



European Geostationary Navigation Overlay Service (EGNOS)

Scenarios and Frequently Asked Questions (FAQs)

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Introduction

The European Satellite Service Provider (ESSP) has notified UK airfields in possession of an EGNOS Working Agreement (EWA), that the agreement between the ESSP and ANSP will be terminated on 25th June 2021. The EWA enables ANSPs to make assured use of the Space Based Augmentation Service (SBAS) for Localizer Performance with Vertical guidance (LPV) approaches, as part of an RNP Approach procedure. At that time, all LPV approaches notified in the UK AIP will be de-notified as they will no longer have assured access to the EGNOS Safety of Life service (SoL) around which they are designed.

The UK CAA are not anticipating the ESSP to issue any new EWAs between now and 25th June 2021. This this will impact on Change Sponsors of new LPV approach procedure(s) either currently with the CAA for Instrument Flight Procedure (IFP) review, or as part of a larger Airspace Change Proposal (ACP). Without an EWA, the CAA will not be able to notify LPV in the UK AIP.

The CAA is not party to the legal arrangements established between the ESSP and the individual ANSP regarding the provision of EWA or provision of a certified SoL service. However, the termination of the EWAs will impact all existing LPVs and those ACPs seeking to implement LPV procedures as part of an RNP Approach. The CAA has received numerous enquiries seeking clarification on several points, and this document aims to provide the most current information and guidance available against commonly asked questions raised by the aviation industry. The CAA will continue to update this document should the information change.

Scenarios

The following scenarios have been created in order to provide guidance to sponsors to enable them to determine the best course of action either relating to LPVs which are currently notified or LPVs which are part of an ongoing Airspace Change Proposal.

Scenario A

ACPs currently in progress which are unlikely reach a regulatory decision by 25th June 2021 (ESSP EWA termination date).

At present the CAA is not expecting to issue any approvals for LPV procedures after 25th June 2021. Change Sponsors should contact their assigned SARG Account Manager to discuss how the LPV element of the airspace change proposal should be managed.

Scenario B

ACPs currently in progress which are expected to be approved by the CAA on or before 19th March 2021 with an AIRAC effective date of 17th June 2021 (AIRAC 06/2021).

These ACPs may continue to be submitted and assessed by the CAA, however sponsors of IFPs are reminded that the LPV procedures will be de-notified and not available for use after 25th June 2021.

If EGNOS or an alternative SBAS SoL service becomes available before 31st December 2021, the LPV may be notified subject to the following:

- a) An impact assessment to confirm nothing has changed since the time of approval before implementation.
- b) IFPs shall be safeguarded against the latest obstacle data to ensure the procedures are obstacle clear.

Scenario C

ACPs currently in progress which are approved by the CAA after 19th March 2021 but before 25th June 2021.

These ACPs may continue to be submitted and assessed by the CAA, however the LPV elements of the Instrument Approach Procedure (IAP) will not be notified in the UK AIP.

If EGNOS or an alternative SBAS SoL service becomes available before 31st December 2021, the LPV may be implemented subject to the following:

- a) An impact assessment to confirm nothing has changed since the time of approval before implementation.
- b) IFPs shall be safeguarded against the latest obstacle data to ensure the procedures are obstacle clear.

Scenario D

LPV procedures which are already notified in the UK AIP.

The CAA will co-ordinate the denotification of LPV procedures. NOTAMs and applicable Change Requests will be issued by the CAA on behalf of aerodromes to remove the LPV procedures from the UK AIP.

If EGNOS or an alternative SBAS SoL service becomes available before 31st December 2021, the LPV may be notified subject to the following:

- a) An impact assessment to confirm nothing has changed since the time of approval before implementation.
- b) IFPs shall be safeguarded against the latest obstacle data to ensure the procedures are obstacle clear.

Frequently Asked Questions

Question 1

What is the process for the de-notification of LPV procedures notified in the UK AIP and what actions are required from IFP sponsors?

The denotification of LPV lines of minima will be required for all LPV procedures in the UK from 25th June 2021. This will be co-ordinated by the CAA and will likely result in the CAA issuing NOTAMs and raising change requests on behalf of IFP sponsors to remove the procedures from the UK AIP.

Question 2

If a Change Sponsor has submitted a Statement of Need (DAP1916) and is currently undergoing the CAP 1616 (or CAP 725) process with the intention of proposing an RNP APCH procedure with LPV line of minima, can they keep the LPV elements of the IFP submission and continue to progress their ACP?

