

COMMITTEE REPORT – CONSULTATION FRONT SHEET

REPORT FOR	EXECUTIVE	COMMITTEE ON	17 JUNE 2008
REPORT TITLE	Consultation to Proposed Changes to Airspace Terminal Control North		
OFFICER TO CONTACT/AUTHOR	MANOUCHEHR NAHVI	EXT.	32253
DATE OF OFFICERS' MEETING	29 MAY 2008		
PORTFOLIO HOLDER	Cllr. David McVicar		

AUTHOR'S CHECKLIST

Legal Implications		No
Financial Implications		No
Risk Management Implications		No
Human Resource Implications		No
Equality & Human Rights Implications		No
Community Safety Implications		No
Environmental Implications	Yes	
Consultation with Tenants and/or External Stakeholders		No
Consultation with Staff Side		No
Consultation with Portfolio Holder	Yes	
Consultation with Overview and Scrutiny (on reports to Executive)		No
Executive Key Decision (If Yes, the item <u>must</u> have appeared in the Executive Forward Plan prior to consideration by the Executive)	Yes	

Part I (Public Session)	Yes	
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Draft Version (state if 2 nd , 3 rd , etc. or final draft)	2nd
Final Version, as cleared by (name of CSM or, if appropriate, Director/CMG)	

Are there any appendices not included with this E-Mail?		No
If a previous version of this report has been circulated, please indicate which paragraphs have changed in the attached version.	All	

CONSULTATION ON PROPOSED CHANGES TO AIRSPACE – TERMINAL CONTROL NORTH

1.0 PURPOSE OF REPORT

- 1.2 To formulate a response to the National Air Traffic Service (NATS) consultation on the proposed changes to the Airspace in Terminal Control North (TCN) region.

2.0 RECOMMENDATION(S)

- 2.2 The Executive agrees to respond to the NATS consultation by raising an objection to the proposed routing of all the Luton westerly departures, on the grounds that the cumulative effect of the current easterly arrival route and proposed westerly departure routes will have a significant impact on the residents of Slip End, Caddington, Woodside, Studham, Hollywell and Kensworth, due to increased noise levels.
- 2.3 The Executive supports the alternative proposal suggested in section 7 of this report which uses the existing departure route for the first two to three miles and then uses the Precision Area Navigation Route.
- 2.4 The Executive also points out the impact of the proposals on the Growth Area in Luton and South Bedfordshire.

3.0 REASON FOR RECOMMENDATION(S)

- 3.1 To respond to the National Air Traffic Service consultation on proposed changes to Airspace in TCN region.

4.0 INTRODUCTION

- 4.1 On 21 February 2008, National Air Traffic Service (NATS) launched their consultation on Airspace Change Proposals (ACP) for the sector of airspace referred to as 'Terminal Control North' (TCN). This includes routes in and out of the major airports at Heathrow, Stansted, Luton and London City as well as smaller airports such as Southend and RAF Northolt.
- 4.2 The proposals include changes to Luton's arrival and departure routes aimed at improving safety; reducing the number of people affected by noise; reducing air congestion and reducing pollution.
- 4.3 As a further measure, separate holding facilities (stacks) are to be introduced for Luton and Stansted to replace the two that they currently share. At present, there are no set routes from the holding areas to the required airfield. Set routes will be introduced, together with Continuous Descent Approaches which reduce both noise and emission levels.

- 4.4 Routes over the Chilterns AONB would be re-routed slightly to the South of their present paths i.e. further into the AONB.
- 4.5 NATS stress that they are responsible to the Civil Aviation Authority (CAA) and obliged to plan for aviation growth levels agreed by Government. They have no say in the number of flights proposed for the future or the number of new runways proposed.
- 4.6 NATS also explain that with there being no physical constraints to the routes that aircraft take, it could have produced an almost infinite number of options for the route changes proposed. Instead, they are putting forward only a single option which they consider to be the best balance between the often conflicting needs of different stakeholders.

