

# ATSEP Qualification, COM Combined



## Course aim

The ATSEP COM Combined course is designed for technicians and engineers who need to understand the infrastructure used in Air Traffic Management (ATM) for communication regarding both Air/Ground and Ground/Ground. It gives them the knowledge and skills needed for operating and maintaining communication 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.

## Course structure

The course is 8 days in duration, consists of theoretical classroom lessons, and is delivered by professional international instructors. It contains the following streams:

- COM-Voice, which covers COM-VCE, COM-TRP, and COM-REC.
- COM-Data, which covers COM-DAT, COM-TRP, COM-REC, and the required parts of DPR-PRC.

While the Combined course covers both the Voice and Data streams, it is also possible to only take part in one of the individual streams, which are each 5 days in duration.

We deliver the course as classroom training with group assignments and emulators/exercises. Additionally, participants share their experiences amongst each other and join discussions based on the course material and inputs from instructors. Active participant involvement is an important part of this course: group discussions and assignments help them gain a deeper understanding of the subject and course material.

The course can be delivered on-site at Entry Point North, at the client's premises, or in a Virtual Classroom.

## Content in brief

### Voice (COM-VCE)

Air/ground: transmission/reception, radio antenna systems, voice switch, controller working position, and radio interface.

Ground/ground: interfaces, protocols, switch, communication chain, and controller working position.

### Data (COM-DAT)

Introduction to networks: types, networks, external network services, and measuring tools.

Protocols: fundamental theory and general protocols.

National networks.

European networks: network technologies.

Global networks: networks and standards, description, global architecture, air/ground sub-network, ground/ground sub-networks, networks on board of the aircraft, and air/ground applications.

#### **Transmission Path (COM-TRP)**

Lines: lines theory, digital transmission, and types of lines.

Specific links: microwave link and satellite.

#### **Recorders (COM-REC)**

Legal recorders: international and national regulations and principles.

#### **Operating Systems (DPR-PRC)**

Operating systems: relevant operating system commands.

## Prerequisites

To become an ATSEP, participants 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, participants 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. Appendix 4a Streams, Stream Communication – Voice and Stream Communication – Data.

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