OSEP – Deployment 11

Engagement Evidence
ACP-2021-061

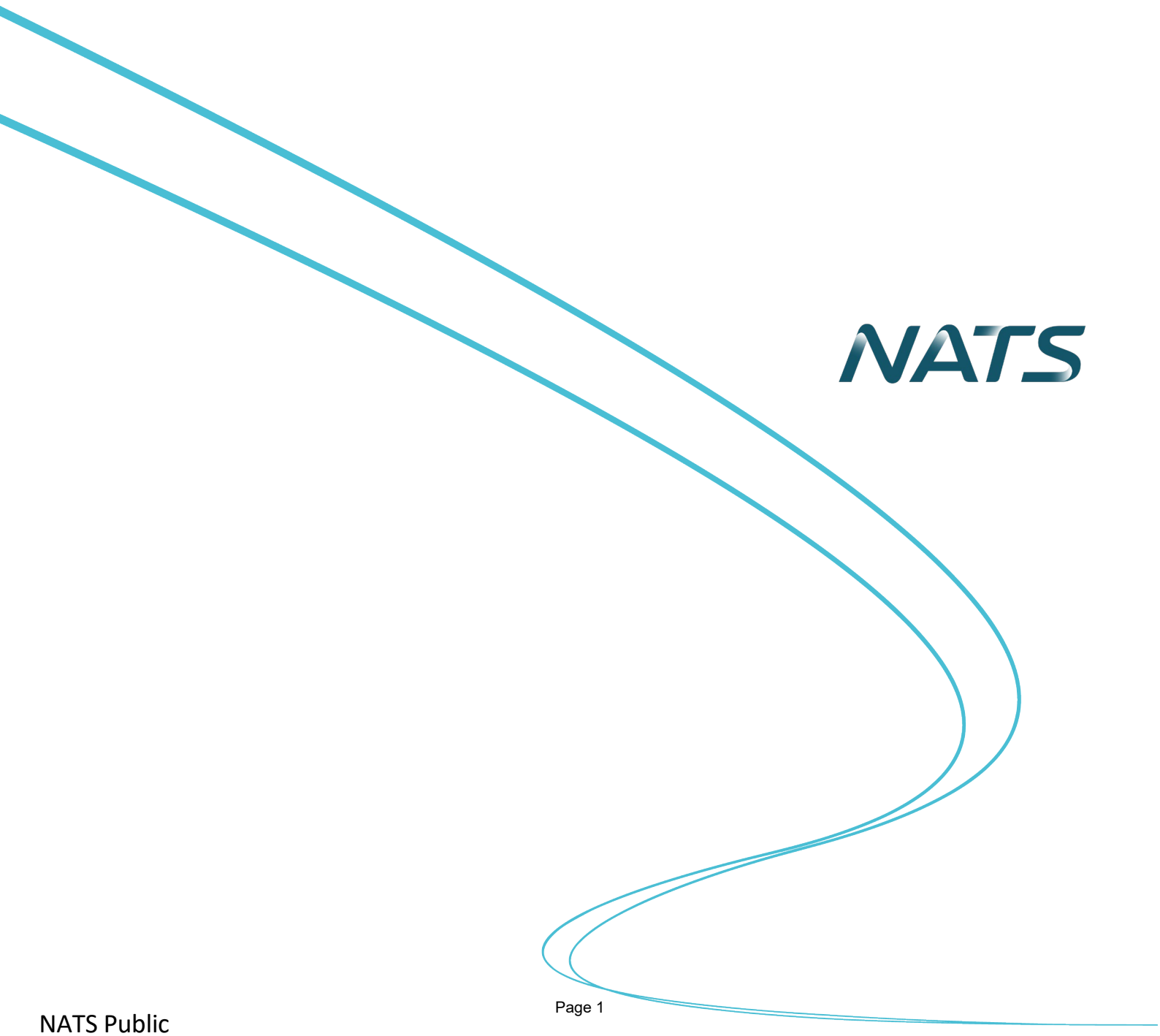


Table of Contents

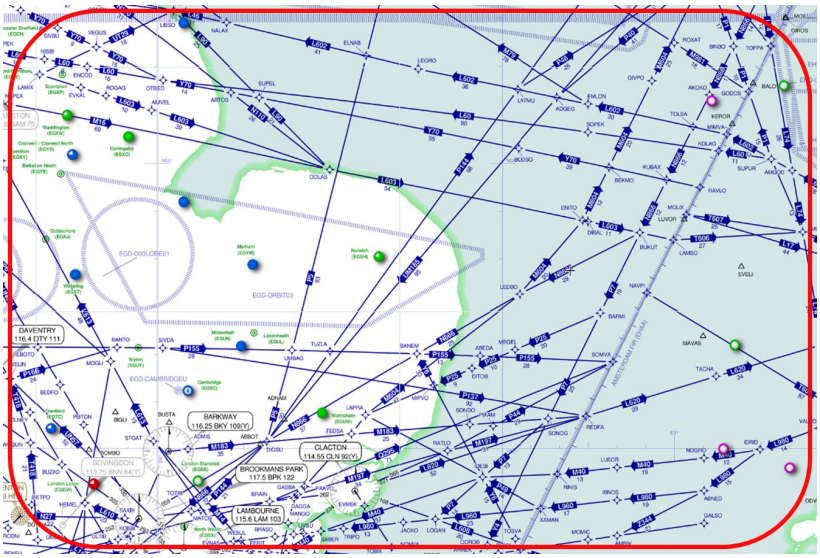
EE1: Example engagement material, email and feedback form sent to all stakeholders during Stage 2.

[redacted]

From: Airspace Consultation
Sent: 19 December 2023 10:31
To: Airspace Consultation
Subject: NATS Airspace Change Proposal - East Anglia area - London/Amsterdam border
Attachments: Stage 2_airlines_engagement_Dec23.pdf

Dear Colleague

NATS are progressing an Airspace Change Proposal to improve the connectivity of the ATS route network and airspace structures between the London and Amsterdam UIRs/FIRs, in the area shown:



The ACP is being delivered under the NATS Operational Service Enhancement Project (OSEP) which seeks to deliver a series of small scale changes across NERL airspace.

We are currently developing design options for this airspace change and wish to share these with you and capture any feedback you may have.
Please find attached a slidepack which presents our current design options, and a link to a feedback form here.

The Design Principles and further information on this ACP can be found on the CAA portal here

We would be grateful if you could review and complete the form with your feedback by Wednesday 10th January.

Kind regards

NATS

Airspace Change Team

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

OSEP NAVPI/CLN ACP

St 2 Initial Option Development

Engagement Material

December 2023

NATS

NATS Protected

1

OSEP NAVPI/CLN ACP

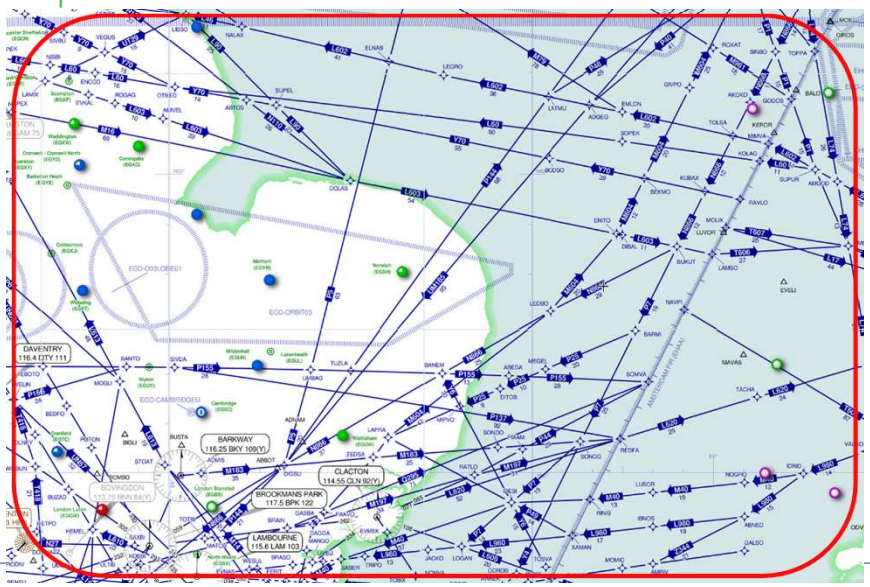
NATS

The ACP is being delivered under the NATS Operational Service Enhancement Project (OSEP) which seeks to deliver a series of small scale changes across NERL airspace.

These changes will deliver against one or more of the following areas:

- enable fuel savings to customers
- reduce CO_2e emissions
- reduce ATC complexity
- optimise the airspace using Flexible Use of Airspace (FUA) principles
- facilitate more efficient flight planning
- provide operationally efficient airspace volumes for military airspace users

Area of Scope



3

Key Components

There are a series of small changes being proposed at this stage which will meet the change objectives. These are primarily revisions to flight plannable routings which reflect current day tactical practice, enabling flight plannable fuel / CO_2e savings.

1) Realignment of East Anglia Military Training Area (eastern corner)
This would facilitate:
a) Optimise northbound route structure FL245+ = approx. 98 tonnes p.a. enabled fuel savings
Which would further facilitate
b) Optimise southbound route structure FL245+ = approx. 110 tonnes p.a enabled fuel savings

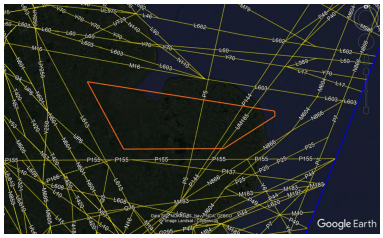
Other changes not dependant on the East Anglia MTA revisions proposed:
2) Optimise westbound route structure at KOLAG = approx. 118 tonnes p.a enabled fuel savings

3) Optimise westbound route structure at NAVPI = reduced complexity for LTMA inbounds

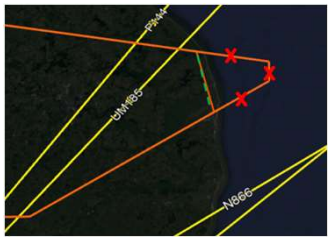
4

Realignment of East Anglia MTA

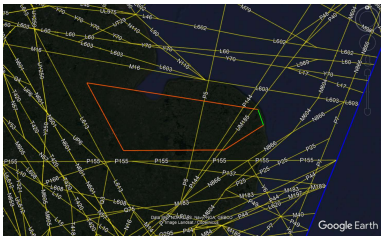
Do nothing: East Anglia MTA remains as today



Potential to revise MTA as shown, with updated LOA



Option 1 To align the co-ordinates in the AIP to be coincident with any updated LOA



5

Optimise northbound route structure FL245+

BASELINE: Currently, two northbound routes (N866 & M604) converge at LEDBO to join M604.

