

N-PBN: PERFORMANCE BASED NAVIGATION

OBJECTIVES.

Performance-based Navigation (PBN) is the most practical solution for the regulation of new navigation systems technology. This course explains the ICAO PBN concept and clarifies the differences between RNAV and RNP. PBN is based on Area Navigation, or RNAV, a method of navigation which permits aircraft operation on any desired flight path within coverage of station-referenced navigation aids or within the limits of the capability of self-contained aids, or a combination of these

It also provides detailed information on the 3 components of PBN: navigation applications, navigation specifications and navigation infrastructure. The course explains the concept, its enablers and provides detailed information on how to implement PBN.

WHO SHOULD ATTEND.

This course will be directed to:

- **Engineering, Technical and/or Maintenance** professionals of an Air Navigation Service provider (ANSP) that are involved in the design and/or operation of PBN procedures.
- **CNS/ATM sector companies staff** requiring knowledge of PBN procedures. So, industry would be able to analyse the evolution of current PBN procedures having a more global view in order to be able to generate better Offers bidding to Call For Tenders launched by ANSPs.

KEY BENEFITS OF ATTENDING.

You will:

- **Learn** current status of the art about PBN.
- **Understand** the principles managing the evolution of PBN procedures.
- **Know** the technical and operational specifications of PBN procedures.
- **Practise** the implementation of operational procedures based on PBN.

HIGHLIGHTS

Technical and operational course based on a wide experience deploying PBN procedures.

Practical explanations based on current operational implementations.

Practical exercises to settle down theoretical concepts.

Ideal course for students with little, middle or high background on PBN due to the customization performed by the Trainer.

Recommendable course for designers, implementers, developers and professionals within the aeronautical CNS/ATM sector.

- **Win** experience and know-how to generate better Offers to ANSPs CFTs.

COURSE PRE-REQUISITES.

Basic knowledge about Navigation concepts.

TABLE OF CONTENTS.

- 1) What is Area Navigation.
- 2) Introduction to PBN.
- 3) Introduction to Navigation Specifications.
- 4) Navigation Specifications.
- 5) PBN Manual Update and the European PBN IR.
- 6) Approach Classifications.
- 7) Navigation Specifications (Approach).
- 8) Navigation Infrastructure (Ground-Based).
- 9) Navigation Infrastructure (Space-Based).
- 10) PBN Implementation in ECAC.
- 11) Data Integrity.
- 12) Procedure Design Considerations.