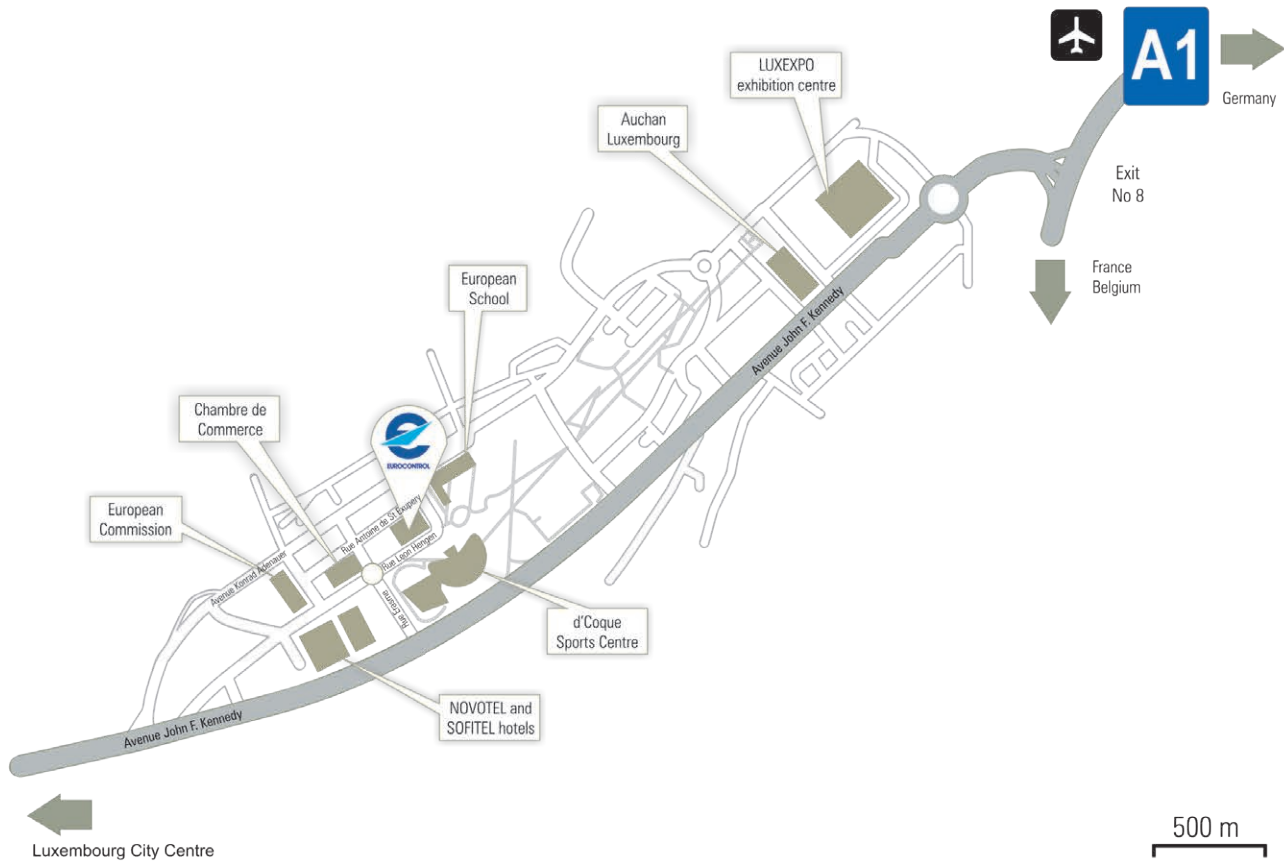


EUROCONTROL Training 2019





Address: EUROCONTROL Institute of Air Navigation Services
 12, rue Antoine de Saint Exupéry
 L-1432 Kirchberg
 Luxembourg
 LUXEMBOURG

Telephone: + 352 43 60 611
Fax: + 352 43 60 61 651

Web: www.eurocontrol.int/ians

Position: N 49° 37.514' E 006° 09.062'

Reaching the Institute by Bus:

From Luxembourg city centre

take line 18 -

Bus stop 'Antoine de St Exupéry'

From Luxembourg Airport

take line 16 EUROBUS -

Bus stop 'D'Coque'

Most service providers, airports and regulators have used the crisis years of the last decade as a heaven-sent opportunity to save on investments in systems, staff and training. The reality of today's traffic growth is biting them more than others. Our growing course attendance numbers show that the tide has turned. The need for properly trained staff to understand and deal with the ever more stringent regulatory requirements is understood by almost all players.

Here at IANS, we are doing the utmost to provide the training services which you need with a permanently evolving portfolio of more than 100 classroom courses and more than 60 e-learning courses. Prompt adaptation of all our courses to new regulatory developments remains our trademark. This allows you to have your staff properly trained for their job at all times.

I should also mention our language proficiency test (ELPAC) and our controller selection tool (FEAST), which remain the best in class in their respective domains. Their modern interfaces give you access to the information you want from the tests. The administrator and examiner courses are covered in this brochure.

We are committed to providing you with the training solution which you need, where you need it and when you need it in 2019. We hope to hear from you soon.



Alex Wandels
Head of the Institute of Air Navigation Services
Network Management Directorate



EUROCONTROL TRAINING 2019

The EUROCONTROL Institute of Air Navigation Services (IANS) is EUROCONTROL's training centre, located in Luxembourg. It is recognised as a centre of excellence for providing advanced air traffic management (ATM) training, comprising both classroom and e-learning courses, as well as training standards, tools and programmes.

This brochure provides information about the range of training products and services available from EUROCONTROL in 2019. The brochure has five parts. The first part describes how to register for a course. The second and third part provide information about the different training programmes provided by EUROCONTROL as well as the range of EUROCONTROL training courses (delivered in a traditional classroom setting or as e-learning via the EUROCONTROL Training Zone). More detailed and up-to-date information for each course is available on the Training Zone within the online catalogue of training products at <https://trainingzone.eurocontrol.int/catalogue.htm>. The fourth part contains details of EUROCONTROL training tools. The final part describes EUROCONTROL training support services.

This brochure is also available in PDF at <https://trainingzone.eurocontrol.int/brochure.htm>

EUROCONTROL TRAINING ZONE

The EUROCONTROL Training Zone is a digital learning environment that supports classroom and e-learning training. The Training Zone is used by thousands of individual users to consult available courses, receive pre-course information and training material, to study online and to interact with each other.

Direct your browser to: <http://trainingzone.eurocontrol.int>.

KEEPING IN TOUCH



Follow us on Facebook via www.facebook.com/EUROCONTROL.IANS

OR



Join the LinkedIn group "Alumni and Friends of the EUROCONTROL Institute of Air Navigation Services" (<http://linkedin.com>).





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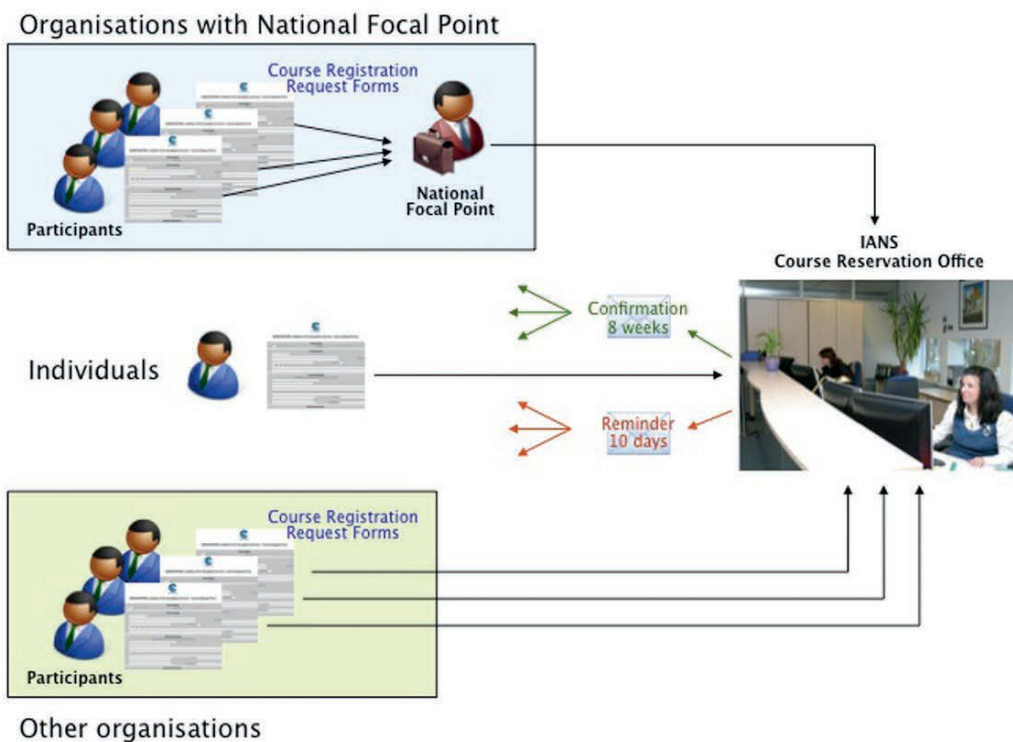
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REGISTRATION

1

IANS Classroom Course Registration



INTRODUCTION

This part of the brochure describes the arrangements for following EUROCONTROL training.

Training portfolio

The current training portfolio and individual course delivery dates are always available online through the EUROCONTROL Training Zone (<https://trainingzone.eurocontrol.int>).