Traffic via LAPRA (1): LAPRA-M604-LEDBO-M604-ENITO-M604-BEKMO (74.4nm). Generally used by LTMA outbounds

Traffic via BANEM (2): BANEM N866 LEDBO M604 ENITO M604 BEKMO (58.1nm). Generally used by overflight traffic on N866 /P155 to join M604

N866 & M604 = 10nm minimum separation from current East Anglia MTA

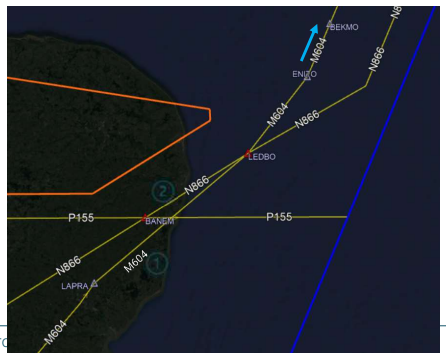
Regular tactical shortcuts are provided by ATC direct from LAPRA/BANEM to BEKMO.

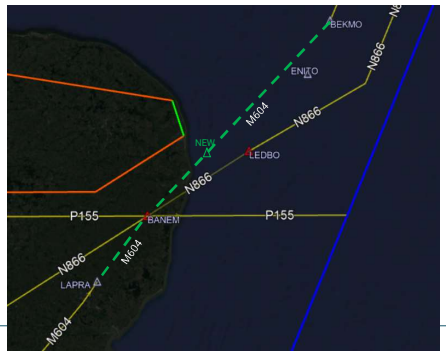
PROPOSED OPTION (realigned MTA): Realign M604 remove LEDBO & ENITO; route via BANEM
Remove northbound N866 BANEM-LEDBO N866 & M604 converge at BANEM

Traffic via LAPRA LAPRA -M604-BANEM-M604-BEKMO (73.4nm)
Track mileage saving = 1nm. 8,785 flights p/a = 8,785nm track miles = approx. 70 tonnes fuel

Traffic via BANEM: BANEM-M604-BEKMO
Track mileage saving = 1.7nm. 2,105 flights p/a = 3,423nm track miles = approx. 28 tonnes fuel

Total Potential impacts: 10,890 flights p/a = 12,208 track miles = approx. 98 tonnes fuel
N866 LEDBO – BANEM becomes southbound only
M604 = 6.5nm separation from East Anglia MTA, as per CAP1385.



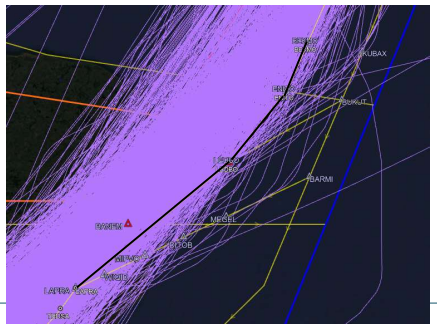


6

Optimise northbound route structure FL245+

	Baseline				Option			Impact		
Component	Flights (2022)	Current Track Miles	Current Fuel (T)	Current CO_2e (T)	New Track miles	New Fuel (T)	New CO_2e (T)	Track mile delta	Fuel delta (T)	CO_2e delta (T)
M604 realignment	8,785	74 4	5,229	16,628	73 4	5,159	16,406	-1 0	-70	-222
N866	2,105	58 1	978	3,110	56 4	950	3,021	-1 7	-28	-89
Totals	**10,890**	**132.5**	**6,207**	**19,738**	**129.8**	**6,109**	**19,427**	**-2.7**	**-98**	**-311**

BASELINE
Current routing and current traffic flow



OPTION
Proposed new routing and current traffic flow

Purple lines show actual trajectories flown Oct-Nov 2023

NATS Private

7

Optimise southbound route structure FL245+

BASELINE: Currently, southbound traffic on N866 connects with P7 at BUKUT. Traffic heading west stays on N866.

LTMA inbound traffic routes P7-BARMI, connecting to BARMI STARs. EGSS & EGGW BARMI STARs track route P25 towards WIQID.

EGSS BARMI traffic: KUBAX-N866-BUKUT-P7-BARMI 2A-MEGEL (51.0nm)

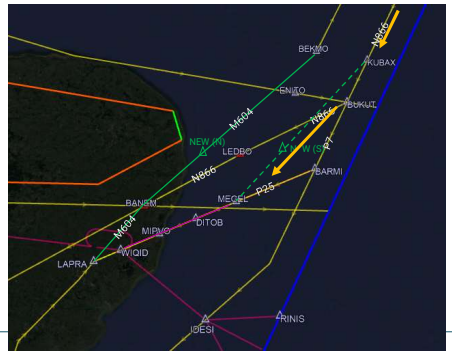
EGGW BARMI traffic: KUBAX-N866-BUKUT-P7-BARMI 1N-MEGEL (51.0nm)

PROPOSED OPTION with realigned MTA: Realign M604 as described in Option 1
New ATS route between KUBAX-NEW-MEGEL, with new 'level at' point for EGSS/EGGW inbounds via N866
Truncate BARMI STAR to MEGEL

EGSS BARMI traffic KUBAX-NEW-MEGEL (48.0nm)
Track mileage saving = 3nm. 3,972 flights p/a = 11,916nm track miles = approx. 96 tonnes fuel

EGGW BARMI traffic KUBAX-NEW-MEGEL (48.0nm)
Track mileage saving = 3nm. 579 flights p/a = 1,737nm track miles = approx. 14 tonnes fuel

Total Potential impacts: 4,551 flights p/a = 13,653 track miles = approx. 110 tonnes fuel



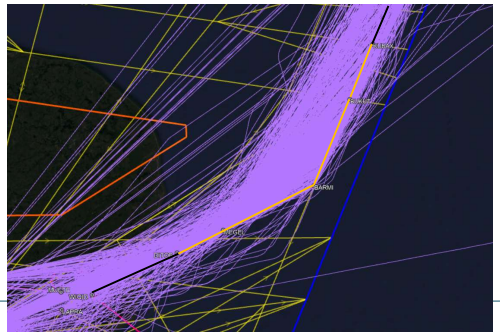
NATS Private

8

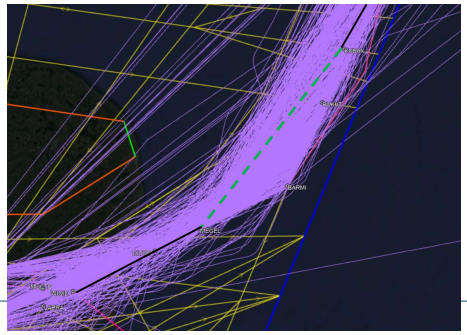
Optimise southbound route structure FL245+

Component	Baseline				Option			Impact		
New ATS route KUBAX-MEGEL	Flights (2022)	Current Track Miles	Current Fuel (T)	Current CO_2e (T)	New Track miles	New Fuel (T)	New CO_2e (T)	Track mile delta	Fuel delta (T)	CO_2e delta (T)
EGSS traffic	3,972	51 0	1,621	5,153	48 0	1,525	4,850	-3 0	-96	-305
EGGW traffic	579	51 0	236	751	48 0	222	706	-3 0	-14	-45
Totals	**4,551**	**51.00**	**1,857**	**5,904**	**48.0**	**1,747**	**5,557**	**-3.0**	**-110**	**-350**

BASELINE
Current routing and current traffic flow



OPTION
Proposed new routing and current traffic flow



Purple lines show actual trajectories flown Oct-Nov 2023

9

Cumulative Benefits

The realignment of East Anglia Military Training Area could enable flight plannable benefits within UK airspace.

Based on 2022 traffic, approx. 208 tonnes of fuel (661 tonnes of CO_2e).

Component	Baseline				Option			Impact		
Component	Flights (2022)	Current Track Miles	Current Fuel (T)	Current CO_2e (T)	New Track miles	New Fuel (T)	New CO_2e (T)	Track mile delta	Fuel delta (T)	CO_2e delta (T)
M604/N866 realignment	10,890	132 5	6,207	19,738	129 8	6,109	19,427	-2 7	-98	-311
New ATS route KUBAX-MEGEL	4,551	51 00	1,857	5,904	48 0	1,747	5,557	-3 0	-110	-350
Totals	**15,441**	**183.5**	**8,064**	**25,642**	**177.8**	**7,856**	**24,984**	**-5.7**	**-208**	**-661**

10

The following 2 changes proposed are not dependent on the realignment of the East Anglia MTA :

Optimise westbound route structure - KOLAG

Optimise westbound route structure - NAVPI

11

Optimise westbound route structure – KOLAG

BASELINE: Currently, westbound Amsterdam departures route L602, L60 crossing into UK FIR at KOLAG COP. 12,579 flights p/a (2022 traffic)

BERGI-L602-AMGOD-SUPUR-L60-KOLAG-L60-SOPEK (72.0nm)

Other traffic also utilises this route, primarily German / Polish departures to UK/Irish airfields (508 per annum)

Regular tactical shortcuts are provided by ATC direct from BERGI to SOPEK.

PROPOSED OPTION:
Remove KOLAG, add a new COP to provide direct routing from BERGI to SOPEK.
Extend and realign L60 to BERGI

Traffic via new COP BERGI-L60-XXXX-L60-SOPEK (70.9nm)
Track mileage saving = 1.1nm.
13,087 flights p/a = 14,396nm track miles = approx. 116 tonnes fuel

Total Potential impacts:
This route revision will enable shorter routes in flight planning for this busy route.
This would enable flight plan fuel savings of approx. 116 tonnes per annum.

BASELINE: Current routing – BERGI-AMGOD-SUPUR-KOLAG-SOPEK

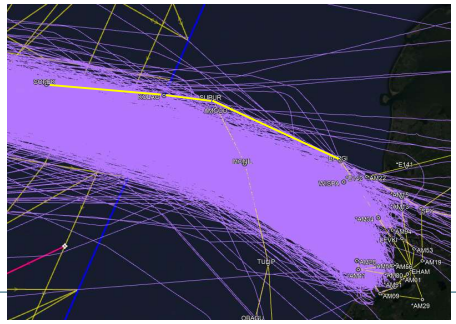
OPTION: Proposed new routing – BERGI-newCOP-SOPEK

12

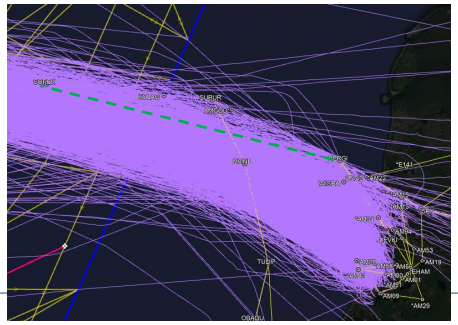
Optimise westbound route structure - KOLAG

Component	Baseline				Option			Impact		
L60 realignment (BERGI-SOPEK)	Flights (2022)	Current Track Miles	Current Fuel (T)	Current CO_2e (T)	New Track miles	New Fuel (T)	New CO_2e (T)	Track mile delta	Fuel delta (T)	CO_2e delta (T)
EHAM deps	12,579	72 0	7,246	23,041	70 9	7,135	22,689	-1 1	-111	-353
Other traffic	508	72 0	293	932	70 9	288	916	-1 1	-5	-16
Totals	**13,087**	**72.0**	**7,539**	**23,973**	**70.9**	**7,423**	**23,605**	**-1.1**	**-116**	**-369**

BASELINE
Current routing and current traffic flow



OPTION
Proposed new routing and current traffic flow



Purple lines show actual trajectories flown Oct-Nov 2023

NATS Private

13

Optimise westbound route structure – KOLAG

BASELINE:
Rotterdam departures which route via SUPUR – KOLAG would be impacted by this change.

