EUROPEAN GBAS ALLIANCE

When implemented for CAT II and III operations, GBAS will lead to substantial cost, capacity and safety benefits for airports, airlines and air navigation service providers. The technology is ready, and industry stakeholders are now gathering to speed up the process of getting the infrastructure and regulatory framework in place.

GBAS TECHNOLOGY IS READY

Ground Based Augmentation Systems (GBAS) are recognized as the future replacement of ILS when considering the CAT II/III performance levels. GBAS CAT II/III technology has been matured in SESAR Industrial Research and it is today considered ready for deployment (and to be scoped in the Revised SESAR Pilot Common Project PCP/CP2). GBAS CAT I technology is developed and today available in some airports, but not widely.

DEPLOYMENT IS A CHALLENGE

In spite of the indisputable benefits, a collective effort is required to deploy the technology. It is not sufficient to have a handful of airports on board, as this is not attractive enough to make airlines invest in GBAS receivers for their aircraft equipage. Unless a significant number of airports invest in GBAS CAT III ground stations, the airlines will not make the required investments. Likewise, airports and ANSPs are reluctant to invest as long as aircraft equipage is low.

Please contact one of the following members to join:

Airbus – Thierry Harquin, e-mail: thierry.harquin@airbus.com
Indra – Hugo Moen, e-mail: hugo.moen@indra.no

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WE NEED TO ACT

To get out of the "chicken and egg" situation mentioned above, Europe needs a collective and coordinated deployment effort with an agreed and synchronized plan between the involved ATM stakeholders (European Commission and DM, ANSPs, airports, airspace users and industry) to invest in and to deploy the GBAS CAT II/III technology.

Time is now for action. A subset of these stakeholders including Airbus, Indra, DFS, ENAV, ENAIRE and PANSA are proposing to build a deployment project of GBAS CAT II/III for Europe with the following key objectives:

• Deploy a critical mass of GBAS CAT II/III ground stations and associated procedures in major and secondary airports with significant LVP operations creating the market conditions for the ground industry. The initial target is around 20 airports.

• Develop the business case for airspace users to equip their aircraft based on incentive mechanisms, which in turn creates the market conditions for the airborne industry to develop avionics.

• Setting up a regulatory framework for both air and ground actors.

The intention of this group is to submit a proposal for a deployment project at the next CEF Transport Call 2019.

If you believe GBAS is the future of CAT III Landing, you are welcome to join us in this collective effort.

GBAS BENEFITS

IMPROVED CAPACITY AND EFFICIENCY FOR AIRPORTS AND AIRLINES

• As GBAS is based on GNSS signals, there are no signal perturbations as those encountered on ILS
• GBAS approaches are more stable, providing improved fuel efficiency, less noise and improved passenger comfort
• GBAS Autoland is possible without protection of ILS sensitive area
• Potential for closer separation and reduced clearance zone, enabling capacity increase

HIGHER FLEXIBILITY AND AVAILABILITY

• One single GBAS ground station can provide precision approaches to all runways at an airport.
• Less service interruption since ground infrastructure requires less maintenance and tests than ILS.
• Growth capability for new operations (increased glide slope for noise reduction, displayed thresholds, curved approaches ...)

COST EFFECTIVE

• Less maintenance means lower costs
• More efficient approaches reduce fuel consumption for airlines
• One installation can replace several ILS systems

ENVIRONMENTAL BENEFITS

• Less CO_2 emissions and less noise due to more efficient landings

AIRBUS indra

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