We have heard that the changes result in nearly twice as many people being over-flown twice as often, how can this be justified?**

This statistic has been published by the media and some pressure groups. We do not believe it is a fair representation for three reasons.

Firstly the statistics relate to our population counts that show 1,470 people would have fewer over-flights below 4,000ft compared to 2,400 people who would have more; this is not twice as many.

Secondly, it concentrates only on the negative and fails to highlight that the 1,470 people would no longer have any Stansted Dover departures over-flying them in the daytime. As previously stated reducing the number of people over-flown is in line with Government guidance (ref 1).

Lastly, this comparison of the ‘raw’ numbers does not take into account variation in runway use. As part of our case for change we will be presenting the CAA with a ‘weighted’ comparison which takes account of the historic usage of each runway. For example, a reduction in the number of people over-flown by a Runway 22 route which is used 70% of the time should be given more weighting than a similar benefit on Runway 04 as this is only used 30% of the time. The calculation of the weighted comparison is presented in Appendix B; the resultant weighted statistic is more balanced in terms of the negative and positive numbers.

It is also important to consider the wider context: the Government guidance (ref 1) states that ‘in general, the balance of social and environmental advantage lies in concentrating aircraft taking off from airports along the fewest possible number of specified routes and that these routes should avoid densely populated areas as far as possible.’ Meeting this objective would always mean that some people get over-flown more than others.

Government guidance (ref 1) also states that proposals need to balance competing characteristics of change, including the operational and environmental elements.

Therefore we do not seek to justify this proposal on population figures alone; this proposal would not only reduce the number of people over-flown during the daytime, it would also reduce CO₂ emissions and minimise future delays. Some localities would be over-flown more regularly as a result, but we contend that the overall package of net operational and environmental benefits makes a compelling case for this change.

5.19 Why have you not provided more information on noise levels beyond the noise contours?

NATS has provided the noise analysis required by the process for airspace change laid out by the CAA (ref 2). This proposal is to change the usage of existing routes. Stakeholders affected by existing routes will understand the impact that over-flights have on them because they have real experience of what the over-flights look and feel like. Using their experience, along with the information on the number of flights presented in the consultation document, is in our view the best way for stakeholders to understand the potential impact on their area.

5.20 Why have you not provided population counts for people affected by flights between 4,000ft and 7,000ft?

The Dover route has a much wider dispersal of flights than the Clacton route. The Dover route flies through congested airspace where air traffic controllers often have to give aircraft instructions to leave the route to avoid other aircraft, so while there is still a concentration around the centre of the route, there is also a greater spread of flights to the east (as seen in Appendix F of the consultation document). As a result, a comparison of the populations over-flown would not be like-for-like as the Dover flights cover a much larger area, but with less regular over-flights than the Clacton route.

Even though this population data would have presented a much increased benefit we chose not to show it, to avoid misinterpretation.

5.21 Would the additional flights stay on the Clacton route or be spread around?

Once above 4,000ft air traffic control may direct the aircraft off the route in order to maintain system efficiency, as per today. However, under normal circumstances we do not envisage that the additional flights would be directed off the route at low altitudes.

At higher altitudes aircraft may be turned to the south once they have climbed sufficiently to pass over the stream of Heathrow arrivals that are descending from the east on their way towards London. This would not generally be until they have reached around 15,000-20,000ft, well above the 7,000ft threshold defined in Government guidance above which 'local impacts are not a priority' (ref 1). Variation in climb performance means that aircraft would typically reach 15,000ft and potentially turn south along a stretch of the existing route, from passing over the A12 out to the east.

5.22 How has air quality been taken into account in the proposal?

Government guidance on airspace change states that, due to the effects of mixing and dispersion, emissions from aircraft above 1,000ft are unlikely to have a significant impact on local air quality. This is the case in our proposal -

there are no proposed changes affecting flight paths below 1,000ft. For more details see the Government guidance (ref 1).

5.23 **Can you do a bespoke analysis for my postcode?**

We cannot provide a bespoke analysis for every such request; we endeavour to ensure that the consultation material has sufficient information for people to understand the likely effect on their location.

This proposal is to increase the usage of some existing routes and decrease usage of others. People can therefore assess the impact of over-flights today and use the consultation document to determine how the number of over-flights would change in the future.