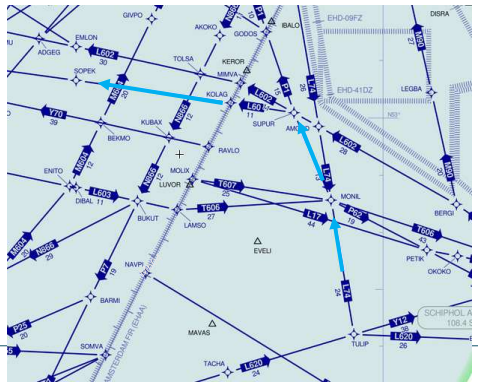
TULIP-MONIL-SUPUR-KOLAG-SOPEK
= 55.6nm

56 flights per annum (2022 traffic)

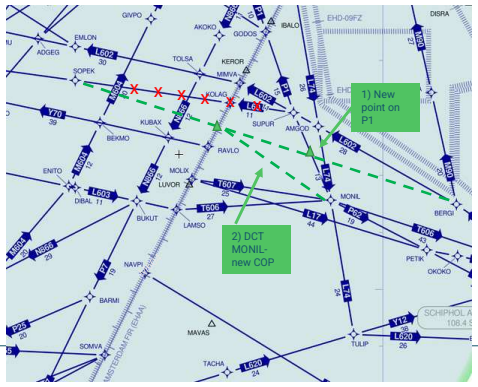
PROPOSED OPTIONS:
1) Add a new waypoint on P1, joining realigned L60
MONIL–P1-NEW–L60-SOPEK = 52.3nm
Track mileage saving = 3.3nm.
56 flights p/a = nm track miles = approx. 1.5 tonnes fuel p/a saving

2) DCT from MONIL to New COP
MONIL–New COP–SOPEK = 50.2nm
Track mileage saving = 5.4nm.
56 flights p/a = nm track miles = approx. 2.4 tonnes fuel p/a saving

BASELINE: Current routing – BERGI-AMGOD-SUPUR-KOLAG-SOPEK



OPTION: Proposed new routing – BERGI-newCOP-SOPEK



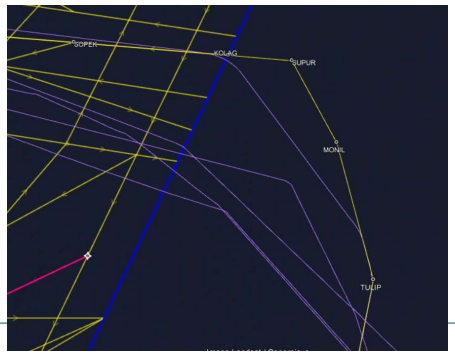
NATS Private

14

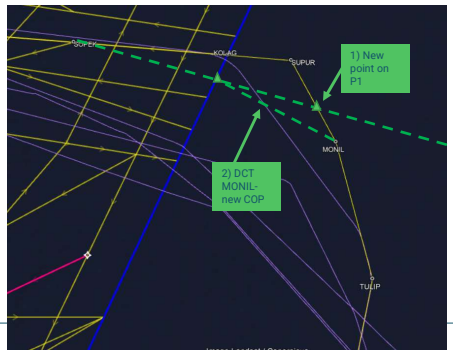
Optimise westbound route structure - KOLAG

Component	Baseline				Option			Impact		
L60 realignment (BERGI-SOPEK)	Flights (2022)	Current Track Miles	Current Fuel (T)	Current CO_2e (T)	New Track miles	New Fuel (T)	New CO_2e (T)	Track mile delta	Fuel delta (T)	CO_2e delta (T)
EHRD Opt 1	56	55 6	24 9	79	52 3	23 4	74 4	-3 3	-1 5	-4 8
EHRD Opt 2	56	55 6	24 9	79	50 2	22 5	71 6	-5 4	-2 4	-7 6

BASELINE
Current routing and current traffic flow



OPTION
Proposed new routings and current traffic flow



Purple lines show actual trajectories flown Oct-Nov 2023

15

Optimise westbound route structure – NAVPI COP

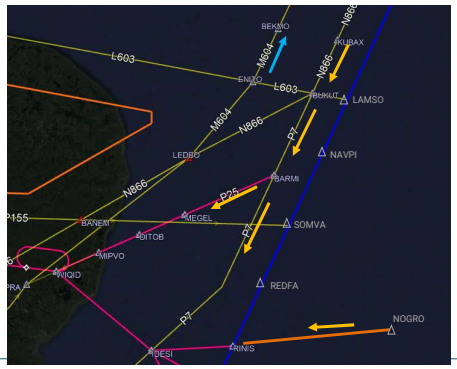
BASELINE:

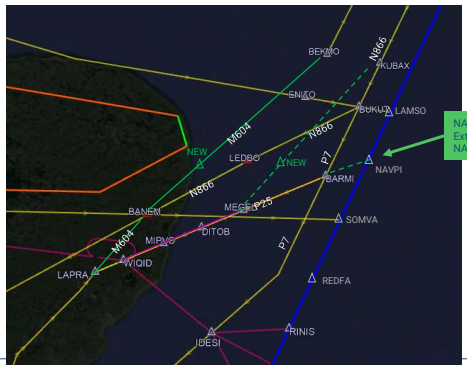
NAVPI is not available as an entry point.
Currently, LTMA arrivals from the northeast have 2 routing options

N866 to BUKUT, join P7 to BARMI for BARMI STARs
or
NOGRO – RINIS for RINIS STARs.

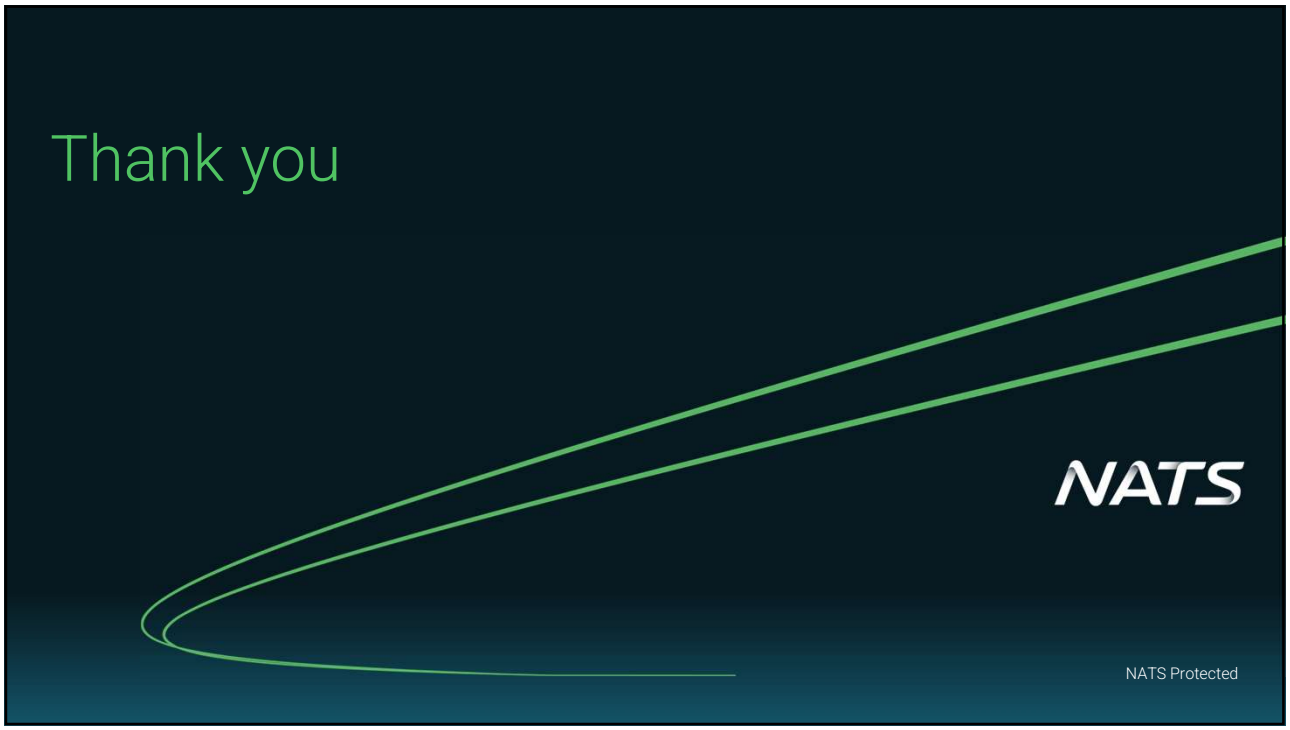
PROPOSED OPTION:
Create a new COP at NAVPI, with route connectivity via an extension of P25 back to NAVPI. This will allow earlier separation of EGGW and EGSS inbounds.

Development work will determine which traffic would be allocated to the new route





16



17

NERL Engagement
OSEP NAVPI/CLN ACP

This form is provided in conjunction with the briefing material which demonstrates the changes proposed as part of this ACP.
The purpose is to capture feedback from stakeholders to inform the design development of this OSEP deployment.

* Required

Section 1 - About you

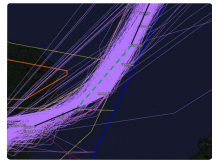
1

What is your name? *

2

Which organisation do you represent? *

Realignment of the East Anglia Military Training Area and ATS route realignments



This proposed change affects traffic above FL200.

This component proposes the realignment of the East Anglia Military Training Area as shown, which facilitates the re-alignment of the northbound and southbound ATS route structures to the east of the MTA.

Traffic routinely uses tactical shortcuts so these route realignments would enable flight plannable fuel savings reflecting current day practice.

3

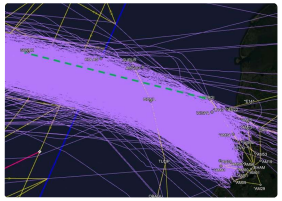
Realignment of East Anglia MTA & optimised route structures: to what extent to you support this? *

	Agree	Disagree	Neutral	N/A
Revise the East Anglia MTA	◯	◯	◯	◯
Optimise northbound route structure (M604)	◯	◯	◯	◯
Optimise southbound route structure (KUBAX-MEGEL)	◯	◯	◯	◯

4

Please leave your comments relating to the **East Anglia MTA and the proposed route revisions** here:

Optimise Westbound Route Structures - KOLAG COP



This proposed change affects traffic above FL200.

