# HCAA ROLE IN BLUEGNSS

Final event

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# IMPLEMENTATION OF GNSS PBN RNP APPROACHES

- The introduction of GNSS Approaches allows pilots, operators and air traffic controllers to make the best use of recent huge advances in navigation technology and brings:
  - increased safety
  - efficiency
  - environmental benefits.

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# IMPLEMENTATION OF GNSS PBN RNP APPROACHES

PBN and GNSS allow straight-in approaches to be designed for most runways.

**International Civil Aviation Organization** (ICAO) data, shows that straight-in approaches are 25 times safer than circling approaches.

Adding vertical guidance to the approach brings a further safety gain, which in fact , where the aircraft has both lateral and vertical navigation capability, are eight times safer than approaches without vertical guidance.

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# IMPLEMENTATION OF GNSS PBN RNP APPROACHES

- As the skies become busier, PBN allows the most efficient use of available airspace, through appropriately managed reductions in separation standards and track miles flown during the en-route, approach and landing phases.

# IMPLEMENTATION OF GNSS PBN RNP APPROACHES

- Global harmonization—ICAO's PBN navigation standards are being applied worldwide for use by any authorized operator from any ICAO state. This means that certifying both operators and aircraft will be much easier, **and aircraft will be built to common global standards**.

# THE GREEK AIRPORTS INVOLVED IN THE BLUEGNSS PROJECT

Four (4) Regional Greek Airports have been selected to be included in the BLUEGNSS Project for for the Implementing GNSS RNP APCHs.

Namely :

- **IOANNINA (LGIO),**
- **THESSALONIKI (LGTS) ,**
- **KOS (LGKO) and**
- **MYTILINI (LGMT)**

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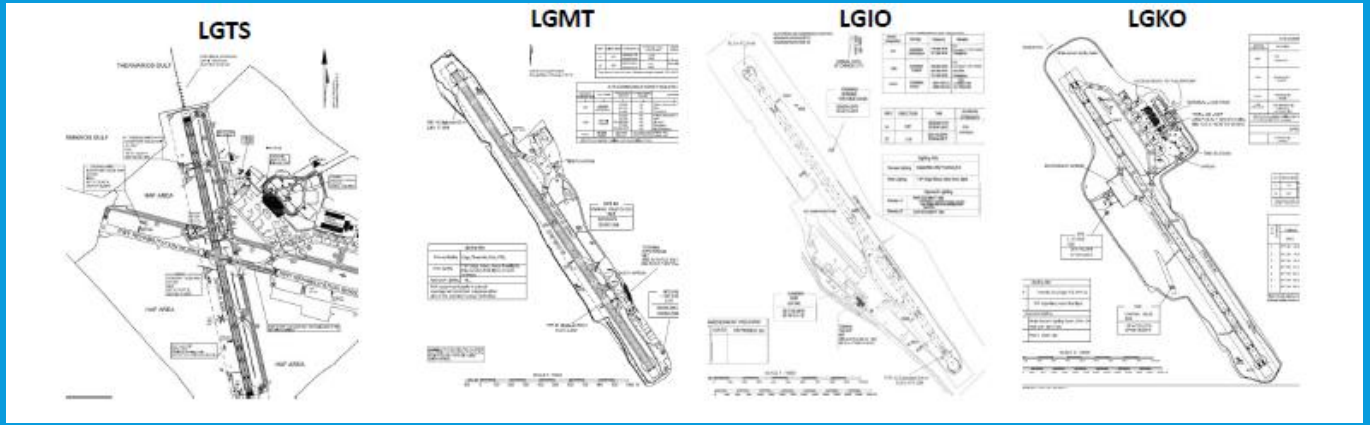
# THE GREEK AIRPORTS INVOLVED IN THE BLUEGNSS PROJECT




- Although the orientation of the runways is alike to all four airports selected, similarities stop here.
- Diverse airport proximity environments and terrain challenging conditions make the selection of these airports an ideal exercise to investigate, develop and validate RNP APCH procedures with a vast variety of accessibility and safety issues.

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# HCAA INVOLVED ACTIVITIES

- Contribution to design and validation, including safety, performed from June 2016 till November 2017
- Huge obstacle data survey
- 2 Procedure designers successfully passed Advanced PANS OPS training course
- Workshops participation
- EGNOS Working Agreement signature
- AIP publication planned between September 2018 to December 2018

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# DIRECT BENEFITS OFFERED BY THE BLUEGNSS PROJECT TO HCAA

1. Training offered within the BLUEGNSS programme, enabled HCAA procedure designers to apply and use soft tools, methods and processes on the design, review and maintenance of RNP APCH procedures;
2. Dissemination of EGNSS culture, among HCAA ATCO and NON ATCO staff as a BLUEMED partner, evenly, on common grounds and practices;
3. Implementing a regional EGNSS Monitoring Network and data recording capabilities in support of the validation of RNP APCH and of the introduction of EGNOS/Galileo for aeronautical applications, simultaneously satisfies ICAO guidelines for safety oversight (GNSS Monitoring) and data recording, on Local and BLUEMED FAB level;

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# DIRECT BENEFITS OFFERED BY THE BLUEGNSS PROJECT TO HCAA

4. Safety, enabling Continuous Descent Final Approaches;

5. Airport accessibility, enabling the possibility of precision approaches for both RWY ends on airports that do not have other than conventional NPA infrastructure, such as **Mitilini, Kos** and **Ioannina**) or for one RWY end not supported by ILS, such as **Thessaloniki.**

# IMPLEMENTATION OF PROCEDURES

- First developed RNP APCH procedures for IOANNINA AIRPORT (LGIO) for both RWYs publication already initiated . Expected (AIRAC cycle) effective date is **13 September 2018.**
- Remaining procedures publication for Thessaloniki (LGTS) , Kos (LGKO) and Mytilini (LGMT) will follow till **31-12-2018**.

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# THANK YOU

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