5.0 NOISE PREFERENTIAL ROUTES (NPR's) AND PRECISION AREA NAVIGATION (P-RNAV)

- 5.1 The Runway of airports are linked to the high-level (More than 19000ft) airways by routes known as "Standard Instrument Departure, or SIDs.
- 5.2 Up until now, commercial aircraft have navigated their way through controlled airspace by flying on assigned bearings from a fixed radio beacon to the next. The Routes they follow in the earliest part of the SID is known as "Noise Preferential Routes" or NPRs. They are designed to minimise noise exposure for the populations living below the route.
- 5.3 NATS intends to replace these routes with a GPS-based satellite navigation (sat nav) system called Precision Area Navigation or P-RNAV.
- 5.4 P-RNAV system essentially uses sat-nav technology which does not rely on fixed beacons. Reference points can be defined anywhere, as a set of co-ordinates, so routes can be designed so as to connect the reference points.
- 5.5 The compliance altitude for aircraft to use P-RNAV is up to 4,000ft.
- 5.6 P-RNAV system that monitors the route of an aircraft will also enhance the accountability on the part of the airport for violations of routes. Making it easier to identify those airlines that persistently fail to fly on stated routes.
- 5.7 Aircraft using the P-RNAV system are required to fly on a straight line for a minimum of 1 mile from the end of the runway.
- 5.8 A further description of the NATS proposals is given in appendix 1 to this report.

6.0 IMPACT OF CHANGES IN SOUTH BEDFORDSHIRE

- 6.1 The area of the District that will be most disadvantaged as the result of the proposed changes is in a triangular area with vertices at: 1- the end of Luton runway, 2- North of Markyate and 3- south west of Studham. This area is highlighted (as area A) on the map shown in appendix 2 to this report.

- 6.2 Villages of Slip End, Caddington including Woodside, Studham including Holywell and Kensworth will be subject to considerable increase in aircraft noise
- 6.3 These villages are currently affected by noise from landing aircraft during easterly operations (approximately 30% of the time). As the result of the proposed changes, these villages will also be subjected to considerable additional noise from departing aircrafts during the remainder of the time that the airport is on westerly operations (Approximately 70% of the time). These changes will in effect subject the residents of these villages to aircraft disturbance at all times – whether the airport is on easterly or westerly operation.
- 6.4 At the time when the airspace changes were in the process of planning, the area north of Dunstable and Houghton Regis was mainly open space and the growth proposals were uncertain. The proposals are now more advanced and if this area is developed, people living and working in the area will also be affected by aircraft disturbance from aircrafts heading east and south east during westerly operations. However due to the altitude of the aircraft at this point, the effect will be less noticeable.
- 6.5 A full description of the estimate effects of the proposed changes, on South Bedfordshire, is listed in appendix 3 to this report.

7.0 **AN ALTERNATIVE PROPOSAL**

- 7.1 Due to the adverse impacts of the proposals on residents in both Luton and South Bedfordshire, a meeting was held with NATS on 16th May. The meeting was attended by member and officer representatives from this Council, the County Council and Luton Borough Council with Andrew Selous MP.
- 7.2 During the meeting an alternative proposal was explored with NATS.
- 7.3 As mentioned in section 5.0, aircraft on a P-RNAV routing, are not permitted to make a turn within the first mile of their flights. Under the P-RNAV system, this restriction will not make it possible to avoid the areas in South Bedfordshire most seriously affected by the proposed changes.
- 7.4 It was therefore suggested that a “hybrid P-RNav” westerly departure route (part conventional, part P-RNav) might be an option. This would be a fairer way of spreading the noise of departing aircraft rather than concentrating it on particular communities.
- 7.5 NATS representatives at the meeting confirmed that it was possible, in design terms, to have a hybrid situation where P-RNAV comes into operation 2-3 miles from the airport, thus allowing the existing system to be followed for departures up to that point. The Civil Aviation Authority’s approval would be required and NATS would take this up with them if it was raised as part of the consultation responses.