Airspace Change/Consultation Process Questions

5.24 **Who have you consulted? Why aren't you consulting directly with the local communities?**

See Section 3 for details of our outreach and the subsequent publicity of the consultation exercise.

5.25 **Why should we believe what you say in your consultation document?**

It is in nobody's interest to present incorrect or misleading information in the consultation material. We take our responsibilities very seriously and whenever we present proposed changes we always seek to present the best available information as straightforwardly as we can.

The process for airspace change is regulated by the CAA. As part of this change process we are required to analyse performance after one year of use, and demonstrate that the change is working as anticipated. If the CAA determines this not to be the case then they may require us to make further changes to rectify the situation which would be costly and time-consuming.

5.26 **How do I know you have considered my response?**

All feedback from this consultation has been given due consideration and reported transparently in this feedback document. The consultation responses and analysis will all be made visible to the CAA as part of our airspace change proposal. The CAA will only approve an airspace change if they have evidence to show that we have followed the correct processes.

We believe that there is a good case for change based on the combined benefits of network efficiency, reduced CO₂ emissions and a reduction in the number of people regularly exposed to noise from departures. We believe that these benefits outweigh the negative impact from increased over-flight for some areas.

The role of consultation is to make this balance of benefits explicit, and allow those with a local knowledge and outlook to comment. Should the consultation exercise highlight any significant and relevant issue that we have not taken into account, then we are duty bound to act on it. We have considered the issues raised by this consultation in Section 4 of this feedback document.

Some stakeholders have suggested that all responses should be published; however, allowing open access to the consultation responses would raise data protection issues. Ultimately, the independence of the CAA as the airspace regulator provides the assurance that due process will be followed.

5.27 Who will check that the development does what you say it will?

Should the proposal be approved and implemented, NATS and Stansted Airport will be required to demonstrate to the CAA that the proposals achieve the target objectives. In accordance with the CAA's airspace change guidance (ref 2), we would provide them with a report on the performance of the changes against the target objectives based on the first 12 months of operation.

5.28 How have you considered noise envelopes?

While noise envelopes are mentioned in the aviation policy framework (ref 3), there is not yet any established policy or methodology for defining them. However, we assume that any future methodology would refer to standard noise metrics such as those specified by the guidance for airspace change (ref 2). The consultation document shows that the impact of the proposal on these metrics is limited.

Questions relating to Design Issues

5.29 The guidance puts value on long term stability of the route system, how have you taken this into account when proposing change?

The requirement to consider long-term stability is not designed to block all change, but to ensure that changes are not made lightly, and that sufficient justification is always provided. We accept that long-term stability for the route system is important; nonetheless we believe that the overall package of net operational and environmental benefits offered by this proposal provides a compelling case for change.

5.30 Will it be safe? Will air traffic controllers be able to cope with rising traffic levels?

Yes. Safety is our first priority. The proposals are for increased usage of existing departure routes that already meet all the required safety standards. The safety of the proposal has been the subject of extensive safety assessment. This includes testing in our simulation facility where we have a virtual airspace system in which air traffic controllers can test the proposed airspace as if it were 'live'.

The safety assurance will be independently assessed by the CAA as part of their decision process.

The air traffic control system has procedures such that if the volume of air traffic rises to a certain level, restrictions are imposed to stop further aircraft entering the congested area until traffic levels have reduced again. This is (in very simple terms) how safe levels of traffic are maintained. These restrictions mean aircraft are held on the ground, which causes delays. NATS has a good record of reducing delays over recent years. The LAMP project is an example of

how NATS and Stansted Airport are being proactive in order to avoid any future increase in delays for flights on the Dover route.

5.31 Are the current flight paths/routes unsafe?

No. See para 5.30 above

Future changes

5.32 Is this to do with expanding Stansted airport by the back door? Is this to do with an additional runway at Stansted Airport?

No. These changes are focused on making the existing air route network more efficient. This proposal is not related to additional runways - at Stansted or any other London airport.

5.33 Is this proposal designed to allow Stansted traffic levels to grow?

No. It is designed to improve the operational and environmental efficiency of the airspace regardless of growth.

The proposed change has no impact on the airport's capacity limit as set out in the planning conditions under which the airport operates. Any such alteration to the planning controls would be subject to a separate regulatory process through the planning system (see para 5.11).

