

Swanwick Airspace Improvements Programme - Airspace Development 3 (SAIP AD3)



CAP 1707 Contents

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#### Chapter 1

## **Executive summary**

## **Objective of the Proposal**

- 1. Under Airspace Development 3 (AD3), part of the modular Swanwick Airspace Improvements Programme (SAIP), NATS is proposing a partial re-alignment of some ATS routes within existing Controlled Airspace in the London FIR, over the English Channel. This will align with a simultaneous, coordinated change to the Channel Islands Control Zone (CICZ) which will introduce new SIDs and facilitate new STARS, serving Jersey and Guernsey Airports. The proposed changes as part of SAIP AD3 will also improve connectivity between Solent Airports and the CICZ, by altering five traffic flows in both directions and realigning traffic through existing waypoints.
- 2. A diagram of the existing airspace structure and traffic flow is at Appendix A and diagram of proposed traffic flow is at Appendix B.

## Summary of the decision made

- 3. The CAA has decided to approve the proposed changes to alter traffic flows in the airspace between the Solent Group Airports and the Channel Islands; including routes between these Airports. The implementation of these changes will alter the distribution to three flows southbound through LELNA; three southbound through ORTAC; two northbound through ORTAC and three northbound through ORIST, thus better distributing the traffic.
- 4. The new alignment of Z171 will route southbound RNAV1 departures and Channel Islands arrivals via LELNA, rather than ORTAC as today. Similarly, the proposed realignment of Y110 will route northbound RNAV5 departures via ORIST, instead of ORTAC as today. Other traffic flows will continue to flight plan as today.
- 5. The ORTAC bidirectional interface will now be available up to FL135, raised from FL95; traffic will switch from Z171 to Q41 at FL105 (previously FL95) and Q41 will be published

up to FL135 to be RAD restricted for flights between the Solent Group and Channel Islands.

## **Next steps**

- 6. Implementation of the revised airspace will be notified through a single AIRAC cycle (AIRAC 13/18) and will become effective on 6 December 2018.
- 7. The CAA's Post Implementation Review (PIR)¹ of the changes approved by the CAA in this decision will commence at least one year after implementation of those changes. It is a condition of the CAA's approval that the sponsor provides data required by the CAA throughout the year following implementation to carry out that PIR. In due course, the sponsor will be advised of the specific data sets and analysis required, and the dates by when this information must be provided.

Chapter 2

## **Decision Process and Analysis**

## **Chronology of Proposal Process**

## **Statement of Need and Assessment Meeting**

8. NATS submitted an initial Statement of Need (SoN) on 1 February 2018. Version 2, which better aligned with CAP1616 direction, was submitted on 8 February 2018. An Assessment Meeting (AM) was held on 2 February 2018 at which NATS outlined that proposed changes to Jersey/Guernsey SIDs and STARs provided an opportunity to increase the systemisation of traffic flows between Solent Group Airports and the Channel Islands. NATS provided outline detail of potential options, including 'do nothing'. The CAA determined that the proposal was in scope of the ACP process and assessed the proposal as Level 2A based on the following criteria; no changes below 7000ft; no changes to UK SIDS/STARS; no new Controlled Airspace and all changes

<sup>&</sup>lt;sup>1</sup> PIR is the seventh stage of the CAA's airspace change proposal process

being over the sea. Minutes of the AM together with a copy of the slide presentation and detail of provisional scaling were published on the CAA Website.

# Process followed to arrive at the proposal's design principles (Stage 1, Step 1B)

9. Using existing consultative forums NATS developed an appropriate set of Design Principles (DPs) through targeted engagement with relevant airline operators, neighbouring Air Navigation Service Providers (ANSPs) and the Ministry of Defence (MOD). Detail of the finalised 11 DPs was submitted to the CAA in the Step 1B Design Principles document and published on the CAA website.

## **Define Gateway**

10. A Define Gateway Assessment for SAIP AD3 was held on 23 February 2018. The CAA was content that the DPs had been developed through appropriate engagement with relevant stakeholders and took account of the 6 criteria laid down in CAP1616, Appendix D. The following statement was uploaded to the CAA website on 23 February 2018. 'The CAA has completed the Define Gateway Assessment for SAIP AD3 and is satisfied that the change sponsor has met the requirements of the Process up to this point. The CAA approves progress to the next Step.