This component proposes the removal of KOLAG COP on the FIR boundary, replaced with a new COP to the south, which would provide a direct routing from BERGI to SOPEK.

Traffic routinely uses tactical shortcuts so these route realignments would enable flight plannable fuel savings reflecting current day practice.

5

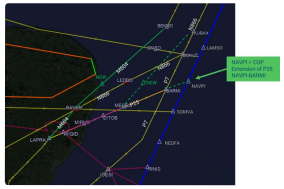
Optimise westbound route structure at KOLAG: to what extent do you support this? *

	Agree	Disagree	Neutral	N/A
Replace KOLAG COP. Extend and realign L60 to BERGI	◯	◯	◯	◯

6

Please leave your comments relating to **westbound route structure at KOLAG** here: *

Optimise Westbound Route Structures - NAVPI COP



This proposed change affects traffic above FL200.

This component proposes the addition of NAVPI COP on the FIR boundary, with route connectivity to P25 BARMI-NAVPI.

This will enable earlier separation of Luton and Stansted inbound traffic, reducing complexity in this airspace.

7

Optimise westbound route structure at NAVPI: to what extent do you support this? *

	Agree	Disagree	Neutral	N/A
Add NAVPI COP. Extend P25 BARMI-NAVPI	◯	◯	◯	◯

8

Please leave your comments relating to **westbound route structure at NAVPI** here: *

[redacted]

From: Airspace Consultation
Sent: 02 January 2024 12:43
To: Airspace Consultation
Subject: NATS Airspace Change Proposal - East Anglia area - London/Amsterdam border
Attachments: Stage 2_airlines_engagement_Dec23.pdf

Good afternoon and Happy New Year

This is a follow up to our email sent on 19 December.
We are seeking your feedback on our initial options to revise the airspace in the East Anglia area to improve operational service, as described in the attached slidepack.

We have created a simple feedback form here and would love to hear your views as a key stakeholder in this area.

We look forward to hearing from you. If you require any further information please do not hesitate to get in touch.

Kind regards

NATS Airspace Change Team

NATS

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

From: Airspace Consultation <airspaceconsultation@nats.co.uk>
Sent: 19 December 2023 10:31
To: Airspace Consultation <airspaceconsultation@nats.co.uk>
Subject: NATS Airspace Change Proposal - East Anglia area - London/Amsterdam border

Dear Colleague

NATS are progressing an Airspace Change Proposal to improve the connectivity of the ATS route network and airspace structures between the London and Amsterdam UIRs/FIRs, in the area shown:

Notes of Meeting between NATS and LVNL: OSEP ACP Stage 2 engagement

Meeting date: 13/10/23 **Location:** Held via Teams

Attendees:

[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (NATS)
[redacted] (NATS)
[redacted] (NATS)
[redacted] (NATS)
[redacted] (NATS)
[redacted] (NATS)

Introduction: Brief introductions were made

Material: NATS shared this presentation for discussion. The notes below are a summary of the discussions held on these slides:

NATS LVNL Meeting 13th Oct'23.pdf

ACP for 2025 topics

NAVPI – discussed future usage of FL250 at NAVPI for EGGW inbounds westbound via NAVPI (MUAC – LAC). LVNL commented on EHAM inbounds via LAMSO and EHRD inbounds. However, it was discussed that these inbounds will be below FL250 by LAMSO. LVNL to take this option of MUAC/LAC using FL250 at NAVPI to operational experts and feedback.

FL240 at REDFA option for EHAM inbounds and/or routing for EHAM inbounds via SOMVA. Discussed if routing EHAM inbounds via SOMVA then LVNL feel FL240 is too high. Potential level of FL230 at SOMVA or maybe lower. Discussed routing lengths and differences between REDFA-SULUT-SUGOL and SOMVA-SULUT-SUGOL and LAMSO-SUGOL. LVNL to discuss internally with operational experts and feedback.

Discussed that sometimes LVNL see S10 route EHAM inbounds direct to SUGOL taking aircraft over the Lakenheath ATA North area. NATS to look into this as Lakenheath ATA North has a top level of FL245 so LVNL are not able to descend inbounds if going over this area.

EHAM outbounds routing west to S10. Remove point KOLAG and introduce new point to the south to enable EHAM outbounds to route BERGI-XXXXX-SOPEK to enable shorter route in flight planning for this busy route. LVNL mentioned deconfliction of these outbounds against EHAM inbounds via TOPPA but not seen as a big issue. LVNL to discuss and feedback.

Timelines/constraints discussed – LVNL advised they will need to discuss potential changes with management and feedback to us. There is limited capacity available, at this moment it is unclear whether this is possible or not to. LVNL to investigate internally and feedback.

Future Development 2026+

LVNL mentioned they are looking at potentially using 3nm separation.

EHAM outbounds high performance a/c discussed and potentially new COP for these outbounds going westbound to S14/S13.

Potential for moving REDFA slightly north to allow for new COP. Currently there is approx. 13nm between SOMVA and REDFA.

LVNL asked if it would be possible to investigate using headings to the south of RAVLO for EHAM outbounds – NATS to look into and feedback (more current day ops than future).

Follow up meeting to be had on Teams in late November – date TBC.

LVNL / NATS ACP meeting 11/12/2023. Meeting held via TEAMS

Attendees

[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (NATS) - ACP Specialist
[redacted] (NATS) – ACP Specialist
[redacted] (NATS) – Airspace Implementation Manager

Introductions

This meeting is a follow up on initial engagement with LVNL on initial design options for the OSEP ACP, which is currently in CAP1616 Stage 2. The project is working to implement in February 2025. NERL presented this slidepack to describe the proposed changes.


Stage 2_LVNL engagement_Dec23.p

Summary of issues presented / discussed

1) Realignment/reshape of EAMTA:

- LVNL confirmed this revision would have no impact on their traffic.

2) This would enable North (M604 & N866)/South bound (P7/P25 & N866) routes change under ACP:

- LVNL confirmed this revision would have no expected impact on their traffic.

3) Optimise westbound routes via KOLAG:

- LVNL questioned if it would be 24/7 as they use different MOPS depending on the other departures etc. They think it is workable.
- NATS confirmed this change is based on KLM feedback and data. LVNL confirmed they only use the actual route if they are very busy and need extra space for vectoring other aircraft.
- LVNL would like to know the Maastricht release box, altitude of aircraft in that space. Action: NATS to look into this.
- NATS confirmed this change is for traffic between FL200- FL250 at KOLAG; and current KOLAG will be removed and replaced with new COP.
- The higher-level traffic will no longer be using KOLAG (separate change from Jan 2024 by Maastricht). Moving the lower level traffic will allow the outbounds to climb better.
- New KOLAG be used for all EHAM traffic entering into UK FIR.
- LVNL will need to review how this new COP impacts their capacity.

Rotterdam to New KOLAG

- LVNL in support of the current proposed options
- Agree traffic is already turning south far below the actual route.

4) Optimise westbound routes via NAVPI:

- LVNL agree that generally, release at FL250 would be ok, but wish NERL to consider EHAM arrivals via SOMVA as part of this change proposal.
- ACTION: NERL to review request from LVNL to consider options around SOMVA.
- Re traffic usage - NERL expect this to be about 3,500 aircraft per year for Luton. Potentially this could be initially limited to Luton traffic only.
- This proposed change is to help mitigate a network hotspot identified by Maastricht.

Other Comments / Questions

Planned implementation of all changes within this ACP is Feb 2025.

Date agreed for next meeting: 8 January 2024 09:00 GMT / 10:00 CET

Meeting close.

LVNL / NATS ACP meeting 08/01/2024. Meeting held via TEAMS

Attendees

[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (LVNL)
[redacted] (NATS) - ACP Specialist
[redacted] (NATS) – Airspace Implementation Manager

Introductions

This meeting is a follow up engagement with LVNL on initial design options for the OSEP ACP, which is currently in CAP1616 Stage 2. The project is working to implement in February 2025.

Minutes of previous meeting:

A brief review of the slidepack presented last time and agreement of minutes.

Actions from last meeting:

For the proposed changes at KOLAG, NERL to provide release box / altitude of aircraft in this airspace. **Action** carried over

NAVPI changes: LVNL to confirm if release at FL250 is agreeable. **Action** carried over

SOMVA: NERL to develop options around SOMVA/REDFA for EHAM arrivals. Presented within this meeting.

Minutes / Actions:

NERL presented a revised slidepack which includes proposed options for SOMVA/REDFA.

Stage 2_LVNL engagement_Jan24.pc

1) EHAM arrivals via REDFA/SOMVA

Potential options were discussed.

Option 1 - to route traffic via SOMVA. LVNL feedback is this is not optimal as not sufficient room to vector aircraft

Option 2 – to create new COP south of SOMVA. LVNL feedback is this also may not provide sufficient space to vector.

LVNL expressed concern re ability to vector aircraft within their airspace. Would a CDR be an option with a direct as possible routing. Agreed both options are still possibilities, but impacts are currently not clear.

ACTION: NERL to develop options, to provide environmental metrics, and a density map of current traffic to show preferred routings.

Other Comments / Questions

Planned implementation of all changes within this ACP is Feb 2025.

ACTION :LVNL to confirm if the planned implementation date in Feb 2025 is possible for LVNL to change systems, Arrival/Departure routes and ATC procedures.

Date agreed for next meeting: Next engagement to be conducted via email exchange; meeting date TBC

Meeting close.

LVNL / NATS ACP meeting 28/03/2024. Meeting held via TEAMS

Attendees

[redacted] (LVNL)
(LVNL)
(LVNL)
(LVNL)
(NATS) - ACP Specialist
(NATS) – ACP Specialist
(NATS) – Airspace Implementation Manager

Introductions

This meeting is a follow up engagement with LVNL on initial design options for the OSEP ACP, which is currently in CAP1616 Stage 2. The project is working to implement in February 2025.

NATS OSEP LVNL impact analyse.pptx

LVNL presented a slidepack which was circulated via email on 26/3/2024.

Minutes / Actions:

1) **BERGI – SOPEK change**.
Timescales: LVNL confirmed this change is acceptable to LVNL for March 2025. NERL would like to implement in February; this is not possible for LVNL.

ACTION: NERL to review and determine how to align implementation dates

Proposed changes: LVNL confirmed the proposed changes to create a new COP and realign L60 are acceptable, as per the slidepack.
EHRD options – discussion on proposal options: 1) new route from MONIL – new COP (less traffic miles), or 2) MONIL - P1 – new COP (less complex in AIP as utilises current route structure). Release point agreed is MONIL. Agreed this is an LVNL decision and does not affect the NERL design.
EHLE deps using AMGOD SID route AMGOD to SOPEK. This could be DCT or keep ATS route. NERL would need to establish do LVNL still need KOLAG? NERL would prefer to remove KOLAG to reduce clutter on screen.