5.34 Will reducing the number of daytime routes available for departures limit growth at Stansted?

If two departure routes heading off in different directions diverge early enough, then the time gap between successive departures can be reduced from two minutes to one minute if each aircraft uses a different route. Therefore in some circumstances the availability of more than one route for departures can help airport efficiency.

However, the existing Stansted routes to Dover and Clacton share an initial segment (diverging later along the route), meaning that these shorter time gaps cannot be used for today's departures in those directions.

This would not change; therefore this proposal would have no impact on the airport's future capacity.

5.35 Will this proposal still be efficient if Stansted traffic levels grow?

Yes. As traffic levels grow, the existing route to the south would become less efficient as congestion to the south of the airport would be exacerbated, so the benefits of this proposal would continue.

5.36 Will there be another consultation involving Stansted Airport and LAMP? For how long would this proposal be operational?

The Stansted operation is closely linked, in terms of local airspace to the southwest, to the network of routes serving Heathrow and Luton. This airspace will be addressed in Phase 2 of the LAMP development, scheduled for late 2019 (see para 4.3). We will consult on any further changes in respect of LAMP Phase 2 when design work commences. Airspace changes have no defined lifespan; they remain in place until further changes are required.

5.37 Why don't you wait until Phase 2 of LAMP to make changes?

The introductory sections of the consultation document describe why the LAMP is phased, due to the complexity of the airspace, and why Phase 2 of the Stansted development would not be expected until 2019. The changes we are proposing now would enable the operational and environmental benefits discussed in the consultation material to be realised in the four year period leading up to that time (see para 4.3 for further detail on LAMP Phase 2).

5.38 You are delaying changes at Gatwick so why don't you delay the changes for Stansted also?

The changes being developed for Gatwick involve significant route realignments at low altitudes, and so constitute a much more complex proposal. As a result of that complexity, Gatwick Airport Limited has decided to undertake additional analysis in order to better understand their options and next steps for the low altitude airspace.

Our proposal for Stansted does not involve new routes, is very much simpler in scope, and is supported by the airport. We believe that there is a clear case for change based on net benefits for both the environmental and operational performance.

5.39 What about future plans regarding new housing estates or revised AONB boundaries etc?

Decisions regarding housing developments or boundary changes are made by the relevant planning authority, taking into account existing flight paths *if* they are considered a relevant factor.

This proposal is to change the use of existing routes but not to move them in any way. The existence of the routes would have been known at the time any previous planning decisions were made.

The use of existing routes changes over time as airlines can choose which routes provide the most efficient flight path to their destination. There is no limit on the proportion of departures that may fly on each existing route. Therefore, if the location of departure routes was relevant in past planning decisions, then the amount of traffic on the route should have been considered as being a variable, rather than fixed value.

We will consult on any proposed changes to flight path alignments for LAMP Phase 2 once initial design work commences, and planning authorities would be included in that consultation.

5.40 Why don't you phase out older, noisier aircraft in favour of more efficient new ones?

NATS is responsible for the network of routes, not for the fleet of aircraft flying them. Questions on the required performance characteristics of aircraft flying in the UK should be directed to the CAA (www.caa.gov.uk).

Stansted operators have some of the youngest and most modern fleets of aircraft operating at any UK airport. Investment by their operators has secured

a significant reduction in the contoured noise climate, whilst increasing movement numbers. London Stansted fines aircraft that breach noise regulations and are continually liaising with airlines regarding effective noise management.

Questions Relating to Separate On-going Trials

5.41 **How does your proposal relate to the noise monitor trial? Why don't you wait for the results of the noise monitor trial before consulting?**

The noise monitor trial is completely independent of this proposal.

That trial is about the accuracy of new ground-based noise monitoring equipment and is not related to airspace design.

5.42 **How does this proposal fit with the RNP route trials on-going at Stansted Airport?**

The CAA is currently trialling two Stansted departure routes based on a modern navigation standard referred to as Required Navigation Performance (RNP).

These trials are designed to test aircraft track-keeping accuracy on routes designed with RNP, to enable the CAA to develop standards for how such routes could be designed in the future at Stansted and other UK airports. The trial started in May 2013 and is due to run until April 2015; it is designed to enable the CAA to collect data which will provide safety assurance required to develop RNP design standards.