If a Change Sponsor wishes to continue with the progression of the CAP 1616 (or CAP 725) process to include LPV elements of the RNP APCH IAP, they may do so. However, Change Sponsors should consider the following points in relation to the cases studies above:

- All LPV procedures will be notified as not available and subsequently withdrawn from the UK AIP after 25th June 2021.
- The CAA do not expect to issue any approval for LPV procedures after 25th June 2021.
- The continuation of any work carried out by APDOs, including any LPV validation activities will be at the aerodrome/Change Sponsor risk.

- The CAA will not support or accept any LPV validations carried out after 25th June 2021.

Question 3

If a Change Sponsor is currently undergoing the CAP 1616 (or CAP 725) process but decides not to proceed with/withdraw the LPV elements of the IFP submission, what is the process for re-introducing the LPV element if a new solution is found for provision of SBAS SoL services?

The CAA will need to consider each application on a case-by-case basis. Change Sponsors should contact their assigned SARG Account Manager.

Question 4

When will the CAA review the LPV designs which are already submitted?

The CAA will assess ACP and IFP submissions on a first come first serve basis taking into account strategic directions and priorities as set out by the Department for Transport (DfT). Currently, a proposal is considered a priority if it is being progressed on safety grounds, in support of National Security or if the proposal seeks to implement GNSS IAPs without an Approach Control Service (WAC).

Question 5

Is this the end for LPV procedures in the UK or is there a specific agreement regarding LPVs aside from the SoL service?

At present, it is expected that LPV approaches will not be available for use in the UK after 25th June 2021. Any published lines of LPV minima will be de-notified in the UK AIP. ACPs submitted to the CAA will continue to be assessed although Change Sponsors should note that the CAA will not issue any approval for the LPV element of an RNP APCH procedure after 25th June 2021 nor will it accept any IFP validation plans after this date.

Note: RNP APCH procedures with LPV minima at Crown Dependency aerodromes e.g., Jersey, Guernsey and Alderney are subject to EWA arrangements with the ESSP that are separate from those negotiated with mainland UK ANSPs. As a consequence, Crown Dependency aerodromes will retain their LPV procedures post 25th June 2021.

Question 6

Are there any alternative systems which can be used by UK Aerodromes to fulfil the same functionality offered by EGNOS?

The end of EGNOS EWA agreements will only impact the LPV elements of an RNP APCH IAP, therefore only the LPV lines of minima within RNP IAPs will be NOTAM'd as unavailable, before subsequently being withdrawn. LNAV (and LNAV/VNAV) lines of minima

published on RNP APCH IAPs will continue to be available. There is currently no alternative to the EGNOS SoL service available in the UK or envisaged in the short term.

Question 7

Does the CAA have any further information regarding the timescales of future negotiations concerning EGNOS and if and when the situation may change?

Regarding UK access to the EGNOS SoL service, the CAA are not aware of any re-opening of negotiations between the UK government and the EU. The CAA will continue to monitor and update Change Sponsors if the situation changes.

Question 8

If there is no access to the EGNOS SoL service, which procedures are impacted by its removal?

The termination of EGNOS EWA agreements will only impact the LPV elements of RNP APCH IAPs, therefore only the LPV lines of minima within RNP APCH IAPs will be NOTAM'd unavailable and subsequently withdrawn. LNAV (and LNAV/VNAV) lines of minima published on RNP APCH IAPs will continue to be available.

Question 9

Is the termination of EGNOS service permanent or temporary?

The CAA is unaware of any plans to secure access to EGNOS SoL or an alternative certified and operational SBAS SoL service. The CAA will continue to monitor and update Change Sponsors if the situation changes.

Question 10

Is the CAA cancelling any/all future applications for LPV approaches to UK Airports? If so, when?

Without access to a certified SBAS SoL service after 25th June 2021, the CAA is unable to issue approvals for LPV elements of RNP APCH IAPs in UK airspace. However, as part of the Airspace Modernisation Strategy (AMS) the CAA is still advocating that aerodromes introduce RNP APCH IAPs for reasons of both access and resilience, implementing LNAV (and LNAV/VNAV) lines of minima.

Question 11

There are known cases where airports in non-EU member states (e.g., Oslo Airport) offers LPV approaches utilising SBAS to augment signal quality. How is this achieved for a non-EU state?

The CAA has no knowledge of the arrangements regarding provision of EGNOS SoL services between an airport in a non-EU State and the EU/ESSP and we are unable to comment.