European ATCO Common Core Content: from topics to competencies

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ATM Training and Competence

CCC Specifications - Developments

CCC Concepts

Competence

Training Plans

From Topics to competence
ATSEP Training Specifications

Development

Participation

ANSP/Training Providers
Belgocontrol/Belgium  LVNL/The Netherlands
Crocontrol/Croatia  AENA/Spain
ENAC + DSNA/France  Skyguide/Switzerland
DFS/Germany  UkSATSE/Ukraine
HCAA/Greece  NATS/United
NavPortugal/Portugal

Social Partners/Associations
ETF
IFATSEA

Regulators
CAA SRG/United Kingdom
DCS/France

Others
ATM/IANs
DCMAC/EUROCONTROL
ATC0 Training Specifications Development

13 Member States Participated to the TF (providers and regulators)

18 Member States Responded to formal consultation

60 delegates attended a consultation workshop at Luxembourg on September 2008
ATSEP Training Phases

Training for: e.g. SMC, OJTI, Safety Management, Training Management

- Refresher Training
- Emergency Training
- Conversion Training

Continuation Training

Development Training

S/E Rating Training

Qualification Training

Basic Training

From Topics to competence
ATCO Training Phases

Training for: e.g. OJTI, Safety Management, Training Management

- Refresher Training
- Emergency Training
- Conversion Training

Development Training

Continuation Training

Unit Training

Rating Training

Basic Training

From Topics to competence
EUROCONTROL Common Core

CCC Concepts
## Principles and structure

3.5.3 Syllabus

Subject 1: Voice

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>SUBTOPIC</th>
<th>Objectives</th>
<th>L</th>
<th>CONTENT</th>
<th>TASK No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Air Ground</td>
<td></td>
<td></td>
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<tr>
<td>1.1</td>
<td>Transmission/Reception</td>
<td>1.1.1 Perform typical measurements on a transmitter</td>
<td>3</td>
<td>Frequency (single carrier, offset carrier), modulation, channel spacing, output power, SWR</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>1.1.2 Analyse and troubleshoot a generic radio transmitter</td>
<td>5</td>
<td>Noise, intermodulation, harmonics</td>
<td></td>
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<td></td>
<td></td>
<td>1.1.3 Design and interpret the block diagram of a transmitter</td>
<td>5</td>
<td>Characteristics (modulation, single carrier, channel spacing) functionalities</td>
<td></td>
</tr>
</tbody>
</table>
ATM Training and Competence
Competence

• competence is linked to action;
• competence is valid in a context;
• competence combines knowledge, skills and attitudes;
• competence cannot be reduced to its simple components but “integrates“ the components to a whole task-related measurement;
• competence is defined relative to some standards (standards on the task definition or on the competence evidence).
How to acquire and maintain competence

- Acquiring competence involves:
  - technical training
  - Acquisition of attitude and behaviour
  - Experience and knowledge of the application domain
  - Communication skills (Human factors, language if required)

- Maintaining and consolidating competence involves:
  - Recency and experience
  - Change management
  - Refresher training
  - Preparation for emergencies or unusual situations
EUROCONTROL CCC Training

Training Plans

From Topics to competence
Training Plans

Subject 5: NAVIGATION

The general objective is:

Learners shall analyse all navigational aspects in order to organise the traffic.

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### Training Plans

- **training requirements**
  - type of training event
  - educational material needed
    - method and mode of delivery
    - time scale
    - performance objectives
Performance objective

A clear and unambiguous statement of what a student is expected to do (behaviour or Performance) with the minimum level of acceptable performance (Standard in terms of quality, quantity and time allowed for completion) and conditions under which the performance is to be carried out (PSC)
From topics to competence

Competence Management

Training experience
And task analysis

TF CCC 2009 - 2010

Competence framework

General Objective
Main Objective
Objective

Subject
Topic
Sub-Topic

Performance Objectives

Training Plans 2011
Conclusion

Competence Based Training

Consultation and consensus

EUROCONTROL Training Specifications

Cooperative Training design

Performance Objectives

Training Plans 2011