

LPVs - Not Just for North America!

In the U.S. and Canada, the number of new WAAS Localizer Performance with Vertical guidance (LPV) approach procedures continues to grow, but North America is not the only region of the world where LPVs are available. Europe is also developing and implementing LPVs made possible by the European Geostationary Navigation Overlay Service (EGNOS) Safety of Life (SoL) service.

According to a paper presented at the International Civil Aviation Organization (ICAO) Navigation Systems Panel May, 2012, there were 9 published LPVs in Europe at the end of February 2012. These included 5 in France, two in Switzerland, and two in the United Kingdom (UK). The number of European LPVs continues to increase at a rapid rate. According to a more recent document posted on the European Satellite Services Provider (ESSP) website (search for the full list of actual airports with EGNOS-based procedures), there are currently 16 European LPVs. By July 12th, the total number of LPVs for France alone is expected to reach 17. More LPVs are planned for Europe. The locations of these future LPVs include Austria, Switzerland, the Czech Republic, Germany, Spain, Finland, France, U.K., the Netherlands, Norway, Poland, Slovakia, and Sweden.

Just as in the U.S., LPV approach procedures in Europe are providing significant benefits. According to a May 2012 news article, "New EGNOS LPV procedures published in France," posted on the ESSP website, the main advantage of this kind of EGNOS-based procedure is to enable SBAS approaches similar to ILS category I approaches. "Airports will now benefit from an inexpensive backup," or an additional and safer alternative to existing nonprecision approaches "to their runway ends and hence increase airport availability in case of bad weather conditions".

In France, plans are to provide LPVs for most of their IFR runway ends (a total of about 200). According to Benoit Roturier, the Global Navigation Satellite Service (GNSS) Program Manager for DSNA (Direction des Services de la Navigation Aérienne), France sees the benefits as threefold: the improvement of safety by providing vertical guidance everywhere; the improvement of airport accessibility on runways not currently equipped with ILS, or in the case that an ILS is out of service; and the ability to cut back on the dense network of ILS Category (CAT I) systems by providing an equivalent capability. To achieve those benefits as soon as possible, France is working with major aircraft manufacturers, such as Airbus, ATR, Dassault-Aviation, and Eurocopter, to increase the number of EGNOS capable aircraft and rotorcraft. More information about EGNOS and Europe's LPV plans can be found on the ESSP website at <http://www.essp-sas.eu>

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