Future Airspace Strategy Implementation South:
ATS Route Network managed by NERL under London Airspace Management Programme 2

‘LAMP 2 - FASI(S) Network’

Stage 1 Design Principles and Priorities

NATS Airspace Systemisation

Feedback please:

airspaceconsultation@nats.co.uk

FASI(S) and LAMP2 – Demarcation to avoid confusion

- FASI(S) is the overall combined efforts of industry to achieve a once-in-a-generation change to the legacy air traffic route structures in the southern part of the UK.
  LAMP2 is NATS' part in this – concerning air traffic structures at and above 7,000ft

- **Why 7,000ft?**
  - NATS is an en route ANSP
  - 7,000ft is set by the CAA and the DfT as a demarcation for noise priorities
  - Below 7,000ft, noise is a factor, requiring engagement and consultation with local communities
    This is known as a **Level 1** Airspace Change
  - At and above 7,000ft, the reduction of aircraft CO_2 emissions is the priority, and minimising noise is not
    This is known as a **Level 2** Airspace Change

- NATS expects to set the requirements for higher-level airspace 7,000ft+ under this part of the FASI(S) programme, known as LAMP2. This would be a Level 2 Airspace Change

- NATS expects airports to set the requirements for lower-level airspace under their parts of the FASI(S) programme, because they understand their own needs and those of their local communities.
  This would be a Level 1 Airspace Change. NATS does not expect to get involved in community consultation.

Design Principles – what are they for?

- Part of the CAA's Airspace Change Process (CAP1616)

- Design principles describe the general qualities a change should seek to achieve
  - more about the *way* something should be done
  - less about the *specific how*

- Design principles must be discussed with key stakeholders. For LAMP2 NATS believes these are:
    - Airline customers
    - Wider aviation industry (airframe/engine manufacturers, FMS, coding houses…)
    - MoD
    - Non-commercial airspace users such as General Aviation (FASVIG)
    - Air navigation service providers ANSPs (UK airports, Dutch, French…)

- Reduces misunderstandings and disagreements later when the design work is more advanced

- Which principles are important to the sponsor (NATS), which are important to key stakeholders?
  - Is there agreement? What conversations need to happen?

- Can be contradictory, can be prioritised, can be accepted or rejected, provided there are reasons to do so

Design Principles – Proposed examples for discussion

- **DP0 (Golden) Safety is always the highest priority**
  Various themes of safety may be considered in design principles, but safety as a concept is a fundamental requirement of our industry

- DP1 (High) Engagement: ANSP
  The ANSPs must agree to work together so that the network is suitable for all

- DP2 (High) Engagement: Industry
  NATS and the aviation industry must agree to engage and provide feedback in order to realise the benefits of modern technology and to maximise its use

- DP3 (Medium) Environmental: Minimise fuel disbenefit
  If the proposed concept causes a fuel disbenefit to certain routes/city pairs, other elements of the region's network could be modified in an effort to offset that disbenefit, thus minimising the network net fuel impact

  It may not be possible to fully balance impacts on all route distance combinations
  This should be an acceptable trade-off for the long-term capacity benefits

Design Principles – Proposed examples for discussion

- DP4 (Medium) Environmental: No change to flightpaths below 7,000ft due to LAMP2
  Changes to routes or tracks below 7,000ft remain the responsibility of the airport
  Each airport knows its own requirements and those of its local communities
  Intent of this principle is for LAMP2 to conform to Level 2 criteria by design

- DP5 (Medium) Airspace: No increase to overall volume of controlled airspace (CAS) at and above 7,000ft
  Intent of this principle is for LAMP2 to minimise the impact on other airspace users
  Allows for increases in some areas provided other areas are reduced

- DP6 (Medium) Airspace: The needs of General Aviation users will be considered, at and above 7,000ft
  Intent of this principle is consider the impacts of revised airspace arrangements on civilian airspace users inside and outside CAS which are *not* classed as commercial air traffic

Design Principles – Proposed examples for discussion

- DP7 (High) Airspace: The needs of MoD airspace users will be considered, at and above 7,000ft
  Intent of this principle is to consider the impacts of revised airspace arrangements on military operational air traffic, inside and outside CAS

- DP8 (High) Modernisation: No constraints to efforts made to systemise the network, for capacity
  Minimise controller and pilot workload as far as possible, via maximum reduction of controller tactical intervention
  Intent of this principle is to segregate as far as possible, by design, the traffic flows in this region. Potentially changing CAS boundaries, ATS routes, STARs, other airspace structures
  As many benefits as possible would be realised

- DP9 (High) Modernisation: RNAV1 would be the minimum navigation standard
  All traffic flows would require compliance with the RNAV1 navigation standard
  Intent of this principle is to use modern navigation standards to maximise the efficiency of the network

Discuss DPs, add more, consider relative priorities Please feed back to NATS

airspaceconsultation@nats.co.uk

NATS

Design Principles – Summary for discussion

- **DP0 (Golden) Safety is always the highest priority**
- DP1 (High) Engagement: ANSP
- DP2 (High) Engagement: Industry
- DP3 (Medium) Environmental: Minimise fuel disbenefit
- DP4 (Medium) Environmental: No change to flightpaths below 7,000ft due to LAMP2
- DP5 (Medium) Airspace: No increase to overall volume of controlled airspace (CAS) at and above 7,000ft
- DP6 (Medium) Airspace: The needs of General Aviation users will be considered, at and above 7,000ft
- DP7 (High) Airspace: The needs of MoD airspace users will be considered, , at and above 7,000ft
- DP8 (High) Modernisation: No constraints to efforts made to systemise the network, for capacity
- DP9 (High) Modernisation: RNAV1 would be the minimum navigation standard

Questions?
Please feed back to NATS

airspaceconsultation@nats.co.uk