



ICAO

GLOBAL AVIATION TRAINING
TRAINAIR PLUS™



Air Navigation

Performance-based Navigation (PBN) Airspace Design



Online

www.icao.int/training

Performance-based Navigation (PBN) Airspace Design Online



The PBN concept represents a shift from sensor-based to performance-based navigation. PBN routes and procedures are designed to meet a navigation specification which is defined in terms of accuracy, integrity, availability, continuity and functionality for the proposed operations in the context of a particular airspace. Personnel involved in airspace design need to understand the PBN concept and how it can be used to improve an existing airspace structure.

▶ **GOAL:**

This course is to explain participants the application of PBN in the design of airspace.

▶ **COURSE OUTLINE:**

1. Introduction.
2. Performance Based Navigation. PBN evolution. PBN advantages.
3. Components of the PBN Concept. Stakeholders points of interest. NavAid infrastructure. GNSS vs GPS. Navigation Specification. RNAV and RNP. ICAO Navigation Specifications. PBN Implementations. PBN Requirements.
4. Airspace Concept. Why develop Airspace Concept? Who develops Airspace Concept? Operational Approval. Airspace Concept Activity Overview. Airspace Concept Summary.

▶ **LEARNING OBJECTIVES:**

Upon completion of the course, participants will be able to accomplish the following:

- Recognize the PBN Concept;
- Define how the PBN Concept can improve airspace efficiency and capacity;
- Characterize who needs to be involved with the airspace design; and
- Conduct actual design of an existing airspace using PBN concept.

▶ **TARGET POPULATION:**

- ATS providers and regulators;
- ATS managers;
- Airline flight planning personnel from operational control centres;
- Supervisors, safety managers, airspace planners, trainers; and
- Inspectors who are involved in ATS airspace design and procedures both civil and military.

▶ **STRUCTURE OF THE COURSE:**

Course duration: 5 hours

Delivery mode: Online

Language of instruction: English



Visit our website for more information at www.icao.int/training
or email us at AviationTraining@icao.int

You can also contact us on Facebook at www.facebook.com/globalaviationtraining