- 7.6 Any significant changes to the proposals such as this hybrid option require a further 12 weeks consultation.

8.0 THE NEXT STEPS

- 8.1 NATS representatives confirmed that the consultation period has been extended to 19 June 2008, and that NATS were aiming to publish a feedback on all consultation responses on 22nd July.
- 8.3 NATS representatives confirmed that NATS is committed to a review of the proposals for the area surrounding Luton airport, and that this would be pursued with the CAA. They would not give any assurance about the outcome of the CAA discussions. However their own view was that they would prefer to explore any other potential options at this stage to get the best possible solution to meet the CAA objectives and minimise impact on populated areas at lower height.
- 8.4 If the Executive are minded to raise an objection to the proposals the alternative solution could be included in the Council's consultation response.
- 8.5 Andrew Selous MP also agreed to pursue a meeting with the CAA to alert them to the alternative hybrid solution as a means of mitigating the impact on those most affected by the changes.

9.0 CORPORATE IMPLICATIONS

9.1 Council Ambitions & Priorities

- 9.1.1 The recommended response to this consultation is in accordance with the Council's ambition to achieve a cleaner and more valued district, in particular our objective to balance the pressures for growth with environmental protection.

9.2 Financial

- 10.2.1 There are no financial implications for South Bedfordshire District Council

9.3 Environmental Implications Statements

- 9.3.1 The NATS consultation documents do not provide sufficient information on the environmental implications of their proposals. For example no evidence is provided to show that the selected routes are tested in terms of energy use and pollution control. NATS defines noise impact by the number of people affected, rather than by the amount of the noise received in an area, or the proportion of time the residents are subjected to aircraft noise. Background noise and tranquillity are not taken into account. A measure of noise in a quieter area (Rural) may be more noticeable than the equivalent level in a more noisy area (Urban).

- 9.4 However, if the recommendations in this report are implemented, on balance, the proposals are likely to have a neutral to a slight negative environmental effect in South Bedfordshire.

10.0 CONCLUSIONS

- 10.1 There will be winners and losers from the plans. Generally, people in the urban areas will gain and those in rural location will lose. The residents in some areas are substantially disadvantaged by the cumulative impact of the new routes and the unchanged routes.
- 10.2 If the alternative hybrid proposal is implemented, it should eliminate the additional substantial aircraft noise disturbance that would have otherwise been imposed on the residents of Slip End, Caddington, Woodside, Studham, Hollywell and Kensworth. Most residents of these areas will therefore be no worse off.

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Exempt Paragraph(s):	

Background Papers: NATS Terminal Control North Consultation Document on Proposed Changes to Airspace

- Appendix 1- Further description of NATS proposals
- Appendix 2 Map showing the area affected in South Bedfordshire.
- Appendix 3 Full list of the effect of proposed changes on south Bedfordshire.

APPENDIX 1

Why Change is Needed

The TCN region is one of the most complex areas of airspace in the world, with routes in and out of major airports including Heathrow, Stansted, Luton and London City as well as smaller airports such as Southend and RAF Northolt.

All of these airports have grown considerably in the past 20 years - London City has grown from virtually nothing since the early 1990s - and we have accommodated this growth within the existing airspace infrastructure.

Just like bottlenecks on our roads, increased air traffic causes congestion in the airways meaning delay and extra fuel burn - and that has an impact on the environment.

Redrawing the routes enables us to make these routes more efficient to reduce delay. It also gives us the opportunity to reroute them to avoid flying over as many towns and villages as possible, especially at lower levels.

NATS provides air traffic control services at 15 of the UK's busiest airports as well as providing en route services to commercial aircraft flying over the UK, under licence from the Civil Aviation Authority. This year we will handle more than 2.4 million flights carrying over 235 million passengers.

