

ACP-2020-66

## Removal of EGSS LYD 6R and 5S SIDs

CAP 2136

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## Chapter 1

# Executive Summary

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## Objective of the Proposal

- 1.1. In support of the removal of the LYDD (LYD) Doppler Very High Frequency Omnidirectional Range (DVOR), NATS Enroute Ltd (NERL) proposed that the London Stansted (EGSS) conventional LYD 6R and 5S Standard Instrument Departures (SIDs) be withdrawn.
- 1.2. In order to ensure connectivity from DET to LYD once the conventional LYD 6S and 5R are removed, the change sponsor NERL have proposed to extend the Air Traffic Services (ATS) route M604 from DET to LYD, however, it's use will be restricted to only departures which would have previously flown from EGSS via LYD.
- 1.3. As a result of improved systemisation NERL assert that there will also be slight environmental and economic benefits.

## Summary of the Decision Made

- 1.4. In response to this proposal, which will support NERL's rationalisation program of DVORs, the CAA has decided to approve the removal of the EGSS LYD 6R and 5S SIDs and the implementation of the proposed extension to ATS route M604.
- 1.5. There are no conditions attached to the approval.

## Next Steps

- 1.6. Implementation of the proposed airspace changes has been agreed with EGSS who utilise the LYD SIDs.
- 1.7. The CAA's Post-Implementation Review (PIR)<sup>1</sup> of the changes approved by the CAA in this decision will commence at least one year after the implementation date. It is a standing condition of the CAA's approval that the Sponsor captures and collates data throughout the year following implementation of the airspace change, which will be used to inform the PIR. In due course, the Sponsor will be advised of the specific data sets to be captured, the analysis that will be required and the dates by which this information must be provided. There is some guidance on general PIR requirements at the end of this document. There is an update, to the CAA's PIR requirements in response to COVID-19, on the CAA website.

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<sup>1</sup> PIR is the 7<sup>th</sup> Stage of the CAA's airspace change proposal process as described in [CAP1616](#)

## Chapter 2

## Decision Process and Analysis

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### Chronology of the Proposal Process

#### Statement of Need and Assessment Meeting (Stage 1, Step 1A)

- 2.1 National Air Traffic Services Ltd (NATS) submitted a DAP1916 Statement of Need (SoN) on 30 Sep 20. An Assessment Meeting (AM) was held on 6 Oct 20 at which NATS outlined the Current Situation, the issues that had been identified and the opportunity to improve the relevant airspace. The Sponsor provided a draft timeline for the ACP with evidence to support the proposed scaling and requested shortened timeline to decision.
- 2.2 NATS proposed a multi-gateway submission for Stage 1-3, which the CAA accepted given the scale of the proposed change, however, the CAA confirmed that each stage would still be reviewed chronologically.
- 2.3 The CAA determined that the proposal was in scope of the CAP1616 ACP process. The CAA asked NATS to be clear that the removal of the SIDs was a proportionate approach to the issue presented in the SoN, rather than replicating them to an Area Navigation (RNAV) specification, which would be the only other viable option, other than to do nothing. The traffic figures presented by NATS confirmed that it would not be proportionate to RNAV replicate the LYD SIDs. The CAA therefore agreed that the provisional level for the proposed airspace change would be Level 2C. Minutes of the AM, together with a copy of the slide presentation that was used in the meeting, were published to the CAA ACP Portal (the Portal) on 7 Oct 20.

#### Development of Design Principles and the Define Gateway, Stage 1

- 2.4 NATS submitted a set of design principles (DPs) that were intended to ensure that the options would meet the requirement of the SoN. Given the nature of the change, this was accepted.
- 2.5 NATS stated that the DPs were developed in isolation, which the CAA accepted given the intent of the proposed changes. However, given that the key stakeholder was stated as EGSS, the CAA requested that NATS provide evidence that EGSS had been made aware of the DPs and the intent of the ACP. Evidence that engagement had taken place with EGSS was received on 23 Oct 20.
- 2.6 The CAA therefore accepted the submission from NATS and it passed through the Stage 1 Gateway on 30 Oct 20.