You can access to the training portfolio by selecting “Training Catalogue” without having to create an account or login. The training portfolio is continuously updated to try to best suit stakeholders’ needs and customer demand. The planned course availability and course delivery dates might therefore be altered prior to confirmation of a participant’s course.

Training Zone login

Registration on courses or access to some of the content requires a Training Zone login.

An individual Training Zone user account is free of charge and can be made by filling in the self-registration form on the home page of the EUROCONTROL Training Zone.

Course Reservation Office

The EUROCONTROL Training Institute Course Reservation Office (CRO) plays a central role in the management of requests. It is the central point of contact for any information related to registration and enrolment.

Contacting the Course Reservation Office:

By e-mail: ians.reservation@eurocontrol.int

By telephone: +352 43 60 61 205 or +352 43 60 61 307

By mail: Course Reservation Office
EUROCONTROL Institute of Air Navigation Services
12, rue Antoine de Saint-Exupéry
L-1432 Luxembourg
LUXEMBOURG

IANAS CLASSROOM COURSES - HOW TO REGISTER?

Requests for course participation are made by submitting an online course registration request form (form: <http://trainingzone.eurocontrol.int/CourseRequest.htm>).

Course registration requests should include as much of the requested information as possible. This will enable places to be allocated in accordance with the policies for priorities agreed by EUROCONTROL Member States.

National Focal Points

National Focal Points act as local representatives of the Institute, providing a source of information about our training, and will often be able to answer a wide variety of questions about the training that is available and related issues. Some States have nominated more than one Focal Point, each representing a particular group or organisation.

Details of all National Focal Points are available at (<http://trainingzone.eurocontrol.int/ListFP.htm>).

For organisations with a Focal Point

The course registration request form should be submitted to the National Focal Point-see above for more details.

For organisations without a Focal Point

The course registration request form and/or requests for further information about our classroom training courses may be submitted directly to the Institute's Course Reservation Office.

For individuals

The course registration request form and/or requests for further information about our classroom training courses may be submitted directly to the Institute's Course Reservation Office. Registration requests submitted by individuals are usually subject to a tuition fee; contact the Institute's Course Reservation Office for more details.

Notification of course confirmation

Latest by eight weeks before the start of the course, the Institute's Course Reservation Office sends a confirmation email to the course participant and the National Focal Point. The email contains useful information about getting to the Institute and details of any preparatory work that should be completed a few weeks before the course starts.

In addition a reminder email is sent 10 days before the start of the course.

If you are unable to take up an allocated place on a training course

Demand for places on our classroom training courses exceeds availability. Because of this, course participants who have been allocated a place but are unable to attend are asked to notify the Institute's Course Reservation Office as soon as possible through the National Focal Point. Early notification that an allocated place will not be taken up will enable the Course Reservation Office to re-allocate the place if at all possible. As with a course registration request, notification that an allocated place will not be taken up should be forwarded to the Course Reservation Office by the National Focal Point to ensure that both your own organisation and the Institute are fully informed.

Accommodation in Luxembourg

There is a wide range of hotels available in Luxembourg which are conveniently located for those visiting the Institute. Further details about the location of local hotels can be found through the Institute's web site at <http://www.eurocontrol.int/how-reach-training-institute>.

EUROCONTROL has negotiated preferential rates with many of the local hotels. To benefit from this special arrangement you should specify the appropriate booking code when you reserve your hotel accommodation. The relevant National Focal Point can provide the necessary booking code.

If you do not have a Focal Point and wish to take advantage of the preferential rates, where they are available, please contact the Course Reservation Office by e-mail at ians.reservation@eurocontrol.int.

E-LEARNING AND VIRTUAL CLASSROOM TRAINING - HOW TO REGISTER?

Direct access

Some e-learning modules are available through the EUROCONTROL Training Zone without any need for registration. These modules are made available through the "Direct-Access Modules" catalogue in the EUROCONTROL Training Zone: <http://trainingzone.eurocontrol.int/directaccess.htm>.

Registered access

Registration is required for most e-learning modules and for all virtual classroom courses. The completion of e-learning modules is often a pre-requisite to the attendance of virtual classroom or classroom courses. Registration is free of charge and is performed via the self-registration form available on the home page of the EUROCONTROL Training Zone.

Note on tracking

No group monitoring or tracking of progress is possible for direct access e-learning modules or for individual registration. Organisations wishing to monitor the progress of their students should refer to the Training Zone for Organisations (see Part 5 of this brochure).



TRAINING PROGRAMMES

2

EUROCONTROL Training Programmes

In the recent years we are witnessing ever growing recognition of the importance of the proper training and competence of staff performing different tasks in an NSA or in an ATM/ANS service provider. Whether driven by regulation or by the speed of change in ATM, there is an increasing need for qualifications/competencies for staff performing a wide range of tasks.

The following part contains information about EUROCONTROL training programmes designed with a purpose to empower the staff members with the required knowledge/competencies for performing specific tasks.

- Safety Management Programme (SAF-PRG-SMS) - **NEW**
- Planning and Conduct of Safety Survey (LEX-PRG-SURVEY)
- Management and Assessment of Changes as per Reg. 2017/373 (SAF-PRG-CHG-373)
- NSA Training Programme (LEX-PRG-NSA)
- Oversight of Changes as per Reg 2017/373 (LEX-PRG-CHG-373)
- ATC Trainer Programme (HUM-PRG-ATC-T)
- Human Factors Practitioner Programme [HUM-PRG-PP] - **NEW**

Important note

The programme provides an opportunity for participants to actually build up, on the basis of knowledge and skills acquired through different courses, the profile required to perform activities related to safety management, thus ensuring their competence in the domain.

Objectives

At the end of the programme the participants will achieve the required profile through education practice, providing the skills needed to perform the task related to safety management.

Audience

This programme is designed for all staff working within the ATM domain, either in service provision or the regulatory authority, requiring in their daily activities an understanding of the SMS and its implementation.

Pre-requisite

The programme covers a number of SAF-related courses which are already offered by IANS. One part will be mandatory (foundation courses) and will constitute a pre-requisite for the second part, where participants will have the freedom to

choose a number of courses that will best suit their job requirements. The mandatory/foundation courses will be formally assessed via online examinations.

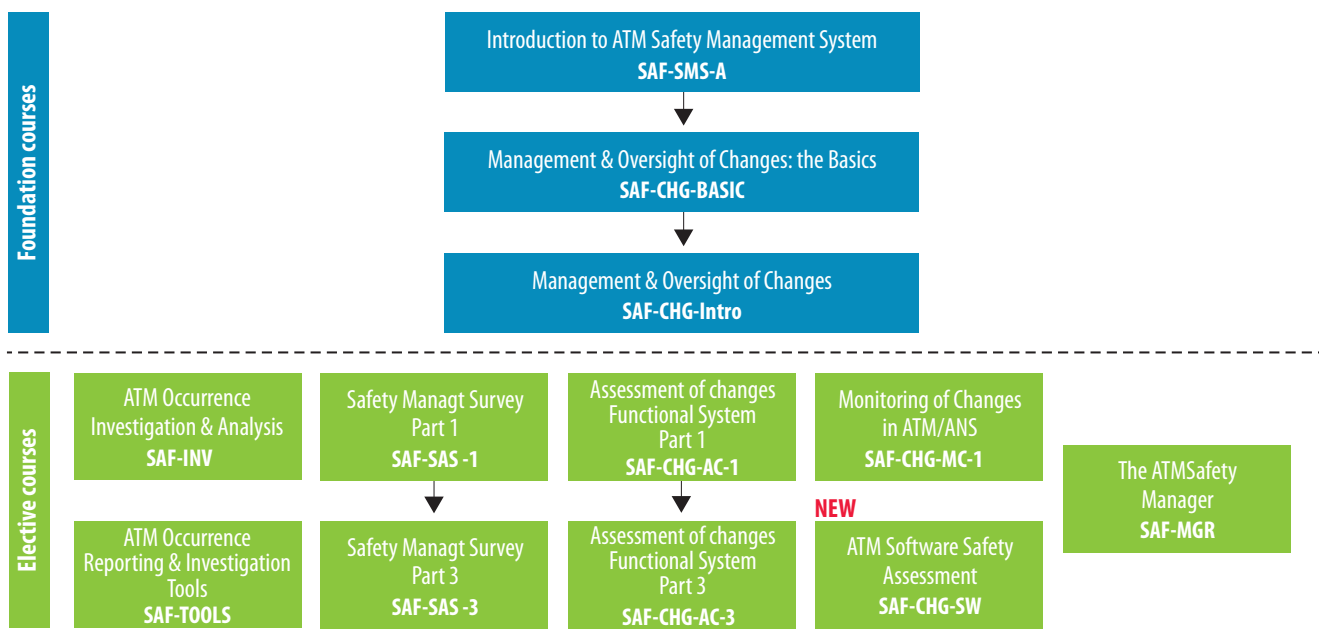
The *foundation* part (pre-requisite) will consist of the three basic courses namely:

- SAF-SMS-A – Introduction to ATM Safety Management System (classroom course);
- SAF-CHG-BASIC – Management and Oversight of Changes. The Basics (e-learning), and
- SAF-CHG-INTRO – Management and Oversight of Changes (classroom course).

Two of the three foundation courses will be assessed through a formal examination. For the e-learning it is already embedded in the package and for SAF-SMS-A there will be a formal assessment at the end of the course with a pass mark of 60%.

Certificate

With two formal assessments over the course of the programme (for the foundation courses) the participants completing the programme will be awarded a Certificate of Achievement.