Our licence also requires us to provide capacity for reasonable growth to meet forecast demand in the years ahead while at the same time ensuring a safe service and making the most efficient use of airspace.

That means investing in the very latest technology, developing our expertise and promoting a responsible programme of airspace development that takes into account Government policy which supports the sustainable development of air travel.

For the full details of why this change is needed please refer to the consultation document.

The Proposal

There are four key objectives that this proposal addresses:

Improving Safety and Reducing Delays

Congestion is being caused by departure routes from Heathrow, Luton, London City and Northolt converging in an area over Brookmans Park in Hertfordshire. The changes involve redesigning these departure routes through the region.

There are changes to the locations of the holds for Stansted and Luton, where aircraft queue at busy times for their clearance to land. The airports currently share two holds but under the proposals Luton would have one and Stansted two dedicated holds.

This also means Continuous Descent Approaches, where aircraft stay higher for longer reducing fuel burn and noise for people on the ground, can be introduced for Stansted's easterly runway.

We have also suggested changes to arrivals, departures and holding arrangements for London City. A new hold is proposed for arrivals, and formalised departure routes reflect the growing numbers of jets using the airport.

Improving Aircraft Navigation

The existing airspace structure is based on the use of conventional navigation where aircraft use beacons on the ground to determine their position.

Modern navigation technology called 'Precision Area Navigation' (or P-RNAV) is now available and NATS is required by the CAA to apply it to all new route design.

Aircraft can fly a P-RNAV route more accurately than a conventional route which means they would be more concentrated along the centre line of a route and may not be seen across such a wide swathe of sky as they are today.

Improving Environmental Performance

We have aimed to minimise the number of low flights over more densely populated areas. We have introduced continuous descent approaches to reduce noise and emissions, and we have sought to enable more efficient flight profiles.

Designs always need to achieve a balance. Routing aircraft away from towns means they fly further and increase their emissions; flying more direct routes reduces emissions but may be noisier for more people on the ground.

It is not possible for routes to avoid all villages, towns and cities, especially in such a busy region. However, we work hard to avoid as many as possible taking into account the competing aims of ensuring safety, reducing delay and mitigating environmental impact.

Improving Airspace Efficiency for All Users

NATS' aim has been to secure the most efficient use of the available airspace and to satisfy the requirements of all users as far as is safe and practical.

That means the controlled airspace NATS secures for use by aircraft under our control is the minimum required to maintain a safe and efficient air traffic service.

For full details of the proposal and objectives please refer to the consultation document.



APPENDIX 3

Consultation Doc. Ref.	Route	Effect of proposed changes On South Beds residents
<u>F10/F11</u>	Westerly Departures To the East	Substantial disadvantage Present routing is over M1 J10, then south of Harpenden and N. of St. Albans. Proposed route moves slightly north to have more effect on Slip End, Caddington, Woodside, Studham and to a lesser extent Kensworth. The route also passes, at 4000 + feet, over the possible development area north of Dunstable, Houghton Regis and Luton.
<u>F12/F13</u>	Westerly Departures to the South East	Substantial disadvantage. Route change and its effect within the South Bedfordshire and Luton area is the same as above (Westerly Departures to the East with the same)
<u>F14/F15</u>	Westerly Departures to the South West	Substantial Disadvantage. Route change and its effect in South Bedfordshire and Luton is the same as the above two. However, the route does not pass over the possible development areas north of Dunstable, Houghton Regis and Luton
<u>F18/F19</u>	Westerly Departures to the North	Substantial Disadvantage closer to the airport. Slight advantage for Leighton Linlade.
<u>F2/F3</u>	Easterly Departures to the East	No Impact on South Bedfordshire
<u>F4/F5</u>	Easterly Departures to the South East	No impact on South Bedfordshire
<u>F6/F7</u>	Easterly Departures to the South East	No impact on South Bedfordshire