## Options Development and Appraisal, Stage 2 and Develop & Assess Gateway – First Attempt

- 2.7 For Stage 2 of the CAP 1616 process, NATS submitted three options which were to do nothing, to RNAV replicate the conventional SIDs and the selected option, which was to remove the conventional SIDs and introduce and extension to the ATS route, M604. The CAA initially, in line with the process, confirmed that this proposal would be a Level 2C ACP, under CAP1616<sup>2</sup>.
- 2.8 The CAA initially accepted that NATS had adhered to the guidance provided in CAP1616 and followed the required process in order to develop a suitable option through proportionately limited engagement with stakeholders. The CAA also agreed with the rationale used to identify and select the option to be taken forward in isolation to Stage 3. It was not the only safe option, as the current situation or the 'do nothing' option was also considered as safe. However, the selected option was also considered to be the only proportionate option based on the presented traffic figures, coupled with the continued availability of the conventional EGSS DET SIDs, which follow the exact ground track of the LYD SIDs up to DET. The submission was initially approved at the Develop & Assess Gateway 30 Oct 20, subject to a number of minor actions that the CAA required NATS to complete prior to commencing Stage 3 - Consultation.

## Consult Gateway, Stage 3 – First Attempt

- 2.9 The CAA carried out a review of the consultation strategy, document and engagement materials that were presented as part of the multi-gateway package.
- 2.10 Following an initial review of the Stage 3 submission there were several requirements that the CAA requested that NATS address. The most critical being assurance that the published DET 1D SID from EGSS (Required Navigation Performance 1, RNP1 specification) would not be used more often as a result of the removal of the conventional SIDs.
- 2.11 The CAA raised this concern based on email evidence (published) that seemed to suggest that EGSS intended to use the DET 1D SID more often in order to get aircraft to LYD, in the event that this ACP was approved. The CAA was concerned that this could result in an increase of aircraft concentration on departure from EGSS, when compared to the current situation. There were also published restrictions constraining the use of the DET 1D SID, that appeared to have not been considered.
- 2.12 Following the Gateway meeting on the 30 Oct 20 the CAA received an email from EGSS that made clear that, should the ACP be approved, the DET 1D SID would be used more often by EGSS, and not in accordance with the published restrictions.

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<sup>2</sup> Page 26, 'the removal of established airspace structure'.

This meant that the CAA could not approve the ACP progress through Stage 2 or 3 of the CAP 1616 process for the following reasons; the CAA could no longer be certain of what level to apply to the ACP, and had not received the assurance required regarding the use of the DET 1D SID as currently published.

- 2.13 The CAA requested that NATs re-engage with EGSS and provide evidence that should the ACP be approved, as presented, there would be compliance by EGSS with regard to the proposal and the correct usage of the extant DET 1D SID.
- 2.14 NATS would have to re-submit the requisite documentation for another Gateway meeting. The remaining requirements and actions would still need to be addressed. NATS requested to re-submit for the 27 Nov 20 Gateway, which the CAA accepted.

### Consult Gateway, Stages 2 and 3 – Second Attempt

- 2.15 NATS resubmitted an updated consultation documentation set to be reviewed for the Nov 20 Gateway. The documentation provided assurance that the DET 1D SID would be used in accordance with the published restrictions. The Consultation Document also explained that if the DET 1D was correctly used to facilitate departures to LYD (if the ACP were approved) the impact would be negligible as based on NATS figures, less than 2 aircraft a day, on average would be cleared to use the DET 1D SID.
- 2.16 The CAA was content with this explanation and the evidence to confirm that EGSS would adhere to the published DET 1D SID restrictions. The CAA recommended that NATS add diagrams to the Consultation Document in order to show how the ground track of the DET 1D SID was almost identical to the conventional DET SID off EGSS runway 04, which they did.
- 2.17 As a result of meeting the Stage 3 requirements the CAA was able to re-confirm that under CAP 1616 the ACP was a Level 2C ACP, as it would not alter traffic patterns below 7000ft. This completed the outstanding element from Stage 2.

