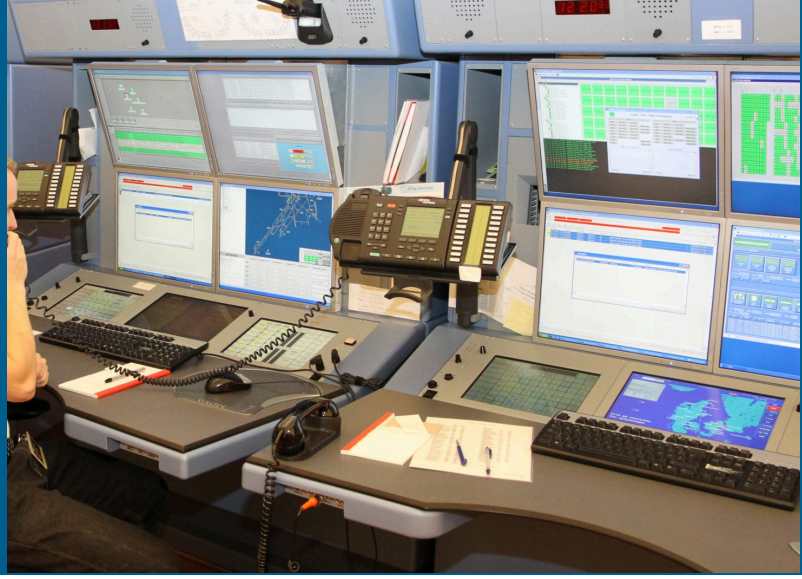
ATSEP Q System Monitoring and Control



Course aim

The ATSEP SMC course is designed for technicians and engineers who need to understand the infrastructure used in Air Traffic Management (ATM) for systems, monitoring, and control of CNS equipment. The course gives learners the knowledge and skills needed for operating and maintaining SMC equipment to support the complete ATM system. It also prepares them for System Equipment Rating Training, which is the next step in becoming an ATSEP.

Ways of learning

Entry Point North offers four delivery formats. Learners have 90 days' access to the course content.

Online On Demand
Online On Demand is a self-paced course format that gives learners access to the ATSEP platform at any time. Learners can revisit content as needed and use AI-driven guidance while working through the course at their own pace.

Certification is issued automatically upon completion.

Online Live Guidance
Online Live Guidance combines online learning with scheduled instructor-led sessions led by experienced ATSEP professionals.

During the live sessions, learners explore key topics, discuss real-world examples, ask questions and exchange knowledge with instructors and other participants. Some courses also include optional open sessions for additional questions and discussion.

Certification is issued automatically upon completion.

Hybrid
Hybrid combines the ATSEP platform with instructor-led classroom training. Digital content, AI-driven guidance and interactive activities are used alongside classroom discussions, collaboration and practical exercises.

Onsite
Onsite training brings the ATSEP course content into an instructor-led, face-to-face setting. Experienced ATSEP professionals guide learners through the material using discussions, real-world examples, collaboration and practical exercises.

Onsite training is available upon request and can be delivered at the customer's premises or at any Entry Point North training site.
Onsite training is offered upon request. The onsite course can be delivered at customer site or any EPN site.

What you will learn

ANS Structure (SMC-ANS)
ANSP organisation and operation: air navigation service provider organisation and operation.
ANSP maintenance program: the needs and the usage of maintenance policy and how this affects the SMC function.
ATM context.
ANSP administrative practices: the administration related to support the SMC function.

SMC System/Equipment (SMC-ASE)
Operational impact: degradation or loss of system/equipment services.
User position functionality and operation: user working position, SMC working position.

SMC Tools, Processes and Procedures (SMC-TPP)
Regulatory requirements: SMS, QMS, SMS application in the working environment.
Maintenance agreements with outside agencies: principles of agreements.
SMC general processes: roles and responsibilities.
Maintenance management systems: reporting.

Technology (SMC-TEC)
Technologies and principles: general, communication, navigation, surveillance, data processing, facilities.

Communication (SMC-COM)

- **Voice**
  Air/ground: controller working position.
  Ground/ground: the different types of interfaces, switch, controller working position.
- **Data**
  European networks: network technologies.
  Global networks: networks and standards, description, global architecture, air/ground sub-network, ground/ground sub-networks, air/ground applications.

- **Legal Recorders**
  Legal recorders: international and national regulations and principles.

Navigation (SMC-NAV)

- **Performance Based Navigation**
  NAV concepts: the concept of performance-based navigation.
- **Ground Based Systems NDB**
  NDB/Locator: the use of NDB/Locator in a SMC context.
- **Ground Based Systems DF**
  DF: the use of DF in a SMC context.
- **Ground Based Systems VOR**
  VOR: the use of VOR in a SMC context.
- **Ground Based Systems DME**
  DME: the use of DME in a SMC context.

Suveillance (SMC-SUR)

- **Primary**
  ATC surveillance: the use of PSR for ATS in a SMC context.
- **Secondary**
  SSR and MSSR: the use of SSR for ATS in a SMC context.
  Mode S: the use of Mode-S for ATS in a SMC context.
  Multilateration: The principles of MLAT in a SMC context.
- **HMI**
  HMI: ATCO HMI, ATSEP HMI, system displays.
- **Surveillance Data**
  Surveillance data: SUR technologies and protocols used by the SMC function.

Data Processing (SMC-DP)

- **Data Processing Systems**
  User requirements: controller requirements, trajectories, prediction and calculation, ground safety nets, decision support.
- **Process**
  Hardware platform: equipment upgrade, COTS, interdependence.
- **Data**
  Data essential features: data significance, data configuration control, data standards.

Prerequisites

To become an ATSEP, learners need to complete the ATSEP Basic course, the ATSEP Shared course, and

at least one ATSEP Qualification course. This Initial Training can be completed in two different orders:

- ATSEP Basic > ATSEP Shared > ATSEP Qualification, or
- ATSEP Basic > ATSEP Qualification > ATSEP Shared

This means that the only prerequisite for starting this Qualification course is to have completed the ATSEP Basic course. However, to become an ATSEP, learners will need to either complete an ATSEP Shared course before taking the Qualification course, or complete an ATSEP Shared course after they completed the Qualification course.

Compliance with regulations

- Commission Regulation (EU) 2017/373 Annex XIII, subpart A.
- EASA ANNEX XIII – Part-PERS requirements for service providers concerning personnel training and competence assessment Subpart A – Air Traffic Safety Electronic Personnel.