

ATSEP QUALIFICATION, SMC COMBINED

Air Traffic Safety Electronics Personnel



Course aim

The course is designed to impart domain related knowledge and skills appropriate to all the Systems, Monitoring and Control (SMC) qualification streams (SMC-COM, SMC-NAV, SMC-SUR, SMC-DAT) in accordance with the EUROCONTROL Specification for ATSEP CCC Initial Training.

Course objectives

After completion of the course, participants have:

- Knowledge and understanding of the subjects described below in accordance with the EASA ANNEX XIII - Part-PERS requirements for service providers concerning personnel training and competence assessment Subpart A - Air Traffic Safety Electronic Personnel.
- Knowledge and understanding of the importance of teamwork.

Course overview

The duration of the course is eight days. The competency-based training consists of theoretical lessons delivered by professional international instructors. The theory consists of individual topics covering various aspects of operating system and monitoring systems.

Entry Point North offers the ATSEP qualification SMC Combined course, i.e. a course covering all ATSEP qualification SMC streams, as well as courses comprising the individual streams (SMC-COM, SMC-NAV, SMC-SUR, SMC-DAT).

Prerequisites

ATSEP Basic.

Compliance with regulations

The course is compliant with Commission Implementing Regulation (EU) 2017/373 Annex XIII, subpart A.

Content in brief

ANS Structure (SMC-ANS)

ANSP ORGANISATION AND OPERATION

Describe and explain air navigation service provider organisation and operation.

ANSP MAINTENANCE PROGRAM

Describe the needs and the usage of maintenance policy and how this affects the SMC function.

ATM CONTEXT

Describe ATM context.

ANSP ADMINISTRATIVE PRACTICES

Describe the administration related to support the SMC function.

SMC System/Equipment (SMC-ASE)

OPERATIONAL IMPACT

Describe degradation or loss of system/equipment services.

USER POSITION FUNCTIONALITY AND OPERATION

Appreciate user working position, SMC working position.

SMC Tools, Processes and Procedures (SMC-TPP)

REGULATORY REQUIREMENTS

Describe and explain SMS, QMS, SMS application in the working environment.

MAINTENANCE AGREEMENTS WITH OUTSIDE AGENCIES

Describe principles of agreements.

SMC GENERAL PROCESSES

Describe roles and responsibilities.

MAINTENANCE MANAGEMENT SYSTEMS

Describe and explain reporting.

Technology (SMC-TEC)

TECHNOLOGIES AND PRINCIPLES

Describe and appreciate general, communication, navigation, surveillance, data processing, facilities.

From qualification COM-Voice

AIR/GROUND

Describe controller working position.

GROUND/GROUND

Describe the different types of interfaces, switch, controller working position.

ATSEP QUALIFICATION, SMC COMBINED

Air Traffic Safety Electronics Personnel

From qualification COM-Data

EUROPEAN NETWORKS

Explain, describe, define and analyse network technologies.

GLOBAL NETWORKS

Explain, describe, define and analyse networks and standards, description, global architecture, air/ground sub-network, ground/ground sub-networks, air/ground applications.

From qualification COM - Legal Recorders

LEGAL RECORDERS

Explain international and national regulations and principles.

From qualification NAV - Performance Based Navigation

NAV CONCEPTS

Explain the concept of performance-based navigation.

From qualification NAV - Ground Based Systems NDB

NDB/LOCATOR

Explain and describe the use of NDB/Locator in a SMC context.

From qualification NAV - Ground Based Systems DF

DF

Explain and describe the use of DF in a SMC context.

From qualification NAV - Ground Based Systems VOR

VOR

Explain and describe the use of VOR in a SMC context.

From qualification NAV - Ground Based Systems DME

DME

Explain and describe the use of DME in a SMC context.

From qualification SUR - Primary

ATC SURVEILLANCE

Explain and describe the use of PSR for ATS in a SMC context.

ATSEP QUALIFICATION, SMC COMBINED

Air Traffic Safety Electronics Personnel

From qualification SUR - Secondary

SSR AND MSSR

Explain and describe the use of SSR for ATS in a SMC context.

MODE S

Explain and describe the use of Mode-S for ATS in a SMC context.

MULTILATERATION

Explain and describe the principles of MLAT in a SMC context.

From qualification SUR - HMI

HMI

Explain, describe, define and analyse ATCO HMI, ATSEP HMI, system displays.

From qualification SUR - Surveillance Data

SURVEILLANCE DATA

Explain, describe and identify SUR technologies and protocols used by the SMC function.

From qualification DAT-DP - Data Processing Systems

USER REQUIREMENTS

Explain, describe and state controller requirements, trajectories, prediction and calculation, ground safety nets, decision support.

From Qualification DAT-DP - Process

HARDWARE PLATFORM

Explain, describe and identify equipment upgrade, COTS, interdependence.

From Qualification DAT-DP - Data

DATA ESSENTIAL FEATURES

Explain and state data significance, data configuration control, data standards.