Planning and Conduct of Safety Survey [SAF-PRG-SURVEY]

Objectives

After completing this training programme, participants will be able to assist in the planning and conduct of safety surveys as per Regulation No 2017/373.

Audience

This training programme has been developed specifically for staff working in an ATM/ANS service provider and who are involved in the planning and conduct of safety surveys.

Pre-requisite

See description of SAF-SAS-1 course.

Certificate

Certificates will be awarded for each course. In addition, participants who complete the programme will be awarded a certificate of achievement.

Content

Safety Management Survey - Stage 1
SAF-SAS-1



Participation in an actual safety survey in
the participant's own organisation - Stage 2



Safety Management Survey - Stage 3
SAF-SAS-3

All three stages are mandatory and must be completed in the prescribed order.

Important note

This training programme is consistent with regulation No. 2017/373 (applicable from 2nd January 2020) and with its Acceptable Means of Compliance (AMC) and Guidance Material (GM).

Objectives

After completing this training programme, participants will be able to assist in:

- The management of changes in ATM/ANS;
 - The Safety Assessment(ATSPs) of changes to the ATM/ANS functional system;
 - The Safety Support Assessment (Non-ATSPs) of changes to the ATM/ANS functional system;
- as per Regulation No. 2017/373.

Audience

This course is designed for personnel working for a provider of ATM/ANS services who are actively involved (i.e. contributing or coordinating) in the safety assessment and/or safety support assessment of changes to the ATM/ANS functional system, as per Regulation No. 2017/373.

Pre-requisite

See description of each of the courses included in this training programme.

Certificate

Certificates will be awarded for each course. In addition, participants who complete the programme will be awarded a certificate of achievement.

Content

Foundation courses

Management & Oversight of Changes: The Basics
SAF-CHG-BASIC

Management & Oversight of Changes
SAF-CHG-INTRO

Specialist courses

Assessment of Changes to the Functional System Part 1
SAF-CHG-AC-1

Assessment of Changes to the Functional System Part 3
SAF-CHG-AC-3

All four stages are mandatory and must be completed in the prescribed order

Objectives

After completing this training programme, participants will have a comprehensive and detailed understanding of the role, functions and all core activities of an NSA as required by the EU legislation in force. The training programme will also provide participants with an awareness of on-going regulatory developments.

Description

The NSA training programme is designed to support States' obligation to ensure specific training for those involved in oversight activities. It will provide participants with a solid foundation in all of the core NSA functions as required by the EU legislation in force, and with an awareness of on-going regulatory developments.

It consists of the following courses:

Foundation courses (all mandatory):

- Introduction to EU Legislation for the Single European Sky (LEX-SES);
- Audit Techniques and Practice - Stage 1 (LEX-AUDIT-1);
- Audit Techniques and Practice - Stage 3 (LEX-AUDIT-3);
- Functions of a National Supervisory Authority (LEX-ORG).

Specialist courses (mandatory selection of 3 of these courses):

- Safety Oversight of Safety Management Systems (LEX-SOSM);
- Safety Oversight/Implementation of Safety Occurrence Reporting and Assessment (LEX-SORA);
- SES Interoperability (LEX-IOP);
- SES : The Performance Scheme (LEX-PERF);
- Oversight of Provision of MET information (LEX-MET).

- Oversight of Security Management Systems [LEX-SEC]
- ATSEP Competence [LEX-COMP-ATSEP]
- ATCO Competence and Training Organisation Certification [LEX-COMP-ATCO]
- Oversight of Changes in ATM/ANS Part 1 [LEX-CHG-OC-1]
- Oversight of Changes in ATM/ANS Part 3 [LEX-CHG-OC-3]
- Implementing Aeronautical Data Quality (ADQ) [IM-ADQ]
- Overview of the financing of Air Navigation Services in Europe [LEX-COST]

Audience

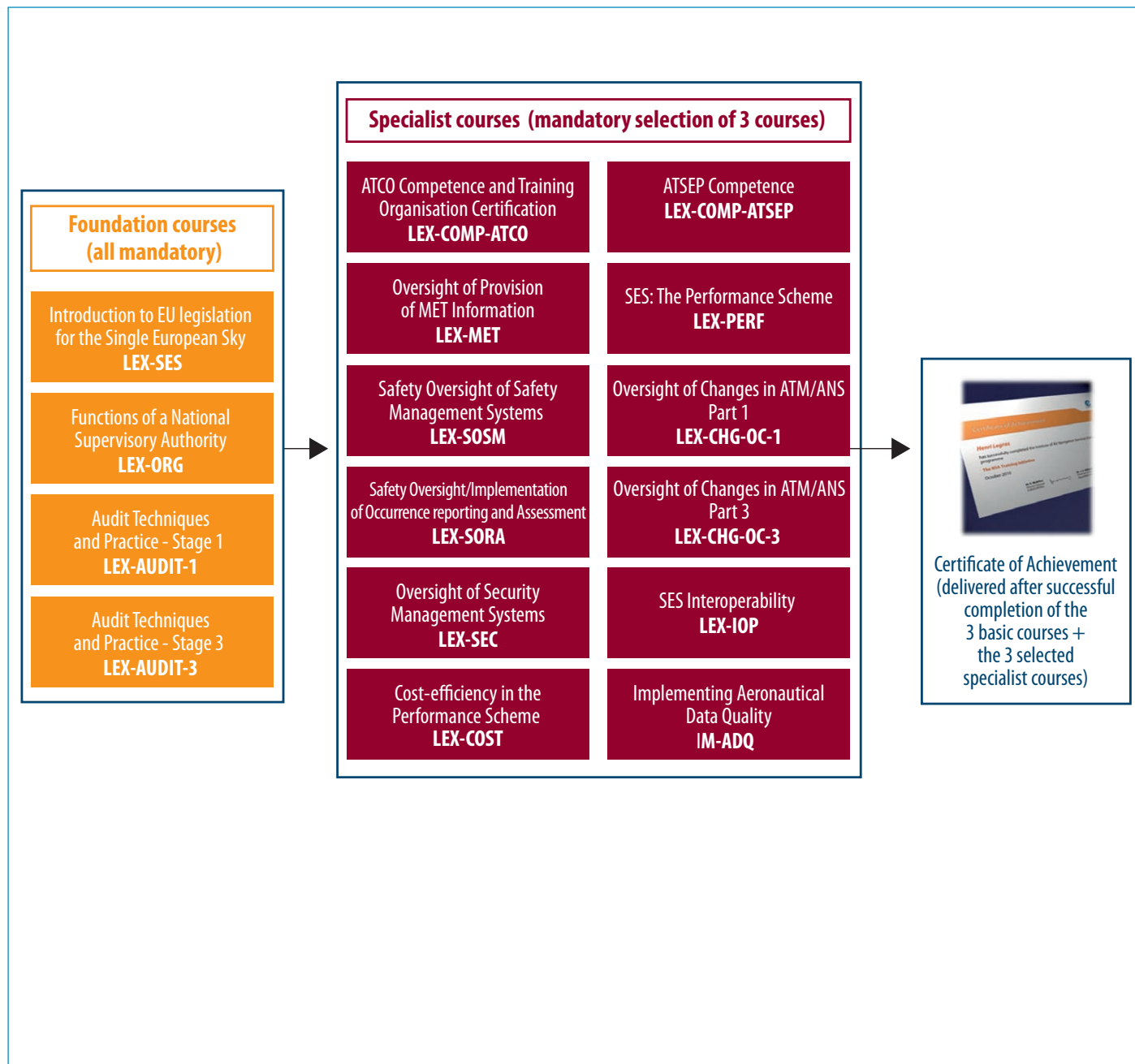
The training programme has been developed specifically for staff working at an NSA. It is ideally suited to those who have recently joined the organisation and wish to gain a comprehensive understanding of the role and function of an NSA. It will also be of value to those with some experience within an NSA who wish to develop their knowledge and skills related to specific NSA functions, in preparation for taking on greater responsibilities, for example. Although the training programme is focused on the oversight role of an NSA, the principles covered, and much of the content, are equally applicable to the work of other regulatory agencies. The courses are also of interest to those wishing to gain an understanding of regulatory functions and techniques, for example staff from providers of ATM/ANS services preparing to take on additional responsibilities which include working with the NSA or regulator.

Pre-requisite

See description of each of the courses included in this training programme.

Certificate

Certificates will be awarded for each course. In addition, participants who complete the programme will be awarded a certificate of achievement.



Foundation courses (all mandatory)

Introduction to EU Legislation for the Single European Sky
LEX-SES

Functions of a National Supervisory Authority
LEX-ORG

Audit Techniques and Practice - Stage 1
LEX-AUDIT-1

Audit Techniques and Practice - Stage 3
LEX-AUDIT-3

Specialist courses (mandatory selection of 3 courses)

ATCO Competence and Training Organisation Certification
LEX-COMP-ATCO

ATSEP Competence
LEX-COMP-ATSEP

Oversight of Provision of MET Information
LEX-MET

SES: The Performance Scheme
LEX-PERF

Safety Oversight of Safety Management Systems
LEX-SOSM

Oversight of Changes in ATM/ANS Part 1
LEX-CHG-OC-1

Safety Oversight/Implementation of Occurrence reporting and Assessment
LEX-SORA

Oversight of Changes in ATM/ANS Part 3
LEX-CHG-OC-3

Oversight of Security Management Systems
LEX-SEC

SES Interoperability
LEX-IOP

Cost-efficiency in the Performance Scheme
LEX-COST

Implementing Aeronautical Data Quality
IM-ADQ



Certificate of Achievement (delivered after successful completion of the 3 basic courses + the 3 selected specialist courses)

Oversight of Changes as per Reg 2017/373 [LEX-PRG CHG-373]

Important note

This training programme is consistent with regulation No. 2017/373 (applicable from 2nd January 2020) and with its Acceptable Means of Compliance (AMC) and Guidance Material (GM).