ACTION: LVNL to confirm design requirements re KOLAG for AMGOD to SOPEK routing.

2) Proposals to reroute EHAM arrivals via SOMVA.
LVNL have scoped proposals in this area. This area is very complex. Adding additional arrival routes would increase workload, decrease capacity – therefore not a viable option for LVNL at the moment.

NERL asked could there be a quiet hours flight plannable arrival via SOMVA. This kind of operation is not currently used by LVNL.

ACTION: NERL to provide examples of this for next meeting.

3) Proposals to create new inbound COP at NAVPI
Discussion on NAVPI release box requirements, for LVNL this must be clear of the MOLIX area. Proposed for NAVPI to become an inbound COP for EGGW/EGSS traffic, to reduce

complexity at IDRID/RINIS. EGGW traffic from northeast directions to join new route to join STAR at BARMI. Request is for FL250 for release East of NAVPI, this is MUAC Airspace but NATS deliver proximate traffic DCT SUGOL (REFA/SOMVA) and via LAMSO

NERL shared some data on traffic levels at REDFA and LAMSO. There would be no conflict with EHAM arrivals. Approx 3,000 flights per annum to go into EGGW.

ACTION – LVNL will review the NAVPI release box to determine what that could look like.

ACTION - LVNL to discuss with MUAC on 16 April 2024.

Date agreed for next meeting: Next meeting TBC - LVNL to propose next date.

Meeting close.

Notes of Meeting between NERL and LVNL: OSEP ACP Engagement

Meeting date: 06/06/2024 **Location:** Held via Teams

Attendees:
NERL: [redacted]

LVNL: [redacted]

L60 implementation – timeline

Both NERL and LVNL wish to implement in March 2025.

MUAC have informed both LVNL and NERL that they cannot meet March 2025 implementation date. Options were discussed around this issue.

Option 1: Introduce New Route and leave L60

- Potential to introduce a new ATS route BERGI-new COP for traffic FL245 and below, and retain L60 for Maastricht above FL245. This is a viable option albeit would require RAD restrictions and is a workaround solution.
- NERL advised that L60 is currently RAD restricted for MUAC (since Feb 24) with no traffic utilising the route SUPUR L60 KOLAG above FL245.
-

Route designator {RNP type}	[Route usage notes]					
Significant point name	Significant point coordinates					Remarks
{RNP type}	Initial Track MAG ↓ / ↑	Geodesic Dist (NM)	Upper limit / Lower limit	FL series ↓	↑	Controlling unit [Airspace class] Remarks
1	2	3	4	5	6	7
L60 (-)	Route availability: (1) H24					
Δ SUPUR	53°00'54.81"N 003°33'52.07"E					
(RNAV 5)	278 / -	11.3	FL 660 / FL 055	Even Note: (1)		Maastricht UAC above FL 245 Amsterdam ACC below FL 245 [Class C above FL 195 Class A below FL 195]
Δ KOLAG (FIR BDRY)	53°02'36.50"N 003°15'17.57"E					Note: (2)
Point/Segment remarks: (2) For continuation see AIP United Kingdom.						

Option 2: Delay and Realign L60 when MUAC are able.

- NERL have asked MUAC for a possible change date. NERL have already moved to March to align with LVNL. LVNL cannot move from March 2025, due to their operational change programme.

Option 3: Maintain L60 above FL245, realign lower route

- An alternative option is to realign L60 below FL245 (below MUAC), maintaining L60 above FL245.. This adds complexity over Option 1.

The preferred and simplest solution is to request MUAC to review their position on implementing this change in March 2025. The route L60 is currently RAD restricted above FL245 as is KOLAG COP, so there is no traffic utilising this. It is appreciated it is an adaptation change however it is a small change.

If this is not viable, then Option 1 is most viable as follows:

- LVNL to request a new ATS route BERGI – new COP for FL245 and below. Extant L60 will be retained and restricted for traffic in the RAD.
- In UK airspace, new route would extend new COP – SOPEK up to FL460, connecting with L60 at SOPEK.
- NERL will remove L60 KOLAG – SOPEK.
- Remove L60 & KOLAG at a time in the future agreeable with MUAC, NERL and LVNL. No impacts on traffic.

LVNL shared an image of the MONIL Release Area Box which MUAC would like the new route to remain within. NERL confirmed this box is part of current LoA and procedures and no concerns as the proposal is well inside.

For March 25 implementation, NERL need to submit their ACP (with final design) to CAA in early September.

LVNL's design must be submitted to Dutch regulator by 25th September, to enable this the final concept must be agreed by 24th July for internal processes.

NAVPI COP and P25 route extension

NERL confirmed we are no longer progressing this. MUAC are unable to support this change, and there are complexities for NERL, therefore the proposals for NAVPI will no longer be part of this change. It may be re-considered in a future airspace change.

Waypoint Names

ENZEN and JURNA are available and have been selected for the additional points for LVNL. These are still waiting for "soundlike" to be checked and confirmed with ICAO.

Action: LVNL will provide the finalised co-ordinates and names once fully confirmed.

Safety Assessment – delegated airspace

NERL have completed their initial safety review and found no hazards – the proposed changes are a replication of today's tactical operation.

LVNL are completing their safety assessment and require NERL input to a standard form. LVNL will send NERL their draft CONOPS and safety assessment.

Next Steps:

NERL to speak to MUAC again, to see if there is the potential to make March 2025 work as timelines are progressing.

Agreed LVNL to attend NERL validation activity on 2 July 2024.

Post meeting update -MUAC have confirmed any month apart from March 2025 is feasible.

[redacted]

From: [redacted]
Sent: 31 July 2024 10:10
To: [redacted]
Subject: [EXTERNAL] RE: Meeting minutes 250724
Attachments: ICARD 5LNC NLD.pdf

Hi [redacted],

I have no comments either. Furthermore, ENZEN has been approved by ICAO. Attached you can find the confirmation.

Kind regards,

[redacted]
LVNL
Enabling aviation together
+[redacted] | ATM Analyst | P&D\ ATMP

Van: [redacted]@eurocontrol.int>
Verzonden: dinsdag 30 juli 2024 15:25
Aan: [redacted]
>
Onderwerp: RE: Meeting minutes 250724

Hi [redacted]

Thank you for taking the notes!

I have no comments.

Kind regards,
[redacted]

From: [redacted]@nats.co.uk>
Sent: Tuesday, July 30, 2024 2:12 PM
To: [redacted]
>
Subject: Meeting minutes 250724

Good afternoon

Please find attached a summary of the meeting held last week on 25 July over Teams
Any issues or comments please let me know

Kind regards

[redacted]
NATS
[redacted]
Airspace Change Specialist

E[redacted]

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

LVNL/NERL/MUAC Meeting: OSEP 11 Airspace Change

TEAMs call 10:00 25/07/2024

Attendees

[redacted] - NERL
[redacted] NERL
[redacted] - NERL
[redacted] - LVNL
[redacted] - MUAC

LVNL:
LVNL's design in is review with their Operational Experts and will be sent to the wider departments by 02.08.24. On track for submitting documentation for changes to their regulator by September.

LVNL have applied for iCARD name (ENZEN); will confirm ASAP for NERL ACP.

On track for March 2025 implementation.

MUAC
MUAC has been sent the operational concept (from LVNL) to check impacts, MUAC agree it is very minimal and plan to go ahead in March.

Would like a copy of the NERL documentation to check the impact on MUAC; impact are minimal and expected to be no issues (based on the LVNL operations concept).

NERL
ACP paperwork is drafted, waiting for confirmation of the waypoint name from LVNL.

Delegated airspace (S10) - NERL have to submit an EASA change form (ATM-ANS Organisation Approval: Notification of Proposed Change to Functional System (in accordance with EU 2017/373)) to provide permission for LVNL to change their operation within the delegated airspace that they operate.

This is now required since Brexit; MUAC and LVNL do not believe this form is required for their operation.

Action: NERL (PN) to send EASA form to both MUAC and LVNL for them to review.

Summary:
All work is progressing for implementation in March 2025, pending regulatory approvals.

DAATM / NATS ACP EAMTA meeting 04/12/2023. Swanwick and via TEAMS

Attendees

[redacted] – DAATM airspace team
[redacted] – DAATM airspace lead
[redacted] – Military Interface Lead
[redacted] – 78 SQN
[redacted] – Airspace Implementation Manager
[redacted] – ATM Development & CLN ATCO
[redacted] – ATM Development & Central/DTY ATCO
[redacted] – ATM Development & West ATCO
[redacted] – ACP Specialist
[redacted] – ACP Specialist

Introductions

The purpose of this meeting is to engage with the MoD on initial design options for the OSEP ACP, which is currently in Stage 2. The project is working to implement in February 2025.
NERL presented this slidepack to describe the proposed changes.

Stage 2_MIL engagement_Dec23.p

Summary of issues presented / discussed

1) Realignment/reshape of EAMTA:

- Potential realignment of EAMTA to the north.
- ACTION: NERL to clarify any other projects affected by this change – MTMA project identified as an interested party.
- TRA 003 consideration underneath EAMTA.
- Confirmed that the proposed changes to the EAMTA area for this ACP are for FL245+.

2) This would enable North (M604 & N866)/South bound (P7/P25 & N866) routes change under ACP:

- NERL confirmed traffic tactically routes northbound DCT to BEKMO/GIVPO under today's operation – new routes follow the tactical directs we currently use.
- New route: KUBAX – MEGEL – EGSS/EGGW inbounds (truncate BARMI STAR to MEGEL).

3) Outside of the EAMTA change but within this ACP, NERL propose:

- BERGI – SOPEK flight plannable DCT/new route for EHAM outbounds. No impact for MIL

EAMTA to be revised in LOA (February 2024): Paul Watson to send out proposal to airspace users this week. Hopefully have response to NATS by 15th December 2023.

Signatories: 78 SQN, 19 SQN Boulmer – most likely no new signatories required. Paul Watson to confirm.

Meeting close.

[redacted]

From: [redacted]
Sent: 13 December 2023 13:21
To: [redacted]@mod.gov.uk
Cc: [redacted]
Subject: RE: NATS EAMTA Request

Hi [redacted]

Many thanks for confirmation of the MoD agreement with the NATS proposal, both in suppression period and permanent AIP change.
Thank you for the speed of the responses that have been collated it is greatly appreciated.

I have copied in the ACP team to plan a discussion on expansion options for EAMTA in other areas as below.