During this time Stansted Airport, in partnership with its Consultative Committee, will determine whether to put forward a separate proposal to the CAA to make these routes permanent.

Neither the trial, nor any subsequent proposal to make it permanent, is part of this NATS proposal. We have, however, considered the potential effect of a subsequent proposal on the operational and environmental benefits that underpin the NATS proposal; the conclusion is that it would have no detrimental effect on the benefits as stated, and so would not undermine the case for the NATS proposal in any way.

6 Conclusion and Next Steps

- 6.1 The consultation earlier this year aimed to confirm and attain views on the proposal. The analysis has confirmed our understanding of general stakeholder concerns, and provides no indication that the generic views of the Stansted community group are different from those in the wider population. Furthermore, the exercise has highlighted no relevant views/issues that have not already been considered sufficiently in the development of this proposal.
- 6.2 We recognise that this proposal would increase the impact on some areas as a consequence of increased regularity of over-flights; however, on the basis of this consultation we see no rationale for deviating from the generic guidance on airspace change objectives laid out in the Government guidance (ref 1), and no rationale for changing the proposal.
- 6.3 The objectives for airspace change laid out by the CAA and the Government require us to consider the benefits and impacts as a complete package. We believe that the package of net operational and environmental benefits presents a compelling case for change.
- 6.4 NATS will submit a formal proposal to the CAA on 19th November 2014 for their consideration. This proposal will be in line with the changes presented in the consultation document. The CAA will then consider the proposal against the requirements laid out in the guidance (refs 1 and 2); we expect this assessment to take until summer 2015 to complete. Subject to CAA approval in summer 2015, we are aiming for implementation in late 2015.

Appendix A: References

1. Department for Transport Guidance to the Civil Aviation Authority on Environmental Objectives relating to the exercise of its Air Navigation Functions
DfT, January 2014
2. CAP725 CAA Guidance on the Application of the Airspace Change Process
CAA, March 2007
3. Aviation Policy Framework
DfT, March 2013

Appendix B: Raw and weighted population comparisons

This appendix shows raw and weighted comparisons of populations potentially affected by the proposal. These tables calculate the ratio (expressed as a percentage) for population and for the number of households that would have fewer flights compared to those that would have more flights.

Two calculations are presented overleaf, a 'raw' comparison as has been publicised by some pressure groups and the media, and 'weighted' comparisons, which takes account of the runway usage (see para 5.18).

Runway 22 routes are historically used 70% of the time compared with only 30% for Runway 04 routes. A weighted comparison can take this into account by multiplying the populations relating to each runway by the proportion of time the runway is in use.

Both the raw and weighted comparisons will be presented as part of the case for change that we submit to the CAA. The CAA will assess our proposal, and as part of this will consider whether the figures we present are accurate and fair (see para 5.25).

	Area	Population	Households	Weighted population	Weighted households
Runway 04 (30% of the time)	Area in which regular daytime flights would be eliminated (current Dover SID)	780	320	$780 \times 0.3 =$ 234	$320 \times 0.3 =$ 96
	Area in which daytime flights would increase (current Clacton SID)	2,050	800	$2,050 \times 0.3 =$ 615	$800 \times 0.3 =$ 240
Runway 22 (70% of the time)	Area in which regular daytime flights would be eliminated (current Dover SID)	690	290	$690 \times 0.7 =$ 483	$290 \times 0.7 =$ 203
	Area in which daytime flights would increase (current Clacton SID)	350	120	$350 \times 0.7 =$ 245	$120 \times 0.7 =$ 84

	Comparison of raw figures		Comparison of weighted figures	
	Population	Households	Weighted population	Weighted households
Pop/h'holds with fewer flights	$780 + 690 =$ 1,470	$320 + 290 =$ 610	$234 + 483 =$ 717	$96 + 290 =$ 299
Pop/h'holds more flights	$2,050 + 350 =$ 2,400	$800 + 120 =$ 920	$615 + 245 =$ 860	$240 + 84 =$ 324
Ratio of fewer/more	$1,470 / 2,400 =$ 60%	$610 / 920 =$ 66%	$717 / 860 =$ 83%	$299 / 324 =$ 92%

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