Objectives

After completing this training programme, participants will have a solid understanding of the oversight of changes, and will be able to assist in:

- the approval of the change management procedures for functional systems;
- the decision to review a notified change to the functional system, and in its review itself; as per Regulation No. 2017/373.

Audience

This course is designed for personnel working for a competent authority (including NSAs) and involved in the oversight of changes in ATM/ANS, in particular of changes to the ATM/ANS functional system as per Regulation No. 2017/373.

Pre-requisite

See description of each of the courses included in this training programme.

Certificate

Certificates will be awarded for each course. In addition, participants who complete the programme will be awarded a certificate of achievement.

Content

Foundation courses

Management and Oversight of Changes: The Basics
SAF-CHG-BASIC

Management & Oversight of Changes
SAF-CHG-INTRO

Specialist courses

Oversight of Changes in ATM/ANS Part 1
LEX-CHG-OC-1

Oversight of Changes in ATM/ANS Part 3
LEX-CHG-OC-3

The courses must be completed in the prescribed order

Any course which is part of the following training programme can also be followed in isolation. In this case the pre-requisites are different and are indicated in the specific course descriptions (e.g. for the TTI; SFM; TRM courses, there is no ATCO licence required).

Objectives

After completing this training programme, participants will be able to deliver the theoretical and practical elements of ATCO training.

The training programme will also provide participants with an awareness of ongoing regulatory developments concerning the role and responsibilities of an ATC trainer.

Description

The ATC trainer programme consists of completing 2 mandatory courses - TTI and OJTI and minimum 1 out of the 4 optional courses - CCA, SIM, SFM and TRM.

By following the 2 mandatory courses candidates will accomplish the training required to provide the essential theoretical and practical training for ATCOs. By making their selection of 1 optional course, candidates are encouraged to choose their "secondary expertise". This means that in the cases where the Trainer will be involved in the provision of continuation training which incorporates designing simulator exercises, the SIM course is recommended. In cases where the Trainer will be involved in the delivery of the HF elements of the ATCO refresher training, the optional courses are TRM or SFM. And finally if the Trainer is also the Assessor - the CCA course is the one that fits this profile best. Obviously, candidates can choose more than one optional course to follow.

Audience

This training programme has been developed specifically for staff delivering ATC training. It is structured in such a way that by following the 2 mandatory courses, the candidate will at the very least complete the training required to provide the essential theoretical and practical training for ATCO.

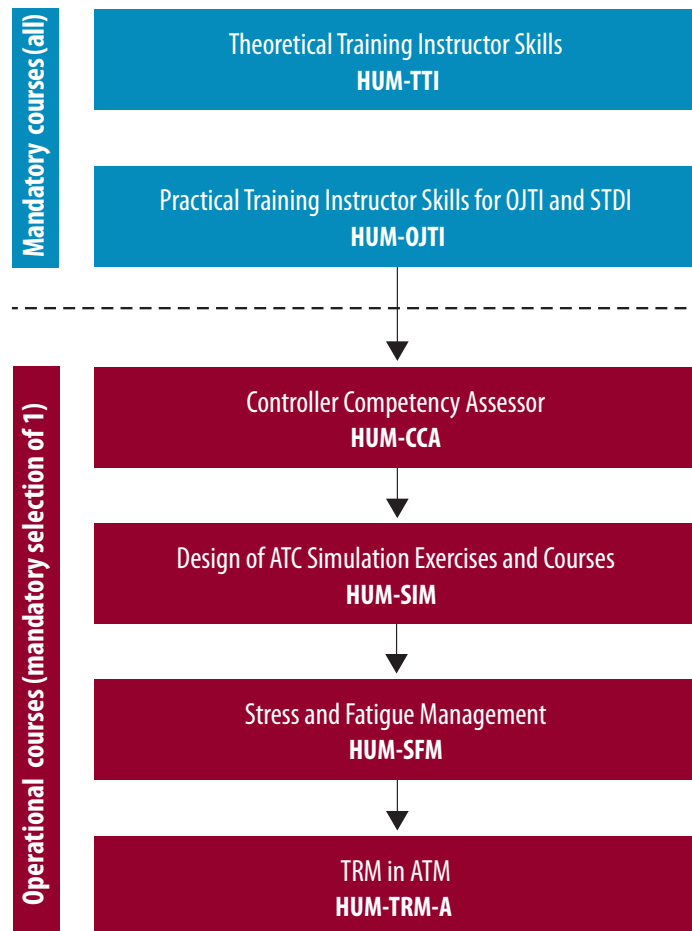
Pre-requisite

Candidates are required to hold, or to have held, an ATCO licence.

Certificate

Certificates will be awarded for each course. In addition, participants who complete the programme will be awarded a certificate of achievement.

Content



Important Note

Any course that is made a part of the following training programme can be followed in isolation as well. More eligible courses will be developed in the future and communicated via the TZO. In the cases of completing the required courses in previous years, you are eligible for the programme certificate now.

Catalogue Info

Human Factors HF Practitioner Programme consists of completing: 2 mandatory introductory classroom courses – SAF-HFA and HUM-DESIGN; at least 2 out of the 4 optional specialized classroom courses - SFM, SYS, HF-Case and TRM-A and 2 e-learning modules - SAF-FAT and HUM-STRESS.

By following the 2 mandatory courses candidates will understand the challenge of designing support tools and systems for ATM users and the human contribution to system performance. They will be familiarized to cognition in complex system and how cognitive bias influences ATM actors. By making their selection of 2 optional courses to follow, candidates are encouraged to choose their “specialized knowledge”. This means that in the cases where the participant will be involved in the assessment or development of concepts ; training which incorporates design thinking SYS and method to integrate HF in projects HF Case are obvious choices. HUM SYS and HF Case courses are the two that fit this profile the best. In cases where the participant will be involved in the delivery of the HF elements of the ATCO refresher training, the suggested courses to follow are TRM and SFM.

Candidates can choose more than 2 optional courses to follow.

The diploma is also subject to the completion of a personal assignment (literature review or practical HF analysis) to be delivered within the year of completion of the program. The assessment of this “homework” will evaluate the abilities of the student to synthesize academic content, refer to and understand key HF concepts, get access to relevant literature and have a sound critical and analytical mind on HF topics. Details of this personal assignment are agreed on and communicated while attending one of the two mandatory courses.

Objective

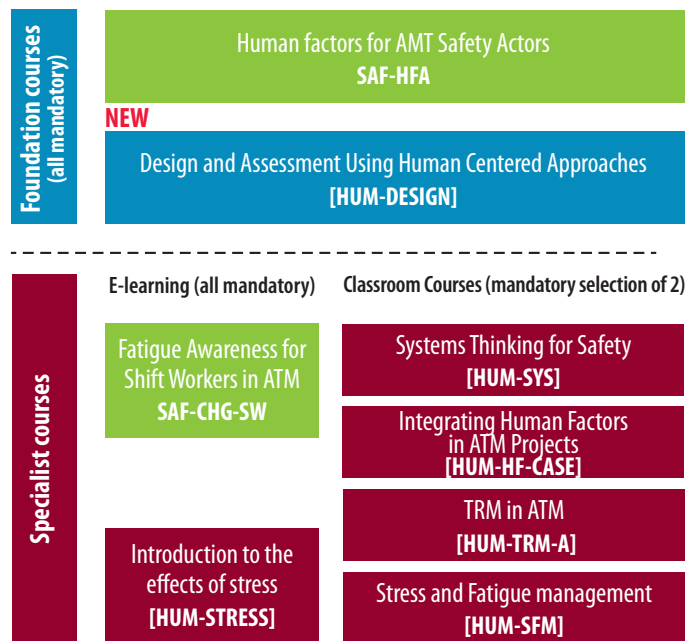
After completing this training programme, participants will receive a recognition that they have understood the essential HF concepts for ATM and that

they can support projects for HF work and better integration of HF in operation. By following the 2 mandatory courses, the candidate will understand the main concept of Human factors in ATM and elements of relevant applied psychology - and with the two additional courses- practical experience required to provide support in HF assessment of HF integration in ANSP is provided.

The training programme will also provide participants with an awareness of on-going regulatory developments concerning the role and the responsibilities of an HF Practitioner.

Audience

IANS has recognized the existing lack of HF expertise in ATM. As more operational, technical or management personnel are willing to develop their expertise in the area of HF, we support them to be recognized as practitioner in their respective organisation for potential contributions in the domain of HF. This training programme has been developed specifically to fulfil this requirement. We welcome operational, technical and organisational ATM personnel with tasks that include integrating human factors in their respective organisations.











TRAINING COURSES

3

This part of the brochure describes training that is offered in classroom setting or as e learning modules on the Training Zone. Classroom training courses are usually held at EUROCONTROL (Luxembourg or Brussels). As part of the partnership that EUROCONTROL is developing with Member States and with other leading training organisations, courses are also delivered at other locations. Further information about the availability of specific courses and the location at which they will be delivered are available on-line in the EUROCONTROL Training Zone.