Best regards

[redacted]

[redacted]
Airspace Implementation Manager
M: [redacted]
E: [redacted]@ nats.co.uk
NATS Swanwick
Sopwith Way
Hants SO31 7AY
www.nats.co.uk

NATS Internal

From: [redacted]@mod.gov.uk [redacted]@mod.gov.uk>
Sent: 13 December 2023 13:00
To: [redacted]@nats.co.uk>
Cc: [redacted]
Subject: [EXTERNAL] RE: NATS EAMTA Request

Hi [redacted],

The MOD support the proposed change in shape of the EAMTA to facilitate a new DCT between DOLAS and NAVPI. DAATM have collated feedback from across the MOD which is valid both for the suppression period and the permanent change to the AIP.

Details on who the LoA signatories should be have already been provide by 78 Sqn.

The MOD would also like to explore the potential to increase the dimensions of the EAMTA in other areas, as previously discussed.

Please do not hesitate to contact me if you require any further information or assistance.

Regards

[redacted]

[redacted] | Sqn Ldr | SO2 Airspace Operations | Defence Airspace and Air Traffic Management | ~~Aviation House | 1E Beehive Ringroad Crawley West Sussex RH6 0YR~~ | Skype: [redacted] | E-[redacted]

Deputy Chair RAF Orienteering Association

From: [redacted]@nats.co.uk>
Sent: 24 November 2023 14:20
To: [redacted] Sqn Ldr (DAATM-AirspaceOpsSO2) <[redacted]@mod.gov.uk>
Cc: [redacted]
Subject: NATS EAMTA Request

Hi [redacted]

Following our previous discussions, please find attached NATS request to assess the impact of the non-use of the NE Corner EAMTA under LoA for February 2024

If any further clarity is required please let me or the ATC team know.

Many thanks for your on-going assistance with this request.

Regards

[redacted]

NATS

[redacted]
Airspace Implementation Manager

M: [redacted]
[redacted]*co.uk*
NATS Swanwick
Sopwith Way
Hants SO31 7AY
www.nats.co.uk

Notes of Meeting between NATS and MUAC: OSEP ACP Engagement

Meeting date: 29/04/2024 **Location:** Held via Teams

Attendees:
NATS: [redacted]

MUAC: [redacted]

Introduction: Brief introductions were made.

Material: NATS shared this presentation for discussion. The notes below are a summary of the discussions around "OSEP_DP11_proposed changes".

Discussion:
MUAC confirmed they are a stakeholder in the ACP even if traffic is not directly handed to them at the potentially impacted COPs. Traffic from S12, enter MUAC via HUMBER (COP RENEQ) sector (note: this is not all northbound traffic from S12).

MUAC have been engaged earlier in the process; and this is reflected in the Stage 1 design principles.

Proposed Changes
Realignment of EAMTA, then northbound / southbound traffic.

- The change to the EAMTA has already happened via LOA, but this is the AIP change.
- Changes to the EAMTA have been agreed with the MOD.
- Allows changes to the north and southbound route structures to better reflect current day shortcuts.

Westbound via KOLAG

- Traffic would route BERGI – ELDIN (new point) – XETRA (new COP) – SOPEK.
- NATS plan to remove KOLAG.
- Rotterdam traffic would turn left at ELDIN (new point) towards XETRA (new COP) and SOPEK.
- There should be no traffic filing from MUAC to KOLAG, as KOLAG is no longer a FRA exit point. However, as L60 is published up to FL660, MUAC will require a system / map update to reflect the changes.
- Traffic from Amsterdam FIR can be forced onto RAVLO, but some still flight plan KOLAG.

Westbound via NAVPI

- The proposal would be to route Luton arrivals via NAVPI to separate them from Stansted, reducing complexity /workload for controllers.
- NATS asked if this could also be used for eastbound traffic, but MUAC couldn't see any benefits to the route other than for Luton / Stansted arrivals.
- MUAC noted that airlines to Stansted may also want to use the route. In the short-term this is considered / designed to separate Luton and Stansted traffic, so will initially be limited to Luton inbounds only. there is a significantly larger amount of Stansted traffic which needs to be considered from an ATC workload / complexity perspective. There is a significantly larger amount of Stansted traffic which needs to be considered from an ATC workload / complexity perspective.
- MUAC have tested Luton inbounds via NAVPI in the simulator (using normal traffic loads). Generally, this is well received by ATCOs.
  Question from MUAC: What will be the loading of COPs? How much traffic may move from SOMVA to RENEQ? Would be interest to have the 2022 comparison to 2023 (Luton traffic routing) as they have seen changes in COP loading since OD6. If NATS

has not done this maths, then MUAC will run NEST modelling for themselves. MUAC would expect that this option would increase LONAM traffic for Luton; but LONAM is not MUAC's preferred routing for operational reasons.
2023 data shows flight planning is approximately 560 flights via LONAM (BARMI STAR) and 3,000 via RINIS STAR for Luton inbounds.

Timeline
NERL request March 2025 to implement EAMTA & adjacent routes; L60, XETRA (new COP) and removal of KOLAG. This is provisionally accepted by LVNL.
P25 extension could be put into the UK AIP at the same time but would require changes by MUAC to implement.

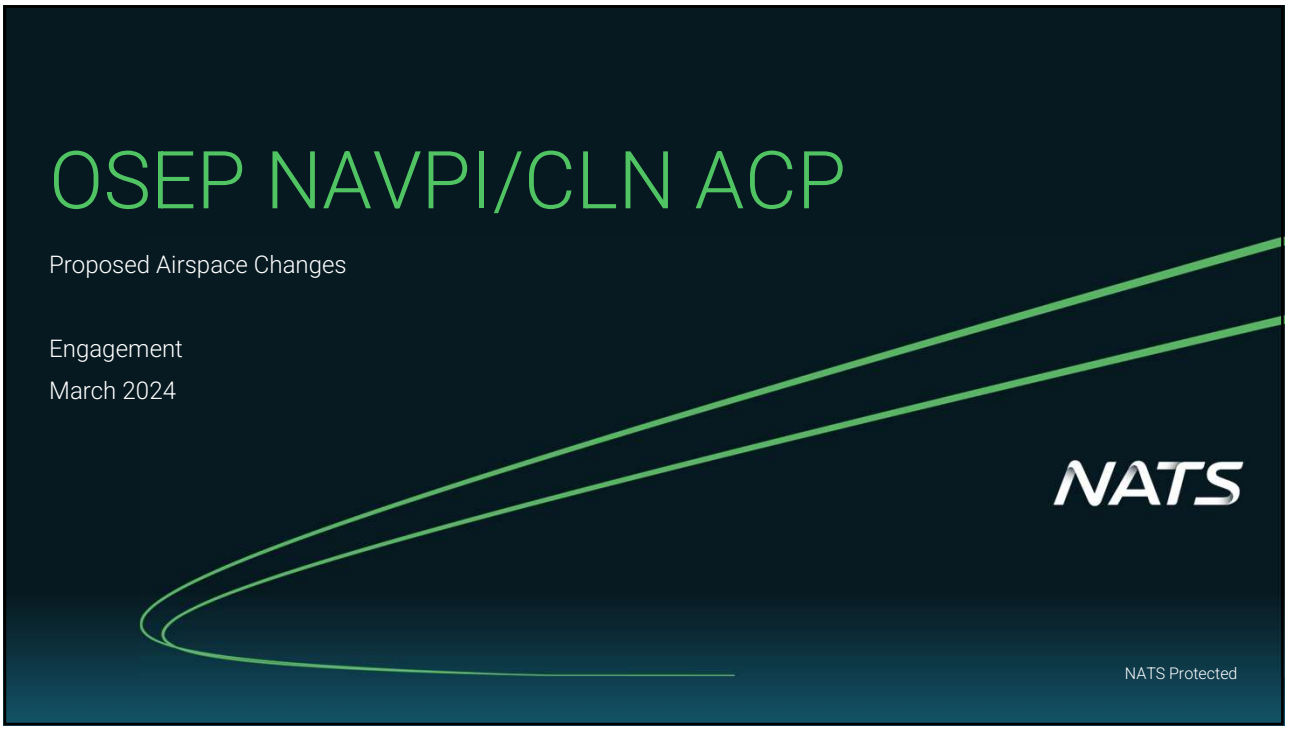
- March 2025 implementation for NAVPI change is not acceptable for MUAC as they have other planned changes already for this AIRAC.
- Inbounds via NAVPI is a fundamental change for D-Sector; these ATCOs will have received a lot of training between January - March, therefore unlikely to be acceptable before the summer.

NERL suggested using RAD restrictions until training is complete and the route is operationally viable. It is proposed this is November 2025, which will be the earliest NATS could accommodate.

Post meeting update: MUAC have confirmed they are unable to support any changes in March 2025, due to other planned changes, this includes updates to L60 as well NAVPI as mentioned above.

Training
NATS Training assessment is to be completed this week. The training team will assess what training is required and timeline for all proposed changes.

Letters of Agreements
MUAC had received questions from LVNL about LOAs regarding traffic via RAVLO. NATS / LVNL agreement is to take traffic on a heading. NATS are happy for LVNL to allow release south of RAVLO (but north of MOLIX), this has been communicated to LVNL already.



1

OSEP NAVPI/CLN ACP

NATS

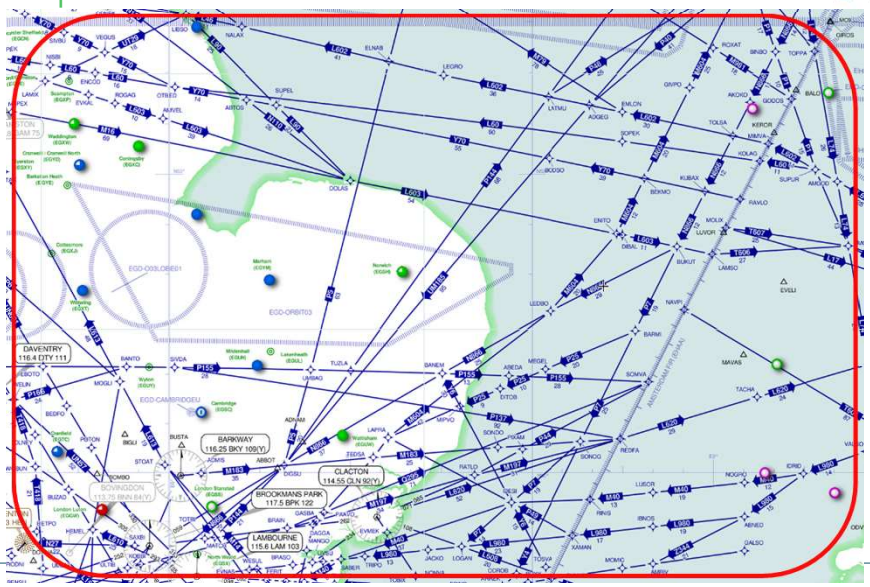
The ACP is being delivered under the NATS Operational Service Enhancement Project (OSEP) which seeks to deliver a series of small scale changes across NERL airspace.