## Options development and appraisal (Stage 2, Step 2A and 2B)

11. NATS acknowledged that options development was constrained by the critical time factor of aligning introduction of proposed changes with those to Jersey/Guernsey SIDs and STARs. In addition, viable options needed to be acceptable to all affected ANSPs (DP1). Three options were presented; Do Nothing; Major Restructure and Minor Restructure. Option 3 (Minor Restructure) met the most DPs and had the potential to deliver safety benefits through increased systemisation. It was therefore taken forward as a sole option.

## **Develop and Assess Gateway**

12. The Develop and Assess Gateway Assessment was held on 23 March 2018. The CAA was content that the proposed options were developed through suitable engagement and that option down-select to one option was justified. The following statement was published on the CAA web page on 23 March 2018; The CAA has completed the Develop and Assess Gateway Assessment for SAIP AD3 and is satisfied that the

change sponsor has met the requirements of the Process up to this point. The CAA approves progress to the next step.

#### Consultation

- 13. As proposed changes under the ACP were within existing volumes of Controlled Airspace, over the sea and above 7000ft the CAA approved the sponsors request to conduct a targeted and appropriately time scaled consultation. The period of consultation was 2 May 2018 to 30 May 2018.
- 14. Consultation documents were emailed to all relevant stakeholders and full details published on the company website. Links to the consultation strategy and consultation document were also available through the CAA website.
- 15. On conclusion of the consultation phase the sponsor submitted a Step 3D (Collate and Review Responses) document on, which provided a breakdown of stakeholder feedback.

## Proposal update and submission to CAA (Stage 4, Step 4A and 4B)

- 16. The sponsor submitted Step 4A (Update Design) and 4B (Airspace Change Proposal) documents on 14 June 2018. Both documents will be published on the CAA website.
- 17. Step 4A provided detail of design amendments resulting from stakeholder consultation. Updated final options appraisal analysis and environmental and safety assessment tables reflected the impact of these design changes.
- 18. Step 4B was the sponsors formal submission of the Airspace Change Proposal.

## **CAA Analysis of the Material provided**

19. As a record of our analysis of this material the CAA has produced:

20180809 – AD3 Consultation Assessment

20180809 - AD3 Economic Assessment

20180809 - AD3 Environmental Assessment

20180809 - AD3 Operational Assessment

The CAA's Assessments will be published on the CAA's website.

## **CAA** assessment and decision in respect of Consultation

20. The CAA is satisfied that the fundamental principles of effective consultation; targeting the right audience, communicating in a way that suits them and giving them the tools to make informative, valuable contributions to the proposals development were applied by the change sponsor before, during and after the consultation. Furthermore, the change sponsor has conducted this consultation in accordance with the requirements of CAP 1616, that they have demonstrated the Government's consultation principles and that they have taken into consideration the contents of the Secretary of State's Air Navigation Guidance.

# CAA Consideration of Factors material to our decision whether to approve the change

## **Explanation of statutory duties**

21. The CAA's statutory duties are laid down in Section 70 of the Transport Act 2000.

## **Conclusions in respect of safety**

- 22. The CAA's primary duty is to maintain a high standard of safety in the provision of air traffic services and this takes priority over all other duties.<sup>2</sup>
- 23. In this respect, with due regard to safety in the provision of air traffic services, the CAA is satisfied that the proposals maintain a high standard of safety for the following reasons:
  - a. The ACP does not involve changes to airspace size or shape.
  - b. NATS have designed the procedures such that combination of flight planning restrictions and revised route network would reduce (but not eliminate) opposite-direction confliction points.
  - c. The revised route network will result in fewer tactical actions and therefore reduce the number of controller interactions and lower RT loading.

<sup>&</sup>lt;sup>2</sup> Transport Act 2000, Section 70(1).

# Conclusions in respect of securing the most efficient use of airspace

- 24. The CAA is required to secure the most efficient use of the airspace consistent with the safe operation of aircraft and the expeditious flow of air traffic.<sup>3</sup>
- 25. The CAA considers that the most efficient use of airspace is defined as 'secures the greatest number of movements of aircraft through a specific volume of airspace over a period of time so that the best use is made of the limited resource of UK airspace'.
- 26. The CAA considers the expeditious flow of air traffic to involve each aircraft taking the shortest amount of time for its flight. It is concerned with individual flights.
- 27. In this respect the CAA is satisfied that increased systemisation will better distribute and segregate traffic and contributes to the safe and efficient operation of aircraft.