Information about our portfolio of courses is grouped into general topic areas. For each course, a short description of the content is provided. The training catalogue on the EUROCONTROL Training Zone contains additional information such as a summary of the objectives that will be achieved by following the training, the length of the course, the target audience and details of any pre-requisite knowledge. For e learning modules, we also indicate the typical time needed to complete the course.

-  This symbol indicates that the training is classroom-based.
-  This symbol indicates that the training is computer-based (on your own, at your own time).
-  This symbol indicates that this is training material that supports classroom-based teaching. It is not accessible to individual learners.
-  This symbol indicates that the training is delivered on-line over a defined period of time.
-  This symbol indicates that the training is training reference material which does not require registration and for which no certificate of attendance is delivered.
-  This symbol indicates that the training is a blended course. It is not accessible to individual learners.
-  This symbol indicates a new course.
-  This icon indicates that the e-learning training is designed to meet the requirements of part of the EUROCONTROL Common Core Content Syllabus for initial training.



GENERAL AIR TRAFFIC MANAGEMENT

Gaining knowledge in general air traffic management (ATM) is essential.

The modernisation of Europe's Air Traffic Management (ATM) networks is crucial for the sustainability of European aviation and the forecasted increase in air traffic by 2035. The Single European Sky (SES) ATM research project "SESAR" is one of the most ambitious modernisation projects launched by the European Union contributing to the implementation of SES.

SESAR's goal is to define, develop, and deploy the technological solutions needed to increase the performance of Europe's ATM system. Hence, how will the future ATM systems look like? How is SESAR deployment coordinated?

Besides, how do we include RPAS in our operations, and how do we keep high levels of ATM security and maintain essential cooperation between civil and military ATM?

What about looking more closely into the costs, the finances, risk and resilience management and liability in ATM?

Finally, are you looking for a solid mix between ATM and ATC theory, and "hands-on" experience of being an air traffic controller for a couple of days?











Are you interested in those topics? You are welcome to participate to any of the courses in the General Air Traffic Management Domain!

- Inside ATM
- Discover Air Traffic Control
- ATM Summer School
- Building a Future ATM System
- Pilot Common Project and SESAR Deployment •
- Introduction to EU Legislation for the Single European Sky
- Civil - Military ATM Coordination
- Remotely Piloted Aircraft Systems - A Regulatory Overview
- Remotely Piloted Aircraft Systems - ATM Integration
- Management Systems in the context of ATM/ANS
- Contingency Measures and Crisis Management
- Liability in ATM
- Legal and Financial Issues for ANSP
- Management of Air Navigation Services
- Cost Reduction Strategies for ANS Providers

General Air Traffic Management

<p>INSIDE ATM</p> <p>GEN-ATM-INTRO NEW E</p>	<p>This course will provide participants with an overview of how the European Air Traffic Management system works today.</p> <p>Duration: 2 hours.</p>
<p>DISCOVER AIR TRAFFIC CONTROL</p> <p>GEN-INTRO C</p>	<p>Many people with an interest in aviation would like to understand more about the job of the Air Traffic Controller. The GEN - INTRO course provides a “hands-on” experience of the working environment for air traffic controllers. The insight that they will acquire will help the participants to appreciate the role within the ATM system.</p> <p>Duration: 2 days.</p>
<p>ATM SUMMER SCHOOL</p> <p>GEN-ATM-UNI C</p>	<p>This course is the perfect combination for university students and new comers in ATM/ATC domain of theoretical knowledge about the current and future air traffic management (ATM) environment and hands-on unique opportunity to control traffic through high fidelity simulators in the en-route phase of flight and Tower simulation.</p> <p>Duration: 5 days.</p>
<p>BUILDING A FUTURE ATM SYSTEM</p> <p>GEN-FUT C</p>	<p>This continuously evolving course provides an overview of the future ATM situation within Europe based on the European ATM Master Plan. It further explains the roles of the Network manager and Deployment manager and also includes topics such as ATM Security, Remote towers and RPAS.</p> <p>Duration: 5 days.</p>
<p>PILOT COMMON PROJECT (PCP) AND SESAR DEPLOYMENT</p> <p>GEN-PCP C</p>	<p>After completing this course, participants will have a solid view of the role of the SESAR deployment manager, the Pilot Common Projects (PCP) and the six ATM Functionalities.</p> <p>Duration: 3 days.</p>
<p>INTRODUCTION TO EU LEGISLATION FOR THE SINGLE EUROPEAN SKY</p> <p>LEX-SES C</p>	<p>This course provides an overview of EU legislation for the Single European Sky, in the field of ATM/ANS. It also describes how the regulatory developments will further affect the stakeholders involved in ATM/ANS (ATM/ANS service providers, competent authorities including NSAs, network manager, EASA, ATM/ANS manufacturers, etc.).</p> <p>Duration: 4 days.</p>
<p>CIVIL - MILITARY ATM COORDINATION</p> <p>GEN-CIV/MIL C</p>	<p>Overview of the Civil-Military ATM/CNS coordination (CMAC) activities : SES, SESAR, Security, flight efficiency, airspace capacity and military mission effectiveness in Europe, Civil/military CNS system interoperability - Awareness of Flexible Use of Airspace and the supporting ASM tools, A-CDM.</p> <p>Duration: 4 days.</p>
<p>REMOTELY PILOTED AIRCRAFT SYSTEMS - A REGULATORY OVERVIEW</p> <p>GEN-RPAS-REG C</p>	<p>The course provides an overview of the standards and regulation on RPAS (Remotely Piloted Aircraft Systems).</p> <p>Duration: 3 days.</p>

General Air Traffic Management

<p>REMOTELY PILOTED AIRCRAFT SYSTEMS - ATM INTEGRATION</p> <p>GEN-RPAS-ATM </p>	<p>The course provides an overview of the integration of RPAS (Remotely Piloted Aircraft Systems) in ATM.</p> <p>Duration: 3 days.</p>
<p>MANAGEMENT SYSTEMS IN THE CONTEXT OF ATM/ANS</p> <p>GEN-MANS </p>	<p>The course will provide a systemic view of management systems, addressing key components such as process management, risk management, compliance management, performance management, etc.</p> <p>Duration: 3 days.</p>
<p>CONTINGENCY MEASURES AND CRISIS MANAGEMENT</p> <p>GEN-CTG </p>	<p>The “Contingency Measures and Crisis Management” course addresses the assessment of the need for contingency measures to mitigate the effect of large-scale events and the related cost-benefit trade-off. It further addresses the basics of crisis management during large-scale events.</p> <p>Duration: 2 days.</p>
<p>LIABILITY IN ATM</p> <p>GEN-LIABILITY </p>	<p>The course Liabilities in ATM provides an overview of the different liabilities and their distribution among the ATM stakeholders.</p> <p>Duration: 3 days.</p>
<p>MANAGEMENT OF AIR NAVIGATION SERVICES</p> <p>GEN-ANS-MGMT </p>	<p> This course provides solid knowledge of modern business management practices in air navigation services to help you guide your organisation to success.</p> <p>Duration: 5 days.</p>
<p>LEGAL AND FINANCIAL ISSUES FOR AIR NAVIGATION SERVICE PROVIDERS</p> <p>GEN-FIN </p>	<p> This course explains the legal and financial issues for Air Navigation Service Providers.</p> <p>Duration: 5 days.</p>
<p>COST REDUCTION STRATEGIES FOR AIR NAVIGATION SERVICE PROVIDERS</p> <p>GEN-ANS-COST </p>	<p> This course is designed to teach you about the cost reduction strategies for air navigation service providers.</p> <p>Duration: 5 days.</p>





AIRSPACE MANAGEMENT







Airspace is a scarce and finite resource. Airspace management is a generic term encompassing the organisation of different airspace structures such as air traffic routes, ATC sectors, terminal areas, restricted and danger areas, TSA, TRA, etc. as well as their strategic, pre-tactical and tactical management.

The way in which airspace is designed, organised and managed can impact significantly on the effectiveness with which air traffic, both civil and military, can be handled, in terms of safety, environment, capacity and costs. As a result, airspace design principles have been formalised in the European Route Network Improvement Plan Part 1 to satisfy the requirements of the ATM Network Functions Implementing Rule.

The policy for access to airspace, and the way in which airspace is managed, is a State responsibility. Nevertheless, a coordinated approach at European level is critical to the effective and efficient management of commercial, general, and military air traffic. The establishment of a European Network Manager and continuous development of the Flexible Use of Airspace Concept reflects how crucial these activities are to the achievement of the ATM network performance targets.

The future concepts, currently under development within SESAR, foresee airspace management as a key tool in the pre-tactical balancing of demand and capacity. These airspace management activities will form the foundation for effective, transparent and efficient flow and capacity management at European, regional and sub-regional levels.

- [Airspace Strategy](#)
- [Introduction to Air Traffic Flow and Capacity Management](#)
- [Operational Airspace Management](#)
- [Network Capacity Planning](#)

AIRSPACE STRATEGY ASM-STRAT		This course looks at the regulatory environment, strategies and fora for the design and development and management of European airspace. Duration: 4 days
INTRODUCTION TO AIR TRAFFIC FLOW AND CAPACITY MANAGEMENT ASM-ATFCM		This course offers an introduction to ATFCM. It explains the rules and procedures that exist and introduces the main actors - the Network Manager, aircraft operators and flow management positions in area control centres. The course also describes the daily work necessary to achieve effective flow and capacity management. Duration: 4 days.
OPERATIONAL AIRSPACE MANAGEMENT ASM-OPS		The operational airspace management course looks at day-to-day management of European airspace in support of network performance. Duration: 3 days.
NETWORK CAPACITY PLANNING ASM-CAP		This course will explain the European network capacity planning and assessment methodology and how this relates to the preparation and monitoring of the Network Operations Plan. It also includes an introduction to the operations planning tools and data sets. Duration: 4 days.