These changes will deliver against one or more of the following areas:

- enable fuel savings to customers
- reduce CO_2e emissions
- reduce ATC complexity
- optimise the airspace using Flexible Use of Airspace (FUA) principles
- facilitate more efficient flight planning
- provide operationally efficient airspace volumes for military airspace users

2

Area of Scope



Key Components

There are a series of small changes being proposed at this stage which will meet the change objectives. These are primarily revisions to flight plannable routings which reflect current day tactical practice, enabling flight plannable fuel / CO_2e savings.

1) Realignment of East Anglia Military Training Area (eastern corner)
This would facilitate:
a) Optimise northbound route structure FL245+ = approx. 98 tonnes p.a. enabled fuel savings
Which would further facilitate
b) Optimise southbound route structure FL245+ = approx. 110 tonnes p.a enabled fuel savings

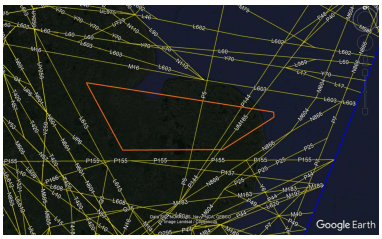
Other changes not dependant on the East Anglia MTA revisions proposed:
2) Optimise westbound route structure at KOLAG = approx. 118 tonnes p.a enabled fuel savings

3) Optimise westbound route structure at NAVPI = reduced complexity for LTMA inbounds

Realignment of East Anglia MTA

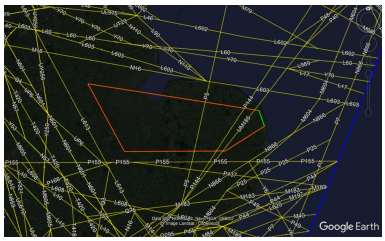
This ACP proposes the realignment of the northeast corner of the EAMTA, which would facilitate a realignment of the adjacent routes, enabling flight plannable CO2e benefits for this traffic which replicate current tactical flight behaviours when the shortcut is available.

Do nothing: East Anglia MTA remains as today



Potential to revise MTA as shown, with updated LOA

Option 1 To align the co-ordinates in the AIP to be coincident with any updated LOA



5

Optimise EAMTA & adjacent route structure FL245+

Current Day Scenario (northbound):
N866 & M604 converge at LEDBO to join M604.

N866 & M604 = 10nm minimum separation from current East Anglia MTA

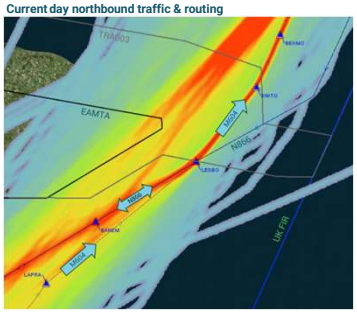
Regular tactical shortcuts are provided by ATC direct from LAPRA/BANEM to BEKMO.

Current Day Scenario (southbound):
LTMA inbound traffic routes P7-BARMI, connecting to BARMI STARs.
EGSS & EGGW BARMI STARs track route P25 towards WIQID.

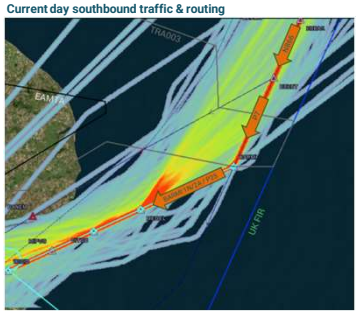
Regular tactical shortcuts are provided by ATC direct from KUBAX to MEGEL.

Proposed Change Option:
Northbound Realign M604 via BANEM and route direct to BEKMO. This would reduce track mileage between 1-2NM per flight.
Southbound EGSS BARMI & EGGW BARMI STARs would be truncated to MEGEL, reducing track mileage by approx. 3NM per flight.
These changes would enable flight plannable fuel and CO2e savings.

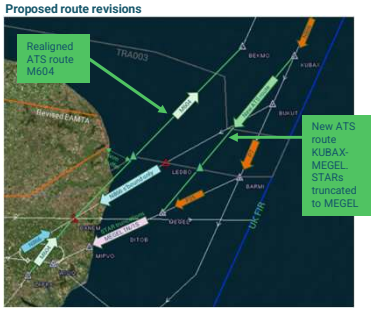
Current day northbound traffic & routing



Current day southbound traffic & routing



Proposed route revisions



6

The following 2 changes proposed are not dependent on the realignment of the East Anglia MTA :

Optimise westbound route structure - KOLAG

Optimise westbound route structure - NAVPI

7

Optimise westbound route structure – KOLAG

Current day scenario: Westbound Amsterdam departures route L602, L60 crossing into UK FIR at KOLAG COP.

Other traffic also utilises this route, primarily German / Polish departures to UK/Irish airfields

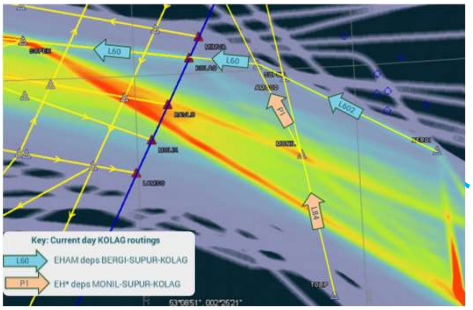
Regular tactical shortcuts are provided by ATC direct from BERGI to SOPEK.

Proposed Change Option:
Remove KOLAG, add a new COP to provide direct routing from BERGI to SOPEK.
Extend and realign L60 to BERGI

This would reduce track mileage approx 1.1NM per flight.

These changes would enable flight plannable fuel and CO2e savings.

Current day traffic and routing



OPTION: Proposed new routing – BERGI-newCOP-SOPEK

8

Optimise westbound route structure – NAVPI COP

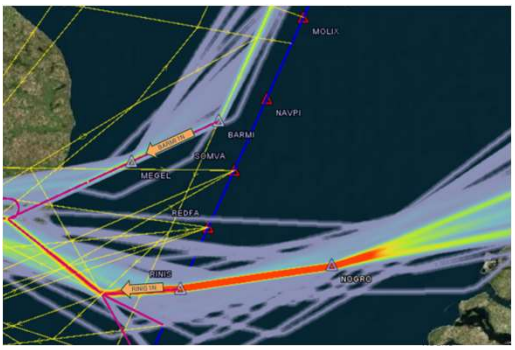
Current Day Scenario:

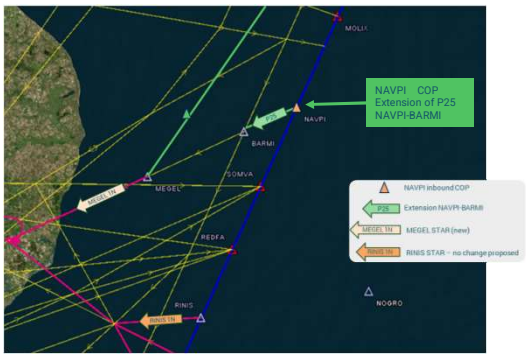
NAVPI is not available as an entry point.
Currently, LTMA arrivals from the northeast have 2 routing options

Via BARMI or via RINIS

PROPOSED OPTION:
Create a new COP at NAVPI, with route connectivity via an extension of P25 back to NAVPI. This will allow earlier separation of EGGW and EGSS inbounds.

Development work will determine which traffic would be allocated to the new route





NATS Private

9

Thank you

NATS Protected

10

[redacted]

From: [redacted]
Sent: 19 March 2024 13:49
To: [redacted]
Cc: [redacted]
Subject: OSEP ACP - engagement follow up
Attachments: Stage 2_airlines_engagement_Dec23.pdf

Hi [redacted]
Thanks again for your time yesterday, when we briefed you on the proposed changes in the East Anglia region as part of our OSEP project.
Please find attached a copy of the engagement material which we discussed.
We would be grateful if you could provide feedback by completing the brief questionnaire from this link:
https://forms.office.com/Pages/ResponsePage.aspx?id=mpASZ_udeEOusLjdJt9-2iVs-_xcN4JKnXnRDONQEltUNkhRTTRCQlo4OFlSRVdENkpaQ0cwTVE2Ny4u

If you have any questions, please drop me a line.
We would be grateful if you're able to complete the feedback form by 28 March. If you need additional time, please let us know
Kind regards
[redacted]

NATS

[redacted]
Airspace Change Specialist

E: [redacted]

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

[redacted]

From: Airspace Engagement
Sent: 03 June 2024 16:06
To: [redacted]
Subject: Airspace Change Engagement
Attachments: OSEP Deployment 11_JUNE24.pdf

Dear Cambridge Airport,

Ref: ACP-2021-061

NATS are currently progressing an ACP which could impact operations into Cambridge Airport.

The attached presentation includes the proposed changes, which are high level changes in the vacinty of the UK FIR. One proposed change, includes the truncation of Stansted's BARMI STAR to start at MEGEL. There will be no operation impact / changes in how traffic is presented after that point. This would, therefore, directly apply to the Cambridge traffic.

We would appreciate if you could complete this MS Form: https://forms.office.com/e/C9BPYApDzb
The form will remain open until COP 24th June. We will use any response within our ACP as engagement evidence.

If you have any questions, please do get in touch.

Kind regards,

[redacted]

NATS

[redacted]
Airspace Change Specialist

4000 Parkway, Whiteley,
Fareham, Hants PO15 7FL
www.nats.co.uk

Operational Service Enhancements Project (OSEP)
OD10 & OD11

NATS

NATS Private

1

OSEP OD11 – Impacted Area – Target deployment March 2025

NATS

Airspace change proposal public view (caa.co.uk)

ANSP Stakeholders

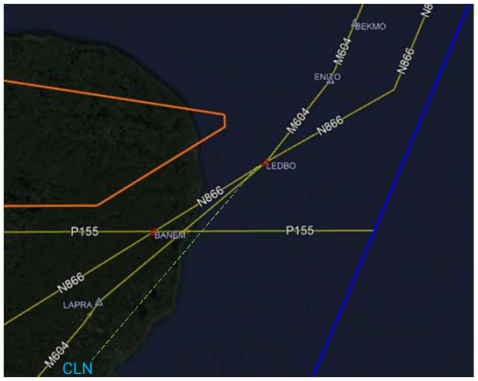
- Luton
- Stansted
- Cambridge
- MoD
- LVNL
- Eurocontrol Maastricht

NATS Private

5

Current Routeings

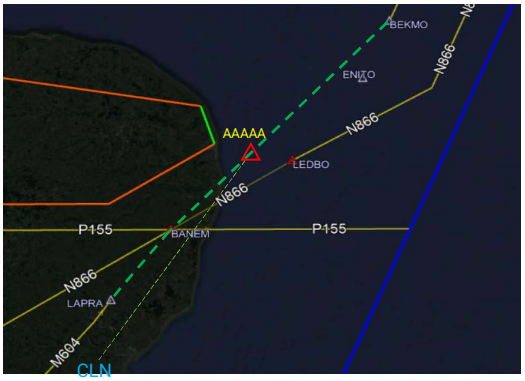
- Traffic Routes via either –
  - LAPRA – LEDBO for most UK Deps
  - CLN – LEDBO for EGLC/EGSS
  - BANEM - LEDBO for Overflights