# Conclusions in respect of taking into account the Secretary of State's guidance to the CAA on environmental objectives

- 28. In performing the statutory duties, the CAA is obliged to take account of the extant guidance provided by the Secretary of State,<sup>4</sup> namely the 2014 Guidance to the CAA on Environmental Objectives.
- 29. In this respect the predominant environmental matter relating to this proposal is a small annual increase of fuel, and resulting CO2 emissions, resulting from increased track mileage through realigning the Y110 and Z171 route segments.

## Conclusions in respect of aircraft operators and owners

- 30. The CAA is required to satisfy the requirements of operators and owners of all classes of aircraft.<sup>5</sup>
- 31. In this respect, the CAA is content that the alteration to traffic flows in the airspace between the Solent Group Airports and the Channel Islands; including routes between these Airports will benefit current and future airspace users. Containment of these changes within existing airspace structures means that airspace access criteria remain the same.

<sup>&</sup>lt;sup>3</sup> Transport Act 2000, Section 70(2)(a).

<sup>&</sup>lt;sup>4</sup> Transport Act 2000, Section 70(2)(d)

<sup>&</sup>lt;sup>5</sup> Transport Act 2000, Section 70(2)(b).

## Conclusions in respect of the interests of any other person

- 32. The CAA is required to take account of the interests of any person (other than an owner or operator of an aircraft) in relation to the use of any particular airspace or the use of airspace generally.
- 33. In this respect the CAA considers that the impact of the proposal will not be discernible to other persons.

## **Integrated operation of ATS**

- 34. The CAA is required to facilitate the integrated operation of air traffic services provided by or on behalf of the armed forces of the Crown and other air traffic services.<sup>6</sup>
- 35. In this respect the CAA is content that the revised structure associated with this ACP will not impact the operational requirements of the MoD and that the impact on other Air Traffic Service Providers will be positive or undiscernible.

## Interests of national security

- 36. The CAA is required to take account of the impact any airspace change may have upon matters of national security.<sup>7</sup>
- 37. In this respect the CAA is satisfied that the proposal has no impact on national security.

## International obligations

- 38. The CAA is required to take account of any international obligations entered into by the UK and notified by the Secretary of State.
- 39. In this respect the CAA is satisfied that the proposal has no impact on international obligations.

<sup>&</sup>lt;sup>6</sup> Transport Act 2000, Section 70(2)(e).

<sup>&</sup>lt;sup>7</sup> Transport Act 2000, Section 70(2)(f).

Chapter 3

## **CAA's Regulatory Decision**

40. Noting the anticipated impacts on the material factors we are bound to take into account, we have decided to approve partial re-alignment of some ATS routes within existing Controlled Airspace in the London FIR, over the English Channel.

#### **Conditions**

41. No conditions.

#### **Period Regulatory Decision Remains Valid for Implementation**

42. To accord with proposed AIRAC dates.

#### **Implementation**

43. The revised airspace will become effective on 6 December 2018. Any queries are to be directed to the SARG Project Leader, on

#### **Post Implementation Review**

44. In accordance with the CAA standard procedures, the implications of the change will be reviewed after one full year of operation, at which point, CAA staff will engage with interested parties to obtain feedback and data to contribute to the analysis.

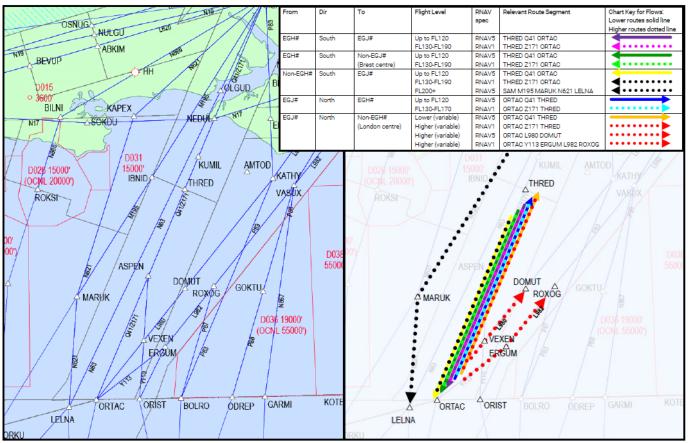
**Civil Aviation Authority** 

August 2018

Appendix A

## Current Routes and Traffic Flows relevant to this proposal

# NATS



Appendix B

## Future Routes and Traffic Flows relevant to this proposal

## **NATS**