### CAA Assessment and Decision in Respect of Consultation

- 2.18 The CAA is satisfied that NATS applied the fundamental principles of effective consultation before, during and after the consultation period, as follows: targeting the right audience; communicating in a suitable way given the circumstances (CV-19) and impact of the proposed changes; giving them the tools to make informed, valuable contributions to the development of the proposals. In addition, the CAA considers that NATS conducted its consultation in accordance with the requirements of CAP1616 and having taken into account the Government's Consultation Principles Guidance, and the Secretary of State's Air Navigation Guidance.



## Proposal Update and Submission (Stage 4, Step 4A & 4B) – 8<sup>th</sup> February 2021

- 2.19 NATS submitted a Step 4A (Update Design) and Step 4B (Submit Airspace Change Proposal) document with associated documents to the CAA on 8<sup>th</sup> Feb 2021; these documents were also uploaded to the CAA Portal.
- 2.20 The Step 3D Collate and Review submission had considered the elements of the minimal consultation responses (a total of two were received) to assess if there was a requirement to update the proposed Option. The feedback did not suggest an update and NATS discounted the requirement for any change to its design.
- 2.21 The formal Step 4B Airspace Change Proposal submission presented the design (removal of the LYD SIDs and extension of M604) which was as expected the only option, other than 'do nothing', that had been considered.

## CAA Analysis of the Material Provided

- 2.22 As a record of the analysis of the Step 4B Airspace Change Proposal formal submission provided by NATS relating to this ACP, the CAA has produced the following documentation which will be uploaded to the Portal:
- i) A Consultation Assessment
  - ii) The Final Options Appraisal Assessment
  - iii) An Environmental Assessment
  - iv) An Operational Assessment
  - v) A Letter of Acceptance with regard to Safety<sup>3</sup>

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<sup>3</sup> Para 3.2 of this document satisfies as the Letter of Acceptance with regard to Safety.

## Chapter 3

## CAA Consideration of Factors Material to the Decision

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### Explanation of the CAA's Statutory Duties

- 3.1 The CAA's statutory duties are laid down in Section 70 of the Transport Act 2000. In addition, Commission Implementing Regulation (EU) No 923/2012 dated 26<sup>th</sup> September 2012 (Standardised European Rules of the Air (SERA)) as retained (and amended in UK domestic law) under the European Union (Withdrawal) ACT 2018.

### Conclusions in Respect of Safety

- 3.2 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>4</sup> In its consideration of this proposal, the CAA is satisfied that the implementation of the proposed removal of the EGSS LYD 5S/6R SIDs and implementation of an extension to ATS route M604, maintains a high standard of safety<sup>5</sup>.

### Conclusions in Respect of Efficient Use of Airspace

- 3.3 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>6</sup> In its consideration of this proposal, the CAA is satisfied that the removal of the EGSS LYD 6R/5S SIDs and implementation of an extension to the ATS route M604, will maintain efficiency and support the DVOR rationalisation project. There will be no impacts to the efficient use of airspace as EGSS will utilise extant SIDs to facilitate any departures wishing to route via LYD. The approach taken by NATS to maintain connectivity is arguably positive and efficient use of the associated airspace, as SID replication was shown not be a proportionate option.

### Conclusions in Respect of Environmental Objectives

- 3.4 The CAA is required to take into account the 2014 Guidance to the CAA on Environmental Objectives provided by the Secretary of State. As this ACP was scaled as a Level 2C ACP, CAP1616 provides additional guidance regarding the specific environmental considerations<sup>7</sup>. NATS have asserted that any environmental impacts as a result of this change will be negligible. They have stated that due to the removal of the LYD SIDs, aircraft following the same route will be

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<sup>4</sup> Transport Act 2000, Section 70(1).

<sup>5</sup> This satisfies the requirement for a CAA Letter of Acceptance of the Sponsors Safety Assessment.

<sup>6</sup> Transport Act 2000, Section 70 (2) (a)

<sup>7</sup> CAP1616 Appendix B, para B41: Summary of environmental assessment requirements for Level 2 proposals

able to plan to carry less excess fuel, which could lead to a reduction in CO2 emissions and fuel burn. The CAA are satisfied therefore, that there could be a slight overall positive impact as result of this change.