NETWORK OPERATIONS

The Network Manager (NM) aims to provide the best possible Network Operations service. This provision is based on the continuous optimisation of local and regional planning, operational procedures, associated tools and network infrastructures in full partnership with airports, ANSPs/FABs and users. This demands a high level of knowledge from the NM staff and from all partners, both in the ATC and aircraft operator communities.

The Collaborative Decision-Making process also requires a high degree of shared knowledge amongst participants in order to be successful.

The use of Web-Based Training (WBT) is one of the pillars of the NM training strategy, put in place to meet the demand for training and collaboration within Network Operations. NM WBT modules are equally suitable for self-study and classroom teaching.

The following descriptive overview, grouped by subject, should raise the awareness of all Network Operations partners of how their work can be assisted by our on-line training provision.

- Flow Management Position - FMP
- Aircraft Operators - AO
- Flight Planners -FP
- Tower Staff - TWR
- Airspace Management Cell - AMC
- Tools & Updates
- Crisis & Contingency







FLOW MANAGEMENT POSITION - FMP

Web based training material and classroom courses for **Flow Management Position staff**.

The participation to classroom courses is subject to the completion of pre-requisites:

For FMP Module 2: completion of the E-learning courses “FMP-1” is required.

For FMP Module 3: FMP Module 2 classroom course is required.

FUNDAMENTALS OF ATFCM NMO-FMP-1		This e-learning course provides the fundamentals of how Air Traffic Flow and Capacity Management works in Europe for FMP and TWR. Duration: 4 hours.
FMP MODULE 2 NMO-FMP-2-C		Completion of this course will provide participants with an understanding of the fundamental concepts of ATFCM and of the procedures applied by the NM and of FMPs. Duration: 5 days.
FMP MODULE 3 NMO-FMP-3-C		An interactive ATFCM Course designed to show in practical terms the operational procedures explained in FMP Module 2 (NMO-FMP-2-C). The course is divided between classroom time and NMOC (Ops Room) time. Duration: 5 days.
ATFCM MESSAGES NMO-ATFCM-MSG-E	 	This e-learning course provides detailed messages used in ATFCM, including those relating to aerodrome closures, low visibility, flight suspensions, revision requests by AO, slots missed re-routing, message formats, AOWIR and more. Duration: 2 hours..
AIRPORT COLLABORATIVE DECISION MAKING: FROM CONCEPT TO IMPLEMENTATION AND PARTNERS' ROLES APT-ACDM-E		Airport CDM is about partners working together more efficiently and transparently in how they work and share data. This course highlights in detail the Airport CDM concept elements in support of local Airport CDM implementation. The dedicated modules focus on the role, tasks and responsibilities of each CDM partner. Finally, in the last module, a flight is followed from one A-CDM airport to another. The course covers each milestone, highlighting the working practices at airports which have implemented A-CDM. Duration: 3 hours.










AIRCRAFT OPERATORS - AO

Web based training material and classroom courses for **Aircraft Operators and ARO**.

<p>ATFCM BASIC</p> <p>NMO-ATFCM-BASIC</p> <p>E</p>	<p>This e-learning course provides a basic overview of how Air Traffic Flow and Capacity Management in Europe works.</p> <p>Duration: 4 hours.</p>
<p>CIAO AND NOP ADVANCED</p> <p>NMO-CIAO-NOP-C</p> <p>C</p>	<p>The objective of this course is to provide the theoretical background and practical training necessary for the usage of the NOP (Network Operations Portal) and CIAO (Collaboration Human Machine Interface for Aircraft Operators).</p> <p>Duration: 3 days</p>
<p>CHMI CLASSROOM COURSE FOR AO ADVANCED</p> <p>NMO-CIAO-ADV-C</p> <p>C</p>	<p>Advanced classroom course on the usage of CIAO (Collaboration Human Machine Interface for Aircraft Operators).</p> <p>Duration: 3 days.</p>
<p>NOP CLASSROOM COURSE</p> <p>NMO-NOP-ADV-C</p> <p>C</p>	<p>The objective of this course is to provide the theoretical background and practical training necessary for the usage of the NOP (Network Operations Portal).</p> <p>Duration: 3 days.</p>
<p>ATFCM MESSAGES</p> <p>NMO-ATFCM-MSG-E</p> <p>NEW E</p>	<p>This e-learning course provides detailed messages used in ATFCM, including those relating to aerodrome closures, low visibility, flight suspensions, revision requests by AO, slots missed re-routeing, message formats, AOWIR and more.</p> <p>Duration: 2 hours.</p>
<p>FLIGHT EFFICIENCY: RE-ROUTING & FUEL COSTS</p> <p>NMO-ATFCM-FE-E</p> <p>E</p>	<p>Aircraft operators face many challenges, including very competitive and deregulated aviation markets, unstable fuel prices and environmental constraints. Both ANSPs and Aircraft Operators (AO) have to improve the way they operate to ensure the sustainable growth of aviation whilst respecting the environment. Flight efficiency has a significant economic and environmental impact and is therefore a key component of the sustainable growth goal.</p> <p>Duration: 3 hours.</p>
<p>AIRPORT COLLABORATIVE DECISION MAKING: FROM CONCEPT TO IMPLEMENTATION AND PARTNERS' ROLES</p> <p>APT-ACDM-E</p> <p>E</p>	<p>Airport CDM is about partners working together more efficiently and transparently in how they work and share data. This course highlights in detail the Airport CDM concept elements in support of local Airport CDM implementation. The dedicated modules focus on the role, tasks and responsibilities of each CDM partner. Finally, in the last module, a flight is followed from one A-CDM airport to another. The course covers each milestone, highlighting the working practices at airports which have implemented A-CDM.</p> <p>Duration: 3 hours.</p>



FLIGHT PLANNERS - FP	
Web based training material and classroom courses for Flight Planners .	
IFPS AND FLIGHT PLANNING E-LEARNING NMO-IFPS-INTRO	This course explains the basic operation, objectives and features of the IFPS. It also introduces the basics of submitting and/or updating flight plans and associated messages. It concludes with an overview of some of the special case situations that may be encountered when filing flight plans. Duration: 6 hours.
IFPS CLASSROOM NMO-IFPS-ADV	The objective of this course is to obtain the theoretical background and practical training for the Integrated Initial Flight Plan Processing System. Duration: 1 day.
FLIGHT PLAN GUIDE NMO-FPL	This Flight Plan Guide allows users to search for the correct format to be used for the different fields of the CIAO Flight Plan via a database.
ATFCM BASIC NMO-ATFCM-BASIC	This e-learning course provides a basic overview of how Air Traffic Flow and Capacity Management in Europe works. Duration: 4 hours.
TOWER STAFF - TWR	
FUNDAMENTALS OF ATFCM NMO-FMP-1	This e-learning course provides the fundamentals of how Air Traffic Flow and Capacity Management works in Europe for FMP and TWR. Duration: 4 hours.
INTRODUCTION TO AIR TRAFFIC FLOW AND CAPACITY MANAGEMENT ASM-ATFCM	This course offers an introduction to ATFCM. It explains the rules and procedures that exist and introduces the main actors - the Network Manager, aircraft operators and flow management positions in area control centres. The course also describes the daily work necessary to achieve effective flow and capacity management. Duration: 4 days
AIRPORT COLLABORATIVE DECISION MAKING: FROM CONCEPT TO IMPLEMENTATION AND PARTNERS' ROLES APT-ACDM-E	Airport CDM is about partners working together more efficiently and transparently in how they work and share data. This course highlights in detail the Airport CDM concept elements in support of local Airport CDM implementation. The dedicated modules focus on the role, tasks and responsibilities of each CDM partner. Finally, in the last module, a flight is followed from one A-CDM airport to another. The course covers each milestone, highlighting the working practices at airports which have implemented A-CDM. Duration: 3 hours.

ATFCM MESSAGES FOR TWR NMO-ATFCM-MSG-TWR-E	 This e-learning course provides detailed messages used in ATFCM, including those relating to aerodrome closures, low visibility, flight suspensions and slots missed message. Duration: 45 min.
AIRSPACE MANAGEMENT CELL - AMC	
ATFCM BASIC NMO-ATFCM-BASIC	 This e-learning course provides a basic overview of how Air Traffic Flow and Capacity Management in Europe works. Duration: 4 hours.
CIAM - CHMI INTERFACE FOR AIRSPACE MANAGEMENT NMO-CIAM-HELP	 Web based training package with detailed explanations of each function in the CHMI Interface for Airspace Management Cells (CIAM).
INTRODUCTION TO AIR TRAFFIC FLOW AND CAPACITY MANAGEMENT ASM-ATFCM	 This course offers an introduction to ATFCM. It explains the rules and procedures that exist and introduces the main actors - the Network Manager, aircraft operators and flow management positions in area control centres. The course also describes the daily work necessary to achieve effective flow and capacity management. Duration: 4 days.
OPERATIONAL AIRSPACE MANAGEMENT ASM-OPS	 The operational airspace management course looks at day-to-day management of European airspace in support of network performance. Duration: 3 days.
TOOLS & UPDATES	
NMOC OPS ROOM TOUR NMO-ATFCM-OPS	 A virtual tour of the Network Manager Operations Centre (NMOC).
LATEST NM CHANGES FOR AO NMO-CHG-AO	 This course contains modules which describe changes to Network Operations and CHMI caused by the latest software releases affecting AO.
LATES NM CHANGES FOR FMP NMO-CHG-FMP	 This video presents the changes to Network Operations caused by the latest software releases.
CIAO - CHMI INTERFACE FOR AIRCRAFT OPERATORS NMO-CIAO-HELP	 Web based training package with detailed explanations of each function in the CIAO.

