

LAMP 1A Review

Anticipated Impacts and Benefits for Post-Implementation
Review - Executive Summary



NATS

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LAMP 1A Post Implementation Review Anticipated Impacts and Benefits

Safety benefits, airspace systemisation

A number of important benefits have been observed since LAMP1A changes were implemented on 4th February 2016.

Controller workload in the London TC (Terminal Control) Thames sector has been greatly reduced as a result of the new systemised airspace design, with much less tactical control at low levels overland within a congested area close to the airport.

This has resulted in an improvement in safety risk within the Swanwick TC environment and particularly within the TC Thames sector.

Reduction in population directly overflown

The new London City Airport approach design has been located primarily over the sea and the Thames Estuary, which has resulted in a 69% reduction of the population being directly overflown below 7,000ft by traffic inbound to London City Airport and a 38% reduction for those directly overflown by departures (see Population Overview analysis).

Enabled fuel benefit, Actual fuel benefit

There is a significant benefit in enabled/planned fuel/CO₂ as a result of the changes; there has also been an overall actual fuel/CO₂ benefit (see Fuel CO₂ Analysis).

However, while Stansted flights have had a significant reduction in average fuel burn, there has been an increase at London City and Biggin Hill. This increase was expected as it was known that the new Point Merge design would increase track mileage and fuel burn for some arrival routes.

The increase is the direct consequence of implementing the Point Merge system over the Thames Estuary – it must therefore be considered as a direct trade-off against the benefits described above in respect of safety enhancement, airspace systemisation and impacts on populated areas overflown at low levels.

Although the estimated actual fuel/CO₂ benefit is much smaller than estimated, it is questionable whether the comparison with the flight efficiency of 2013 actual flight paths is the best indicator of long term effects. This is because the tactical shortcuts possible prior to the change would have become increasingly untenable as traffic levels grow (London City and TC traffic have already grown approximately 15% since 2013, with Stansted growing by 29% in this period).

As a consequence, aircraft would have been more likely to be kept on their flight planned route regardless of whether the change had occurred or not. Therefore the comparison of enabled/flight planned fuel is probably more representative of real impact than the comparison with a 2013 baseline. We recognise that further work is required to better predict actual fuel burn effects and will seek to work with the CAA to investigate how best to meet their requirements.

Conclusion

Overall the redesigned airspace works efficiently and broadly as expected, and demonstrates the benefits of making a significant airspace change in an already constrained airspace environment.

It provides a system that has improved safety in the Thames region and has provided capacity to enable continued traffic growth whilst minimising the impacts on local communities.