OD11 Proposal

Departures and all overflights will route via

- BANEM –AAAAA – BEKMO on re-aligned M604 1 7nm shorter
- EGLC/EGSS CLN –DCT- AAAAA M604
- East Anglia Military Training Area reduced NE Corner



NATS Private

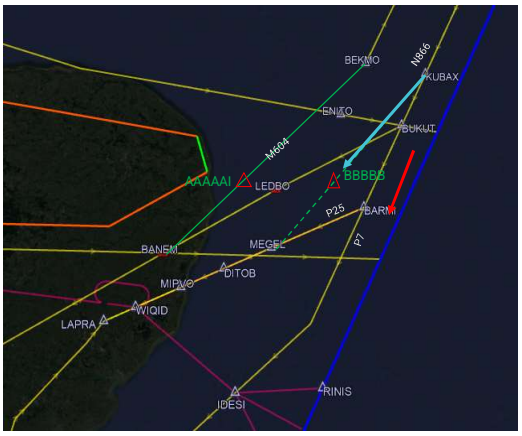
6

Current Routeings SS/GW/SC

- KUBAX BUKUT BARMI MEGEL

OD11 Proposal

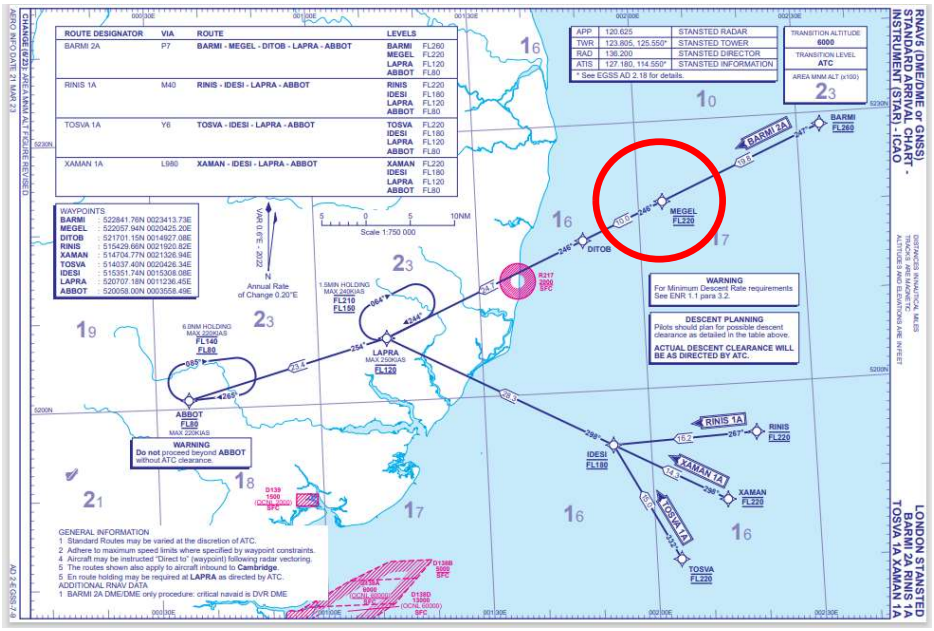
- KUBAX BBBBB MEGEL - 3nm Shorter



- BARMI to MEGEL 19.8nm - BBBBB to MEGEL 13.3nm
- Both EGGW and EGSS STARs truncated to MEGEL

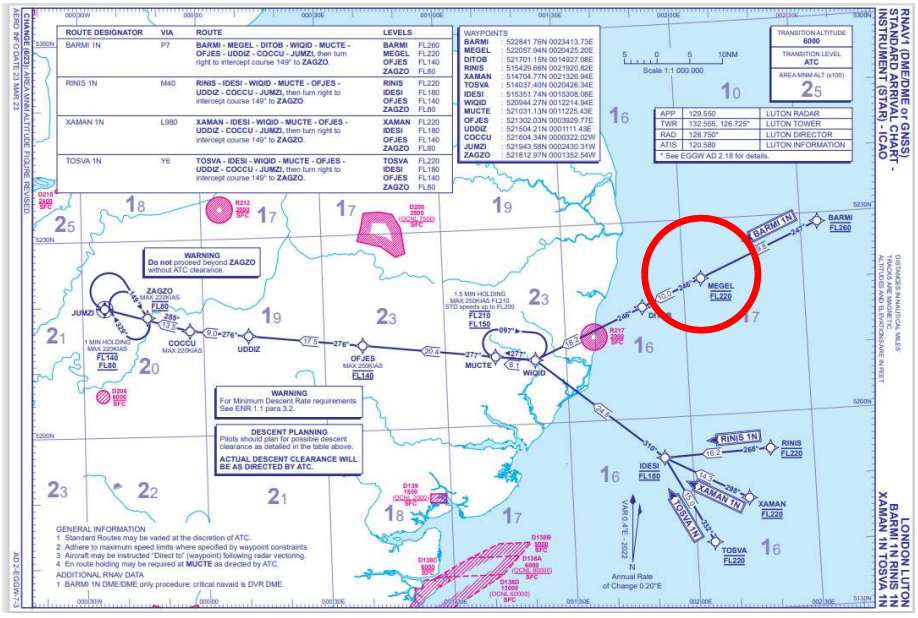
NATS Internal

7



NATS

STANSTED STARS



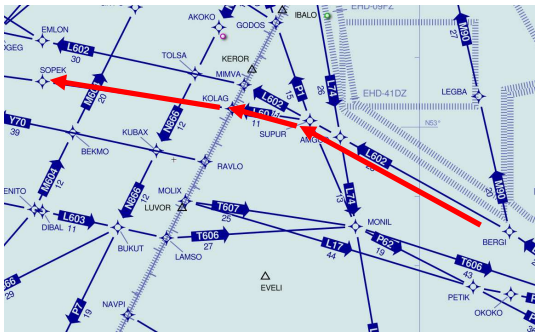
NATS

LUTON STARS

EHAM Departures

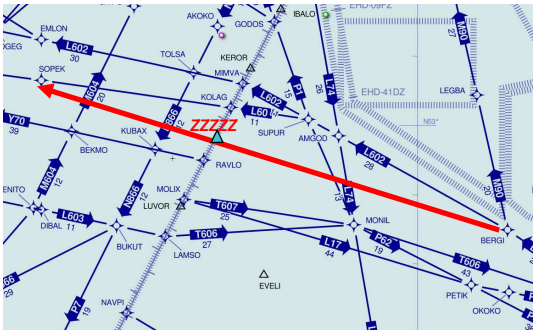
Current Route

BERGI SUPUR KOLAG SOPEK



OD11 Proposal

BERGI ZZZZZ SOPEK 1.1nm Shorter



10

Lead Operator Carrier Panel Review #21

Microsoft Teams

Date: 24th June 2024

Attendees

Delta Air Lines	[redacted]	NATS [*chair*]	[redacted]
Delta Air Lines	[redacted]	NATS	[redacted]
EasyJet	[redacted]	NATS	[redacted]
EasyJet	[redacted]	NATS	[redacted]
NATS	[redacted]	NATS	[redacted]
NATS	[redacted]	Ryanair	[redacted]
NATS	[redacted]	Ryanair	[redacted]
NATS	[redacted]	United Airlines	[redacted]
NATS	[redacted]	United Airlines	[redacted]
NATS	[redacted]	United Airlines	[redacted]
NATS	[redacted]	Virgin Atlantic	[redacted]

Agenda

This meeting was set-up to cover

OSEP OD10 & OD11: Lakes & Clacton

Which we were unable to cover during LOCP#21 due time constraints.

Refer to "**Lead Operator Carrier Panel #21- SLIDE PACK v1.1**", slides 55-64

[redacted]

- - - - - - - - - - - - - - - - -

[redacted] presented an overview of the OD11 delivery of Operational Service Enhancements Project (OSEP), which aims to reduce controller workload and provide environmental benefits for traffic arriving and departing into/out of London TMA on the north-east axis.

The project will change ATS Routes to broadly replicate what has to be tactically managed today through the Clacton and TC REDFA sectors. This will offer improved flight-plannable routes.

Departures heading north will be shortened 1.7NM by routing via a new waypoint (waypoint name to be determined) just east of the East Anglian Military Training Area (EAMTA), instead of via LEDBO.

London EGSS and EGGW Arrivals via the North Sea will cut the corner via a new waypoint (waypoint name to be determined) to start STARs at MEGEL instead of BARMI, saving 3NM. The relevant EGSS and EGGW STARs will be truncated to MEGEL. EGLL and EGKK Arrivals via the North Sea will continue to route via BARMI to LOGAN/ODROB.

In response to an initial request by KLM, Amsterdam EHAM departures heading west will cut the corner between BERGI To SOPEK via a new waypoint (waypoint name to be determined, saving 1.1NM.

Implementation is planned for March 2025.

- - - - - - - - - - - - - - - - -

Although these changes did not greatly affect the airlines present, all agreed that these OSEP deliveries were valuable. The shorted the routing, the better, with these small benefits all adding up over time.

[redacted]

From: [redacted]ats.co.uk>
Sent: Tuesday, June 4, 2024 12:17 PM
To: [redacted]nats.co.uk>
Cc: [redacted]@nats.co.uk>
Subject: KLM Fuel analysis

[redacted]

I sent KLM the following request:

Internally we have been working on some interface work with adjacent ANSPs and have used some of the KLM examples to help progress some of this work. Attached are some slides which I will explain, and we have two requests for KLM to validate some of the work we have modelled.

[redacted]

Request 2 - Departures via L60 to S10 Proposal in co-ordination with LVNL and Eurocontrol Maastricht

- A change has been proposed to the route currently BERGI-SUPUR-SOPEK, which removes the current dogleg and introduces a new straighter route BERGI-XETRA-SOPEK (XETRA is a new co-ordination point on the boundary). This is based off the real time examples KLM provided to NATS.
- Could KLM assess what impact this proposal would have for traffic routeing via KOLAG today against the shorter proposal. Either for a 28-day AIRAC or Quarterly/Annually - If the traffic sample could be shared it would facilitate the modelling assessment?

They sent me this response:

Our fuel analyst has sent me the following information to answer your questions:
Question 1:

- [redacted]

Question 2:
Savings if routing via BERGI-L60-ELDIN-XETRA-SOPEK instead of via KOLAG:

- From 1 May 2023 upto 30 apr 2024: 6520 narrow-body and 1259 wide-body flights used the departure via KOLAG.
  The shortening **will save approx 110,000 kgs fuel annually** for KLM/KLC flights.

Hopefully this assists the work, let us know if you require anything more from KLM. It does seem that they are happy with the planned savings

Regards
[redacted]