CIFLO - CHMI INTERFACE FOR FLOW NMO-CIFLO-HELP R	Web-based training module with detailed explanations of each function in the CIFLO.
CITO - CHMI INTERFACE FOR TOWERS NMO-CITO-HELP R	Web based training package with detailed explanations of each function in the CHMI Interface for Tower (CITO).
CIAM - CHMI INTERFACE FOR AIRSPACE MANAGEMENT NMO-CIAM-HELP NEW R	Web based training package with detailed explanations of each function in the CHMI Interface for Airspace Management Cells (CIAM).
FLIGHT PLAN GUIDE NMO-FPL R	This Flight Plan Guide allows users to search for the correct format to be used for the different fields of the CIAO Flight Plan via a database.
THE WHY, THE HOW AND THE WHEN OF CCAMS NMO-CCAMS-INTRO R	This centralised code assignment and management system (CCAMS) awareness module introduces the main concepts of CCAMS and SSR code allocation.
CRISIS & CONTINGENCY	
EVITA NMO-NOP-EVITA R	European crisis Visualisation Interactive Tool for ATFCM (EVITA) is a tool that supports decision making during crisis events that have adverse impact on aviation in Europe. E.g. volcanic ash clouds.
CCAMS CONTINGENCY NMO-CCAMS-CONT E	The module describes the various CCAMS contingency scenarios and how they are handled. Some prior knowledge is assumed. If you are new to CCAMS, please have a look at "CCAMS Introduction" first. Duration: 20 minutes.



AIRPORT INTEGRATION AND THROUGHPUT

The Institute's airport-related courses mainly cover the work of the EUROCONTROL Airport Unit. The Airport Unit provides stakeholders with fast, easy-to-implement and cost-effective solutions to help enhance safety, capacity and efficiency in an environmentally friendly manner, thereby ensuring the integration of the airports into the European ATM network. The courses focus on airport operations, and bring together airports, airlines and air navigation service providers.

Of course, cooperation between airports, airlines and air navigation service providers is nothing new. It is as old as the industry itself. What is new is the very high degree of integration that is increasingly being required to optimise the use of two very limited resources: space on the ground and time.

- Airport Collaborative Decision-Making: from Concept to Implementation and Partners' Roles
- Airport Collaborative Decision-Making
- Aerodrome Resource Management – Runway Safety
- Performance Indicator and Analysis Tool for Airports-Neo
- Deployment of A-SMGCS services
- Airport Capacity & Performance
- Introduction to RECAT-EU for pilots

Airport Integration and Throughput

<p>AIRPORT COLLABORATIVE DECISION MAKING: FROM CONCEPT TO IMPLEMENTATION AND PARTNERS' ROLES</p> <p>APT-ACDM-E E</p>	<p>Airport CDM is about partners working together more efficiently and transparently in how they work and share data. This course highlights in detail the Airport CDM concept elements in support of local Airport CDM implementation. The dedicated modules focus on the role, tasks and responsibilities of each CDM partner. Finally, in the last module, a flight is followed from one A-CDM airport to another. The course covers each milestone, highlighting the working practices at airports which have implemented A-CDM.</p> <p>Duration : Package of 8 modules -3 hours.</p>
<p>AIRPORT COLLABORATIVE DECISION MAKING</p> <p>APT-ACDM C</p>	<p>Airport CDM is about all airport partners working together more efficiently by sharing data and acting on the basis of this common knowledge. This course explains the importance of common operational situational awareness and describes the local benefits and the gains to the overall ATM network.</p> <p>Duration: 3 days.</p>
<p>AERODROME RESOURCE MANAGEMENT - RUNWAY SAFETY</p> <p>APT-ARM C</p>	<p>This course focuses on how to prevent runway incursions. It will help airports to build a strategy to prevent these occurrences from happening. One of the main points is the introduction of local runway safety teams and the use of facilitation techniques to run these teams.</p> <p>Duration: 5 days.</p>
<p>PERFORMANCE INDICATOR AND ANALYSIS TOOL FOR AIRPORTS- NEO</p> <p>APT-PIATA-N C</p>	<p>PIATA Neo is a versatile analysis and modelling tool that offers key functionality for effective airport and TMA performance assessment. It enables thorough analysis of collected airport data and modelling of the maximum runway system throughput in different scenarios.</p> <p>Duration: 5 days.</p>
<p>DEPLOYMENT OF A-SMGCS SERVICES</p> <p>APT-ASMGCS-DPL NEW C</p>	<p>This course provides in-depth knowledge of the Services and requirements for an Advanced-Surface Movement Guidance and Control System (A-SMGCS) to support their deployment at an aerodrome. It mainly reflects the content of the EUROCONTROL Specification for A-SMGCS Services published in 2018.</p> <p>Duration: 3 days.</p>
<p>AIRPORT CAPACITY AND PERFORMANCE</p> <p>APT-ACAP C</p>	<p>The Stakeholders/Actors involved in ATM do not have the same background on all parts of the network, in this case airports and the determination of their capacity. If the Network CDM processes are to be improved, a better understanding of the existing interdependencies is pivotal.</p> <p>Duration: 4 days.</p>
<p>INTRODUCTION TO RECAT-EU FOR PILOTS</p> <p>APT-RECAT-EU R</p>	<p>This module introduces to Airspace Stakeholders, especially Flight Crews, the newly optimized wake turbulence categories and separation minima as alternative standard at European airports, known as "RECAT-EU". In addition to introducing the context and principles for re-categorisation, it allows users to check the RECAT-EU wake vortex category for common aircraft types.</p>



ENVIRONMENT

The United Nations Intergovernmental Panel on Climate Change estimates aviation's impact on the environment as 2-3% of the world's CO₂ emissions. This percentage is likely to increase in the coming years owing to both growth in air traffic and the decarbonisation of other sectors. Aviation in Europe is faced with conflicting and growing demands: to increase capacity and connectivity on the one side, and to reduce environmental impact on the other side. The enhanced environmental performance of aircraft through technological improvements is slowing and ATM is expected to make an increasingly important contribution to aviation sustainability and the achievement of European performance targets.

EUROCONTROL stimulates environmental progress in air traffic management by assessing the environmental impact of ATM. We also promote environmental best practices and a collaborative stakeholder approach to mitigate the environmental impact of aviation.

- [Aviation and the Environment](#)

AVIATION AND THE ENVIRONMENT

ENV-ENV



The Single European Sky (SES) initiative and the SES ATM Research (SESAR) Programme include efficiency and environmental objectives within their overarching objective of sustainable development. This course provides a broad overview of the environmental impact of the aviation industry and the measures that can be taken to improve sustainability.

Duration: 5 days.






INFORMATION MANAGEMENT

The future will bring many changes to the way in which information is exchanged in ATM. Accurate information (aeronautical, weather, flight planning, etc.) is essential for efficient and safe flight. This is recognised through the inclusion of aeronautical information management (AIM) within the Single European Sky initiative, and with the crucial role of system-wide information management (SWIM) in SESAR.

The courses provides an insight into the complex technical, operational and regulatory developments in this field, following the path outlined in the ICAO Roadmap for the Transition from AIS to AIM, moving towards SWIM.

- [From AIS to AIM Towards Swim](#)
- [Implementing Aeronautical Data Quality \(ADQ\)](#)
- [SWIM - From Concept To Applications](#)

FROM AIS TO AIM TOWARDS SWIM IM-AIM	 Duration: 4 days.	AIM is about providing the right aeronautical information in the right place at the right time. This course explains how to implement AIM, and how it affects current AIS practice. The SES Aeronautical Data Quality IR, Digital NOTAMs and the European AIS Database are also covered, as is the evolution towards SWIM (system-wide information management).
IMPLEMENTING AERONAUTICAL DATA QUALITY (ADQ) IM-ADQ	 Duration: 5 days.	This course aims to provide stakeholders with the necessary understanding, tools, and experience to proceed with implementation of the ADQ regulation, EU 73/2010.
SWIM - FROM CONCEPT TO APPLICATIONS IM-SWIM	 Duration: 3 days.	The System Wide Information Management (SWIM) concept covers a complete paradigm change in how information is managed throughout its lifecycle and across the whole European ATM system. It is paramount that both consumers and providers of ATM information be fully prepared for this change.











COMMUNICATIONS

Aeronautical telecommunications are a core enabler for air traffic management.

Today, traditional voice communications are no longer sufficient to support modern operations. The introduction – in addition to voice – of a variety of data transfer systems for new and existing mobile and fixed communications systems, makes this a rapidly developing sector of the industry.

The courses offered provide a detailed understanding of current, short-term and future communications networks and applications, and also cover the planned migration steps as part of the Single European Sky, SESAR and ICAO strategies and standardisation activities.