## Conclusions in Respect of Aircraft Operators and Owners

- 3.5 The CAA is required to take account of the requirements of operators and owners of all classes of aircraft<sup>8</sup>. In its consideration of this proposal the CAA accepts that the impact of the proposed changes on other aircraft owners and operators, will be negligible.

## Conclusions in Respect of the Interests of Any Other Person

- 3.6 The CAA is required to take account of the interests of any person, other than an aircraft operator or owner, in relation to the use of any particular piece of airspace or the use of airspace in general. Regarding this proposal, which will only effect departures from EGSS routing via LYD, the CAA considers that there will not be a discernible impact to other persons.

## Conclusions in Respect of the Integrated Operation of ATS

- 3.7 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>9</sup>. The CAA notes that the MoD did not have any concerns with this proposal.

## Conclusions in Respect of the Interests of National Security

- 3.8 The CAA is required to take account of the impact that any airspace change proposal may have upon matters of National Security<sup>10</sup>. In this respect, the CAA is satisfied that the implementation of the proposed removal of the EGSS LYD 5S/6R SIDs and implementation of an extension to ATS route M604, will have no effect on National Security.

## Conclusions in Respect of International Obligations

- 3.9 The CAA is required to take account of any international obligations entered into by the UK and notified by the Secretary of State. The CAA is satisfied that this proposal will have no effect in respect of international obligations.

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<sup>8</sup> Transport Act 2000, Section 70 (2) (b)

<sup>9</sup> Transport Act 2000, Section 70 (2) (e)

<sup>10</sup> Transport Act 2000, Section 70 (2) (f)

## Chapter 4

# CAA's Regulatory Decision

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## General Summary

- 4.1 The removal of the EGSS LYD 5S/6R SIDs and implementation of an extension to ATS route M604, is a proportionate response to supporting the removal of the LYD DVOR. The changes will maintain connectivity and ensure that there are no discernible impacts to operators or other persons. It will also reduce the requirement to carry excess fuel for some operators which could lead to a slight reduction in CO2 production and fuel burn.

## Decision

- 4.2 In considering the formal submission by NATS with respect to ACP-2020-66: Removal of EGSS LYD 5S/6R SIDS and implementation of an extension to ATS route M604, the CAA approves the proposal as presented and described in the document '[EGSS LYD SIDs v1.2](#)' published on the CAA Airspace Change Portal on 4 March 2021.

## Conditions and Recommendations

- 4.3 The CAA ATS Inspector recommends that the changes, as a result of this approval, be notified to the relevant ATC unit through a supplementary instruction (SI).

## Implementation

- 4.4 The proposed changes are approved for implementation as agreed through AIRAC 09/2021.

## Post Implementation Review

- 4.5 In accordance with current CAA standard practice, as detailed in CAP1616, a minimum of 12 months after implementation the airspace change will be reviewed to evaluate whether the anticipated impacts and benefits stated are as expected. The collection of this data is subject to guidance on the CAA website in response to COVID-19.
- 4.6 In this case, the sponsor has asserted the proposal will not lead to *a change in the number of flights or flightpaths: lateral or vertical tracks of any aircraft routing currently flown*. To enable a thorough and rigorous review, the Sponsor will be required to gather relevant data during the post-implementation period.
- i) **Requirement 1:** NATS must make suitable arrangements for collection of the following data for use during the Post-Implementation Review:

- (1) Safety Data, including MORs or ASRs.
  - (2) Traffic figures including actual vs predicted figures and dispersion comparisons along the DET SIDs when aircraft are departing to LYD via M604.
  - (3) Operational feedback from ATC and airlines if relevant.
- ii) **Requirement 2:** NATS must collate related stakeholder observations (enquiry/complaint data) and submit it to the CAA. Any location/area from where more than 10 individuals have made enquiries/complaints must be plotted on separate maps displaying a representative sample of aircraft track data plots and traffic density plots. The plots should include a typical days-worth of movements from the last month of each standard calendar quarter (March, June, September, December) from each of the years directly preceding and following implementation of the airspace change proposal.