

S-ASMGCS: ADVANCED SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEMS

OBJECTIVES.

This course provides an overview of A-SMGCS (Advanced-Surface Movement Guidance and Control System) systems and the associated Surveillance Performance.

A-SMGCS systems provides traffic information about vehicle position in the area and identity of the cooperative vehicles. It also maintains the airport in a safely operation mode in all visibility conditions and even during the night.

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, installation and/or operation of A-SMGCS systems and their evolution.
- **CNS/ATM sector companies staff** requiring knowledge of A-SMGCS systems providing services in Air Navigation as well as their evolution defined in ICAO, Eurocontrol, EUROCAE, ETSI, EASA,... So, industry would be able to analyse the evolution of current A-SMGCS systems 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 A-SMGCS.
- **Understand** the principles managing the evolution of A-SMGCS systems.
- **Know** the technical and operational specifications of A-SMGCS systems.
- **Practise** the implementation of operational procedures based on A-SMGCS systems.
- **Win** experience and know-how to generate better Offers to ANSPs CFTs.

HIGHLIGHTS

Technical and operational course based on a wide experience deploying A-SMGCS systems and services in Air Navigation.

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 A-SMGCS systems due to the customization performed by the Trainer.

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

COURSE PRE-REQUISITES.

Basic knowledge about CNS/ATM systems.

TABLE OF CONTENTS.

- 1) Introduction to A-SMGCS (Advanced Surface Movement Guidance and Control Systems).
- 2) A-SMGCS System Description
 - Antenas.
 - Sensor data fusion.
 - Control and Monitoring.
 - Correlation.
- 3) Performance.
 - Position Accuracy.
 - Probability of Detection.
 - Probability of Identification.
 - Validation Measurements.
- 4) Commercial products.
- 5) Implementation.