- Ground Data Networks and Applications in Aviation
- Data Link Implementation in Europe
- Towards Voice over IP in Aeronautical Communications
- ATS Messaging
- European Frequency Management, Principle and Tools
- Voice Over IP in ATM Test Suite
- Introduction to ATS Messaging Management Centre (AMC)
- ATS Messaging Management

<p>GROUND DATA NETWORKS AND APPLICATIONS IN AVIATION</p> <p>COM-DATA </p>	<p>This course provides a comprehensive overview of the data communication applications, technology and infrastructure used in ATM. The Pan-European Network Services (PENS) are covered in detail, including Surveillance, OLDI/FMTP, Messaging, and others. Related Single European Sky issues are analysed, together with strategic developments.</p> <p>Duration: 5 days.</p>
<p>DATA LINK IMPLEMENTATION IN EUROPE</p> <p>COM-DLK </p>	<p>This course addresses the implementation of data link services in Europe following the introduction of the Data Link Services Implementing Rule (Regulation 29/2009) amended by EU 2015/310.</p> <p>Duration: 5 days.</p>
<p>TOWARDS VOICE OVER IP IN AERONAUTICAL COMMUNICATIONS</p> <p>COM-VOICE </p>	<p>This course provides a detailed view of aeronautical voice telephony and radio networks, largely focusing on the transition of current systems to the Voice over Internet Protocol (VoIP). It looks in detail at VoIP principles and its future use in aeronautical communications, including crucial migration issues for integrating VoIP into the ATM network architecture.</p> <p>Duration: 4 days.</p>
<p>ATS MESSAGING</p> <p>COM-AMHS-AMC-EDS </p>	<p>This course covers messaging techniques and their applications in ATM. It provides a detailed explanation of how to migrate from the current AFTN/CIDIN to the new AMHS systems, and the latter's new capabilities from both technical and operational perspectives. It also addresses related strategic developments in Europe and elsewhere.</p> <p>Duration: 4 days.</p>
<p>EUROPEAN FREQUENCY MANAGEMENT, PRINCIPLE AND TOOLS</p> <p>COM-FREQ </p>	<p>The communication, navigation and surveillance systems used in aviation rely on the availability of radio frequencies without interference. The optimised and flexible management of the radio spectrum allocated to aviation is a must in order to support today's operations and the future ATM evolution. This course will present today's international agreements and processes plus the automation systems used to manage European aviation frequency allocation.</p> <p>Duration: 5 days.</p>
<p>VOICE OVER IP IN ATM TEST SUITE</p> <p>COM-VOTER </p>	<p>The course helps all VOTER (EUROCONTROL VoIP in ATM Test Suite) users to understand the test suite structure, its installation, configuration and execution. The test result analysis and test report generation are introduced to complete the test work. The Voice Quality measurement part of VOTER is also introduced and demonstrated.</p> <p>Duration: 2 days.</p>
<p>INTRODUCTION TO ATS MESSAGING MANAGEMENT CENTER (AMC)</p> <p>COM-AMC </p>	<p>This AMC package provides first information on AMC and its user types. Then information for each user type is provided in separate modules: CCC operators, External COM operators, AMF-I users, Read/Only users.</p> <p>Duration: Package of 5 modules -2 hours.</p>
<p>ATS MESSAGING MANAGEMENT</p> <p>COM-AMC-EDS </p>	<p>This course gives a detailed presentation of AMC and EDS. Essential features of the tools are explained and some demonstrations are included. The way that EDS and AMC support the global transition from AFTN/CIDIN to AMHS is covered. The role of those common facilities is highlighted throughout the course.</p> <p>Duration: 2 days.</p>



NAVIGATION

The navigational performance of an aircraft is dependent on two main factors: the navigation aids, whether ground or space-based, that are used, their geometry relative to the aircraft and the capabilities of the aircraft's avionics. The navigation domain addresses recent advances in navigation capabilities and the performance that can be delivered by the associated infrastructure. These advances include the further development of performance-based navigation (PBN), which has enabled improvements to be made in airspace design and provides a far greater degree of flexibility in aircraft operations compared to conventional navigation.

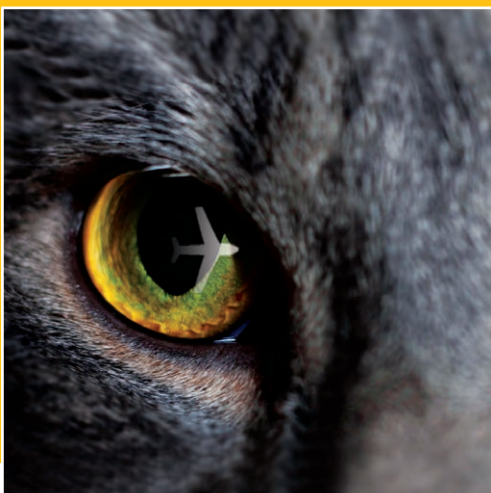
Ultimately, advanced navigation functionalities, with the support of appropriate ATM tools, will enable aircraft operators to conduct their flights in accordance with preferred trajectories, dynamically adjusted, in an optimum and cost-efficient manner.

- [Performance Based Navigation \(PBN\) for ECAC](#)
- [Global Navigation Satellite System for Aviation](#)
- [Area Navigation in European Terminal Control Areas \(TMAs\)](#)
- [Performance Based Navigation \(PBN\) Awareness Package](#)
- [European Airspace Concept Workshop for PBN Implementation](#)
- [Navigation Infrastructure Assessment using DEMETER: Introduction](#)
- [Navigation Infrastructure Assessment using DEMETER: Advanced](#)
- [PEGASUS Toolbox](#)

<p>PERFORMANCE BASED NAVIGATION (PBN) FOR ECAC</p> <p>NAV-PBN</p> <p>C</p>	<p>This course, originally developed to support the ICAO Airspace workshops, explains the ICAO PBN concept and clarifies the differences between RNAV and RNP. It discusses the different navigation specifications together with the navigational infrastructure. It also considers the steps required to implement PBN in ECAC and discusses the PCP Implementing Rule (IR) ATM Functionality 1 (AF1) as well as the current status of the PBN IR.</p> <p>Duration: 4 days.</p>
<p>GLOBAL NAVIGATION SATELLITE SYSTEM FOR AVIATION</p> <p>NAV-GNSS</p> <p>C</p>	<p>This course explains navigation satellite constellations, signal structures, system errors and augmentation. GNSS limitations and vulnerabilities are considered together with a review of GPS, GLONASS, GALILEO and Beidou evolutions. On completion, participants should have an in-depth understanding of GNSS and its benefits for civil aviation.</p> <p>Duration: 5 days.</p>
<p>AREA NAVIGATION IN EUROPEAN TERMINAL CONTROL AREAS (TMAS)</p> <p>NAV-PRNAV-RNAV1</p> <p>E</p>	<p>This generic e-learning module describes the use of Performance Based Navigation (PBN) in the TMA, specifically RNAV1 which within Europe is termed Precision RNAV (P-RNAV). The package addresses aircraft functionality, the benefits of RNAV SIDs/STARs, the different types of waypoint and how turn performance is affected, and a number of ATC best practices, including RTF phraseology, specifically related to RNAV operations. This package has been updated to reflect both PBN and the latest changes in the ATC Flight Plan.</p> <p>Duration: 2 hours.</p>
<p>PERFORMANCE BASED NAVIGATION (PBN) AWARENESS PACKAGE</p> <p>NAV-PBN-AWR</p> <p>E</p>	<p>This upgraded WBT provides detailed information on the 3 components of PBN: navigation applications, navigation specifications and navigation infrastructure. The WBT explains the concept, its enablers and provides detailed information on how to implement PBN.</p> <p>This version of the training has been fully aligned to the new PBN manual (ICAO Doc 9613 Edition 4) released in 2013.</p> <p>Duration: Package of 4 modules - 4 hours.</p>
<p>EUROPEAN AIRSPACE CONCEPT WORKSHOP FOR PBN IMPLEMENTATION</p> <p>NAV-AIR</p> <p>C</p>	<p>The workshop details the activities described in the Airspace Concept Handbook for PBN Implementation. PBN implementation is about teamwork and is a multi-disciplined task and a practical exercise, which demonstrates the importance of good airspace design to reduce workload, enforces this message.</p> <p>Duration: 4 days.</p>
<p>NAVIGATION INFRASTRUCTURE ASSESSMENT USING DEMETER: INTRODUCTION</p> <p>NAV-DEM-INTRO</p> <p>NEW C</p>	<p>A specific tools course aimed at technical experts involved in navigation infrastructure assessment and planning: navigation infrastructure experts, flight inspectors, procedure designers & airspace planners. The course explains how to use DEMETER for infrastructure assessment and optimization.</p> <p>Duration: 2 days.</p>

<p>NAVIGATION INFRASTRUCTURE ASSESSMENT USING DEMETER: ADVANCED</p> <p>NAV-DEM-ADV NEW C</p>	<p>A specific tools course aimed at technical experts involved in navigation infrastructure assessment and planning: navigation infrastructure experts, flight inspectors, procedure designers & airspace planners. The course explains how to use DEMETER for infrastructure assessment and optimization.</p> <p>Duration: 3 days.</p>
<p>PEGASUS TOOLBOX</p> <p>NAV-PEG C</p>	<p>PEGASUS supports the validation of Space-Based Augmentation Systems and Ground-Based Augmentation Systems as well as the future GALILEO system for civil aviation use. PEGASUS is designed to assist ANS providers and stakeholders in evaluating the performance of satellite navigation signals-in-space.</p> <p>Duration: 5 days.</p>





SURVEILLANCE




Surveillance is a key part of ATM. Radar, the mainstay of surveillance for many years, is now being supplemented by a variety of newer techniques such as ADS-B, ADS-C and multilateration. Other techniques appear on the horizon.

The key words for the future of surveillance are “performance” and “interoperability”. These aspects are covered by the Surveillance Performance and Interoperability Implementing Rule (SPI IR) which is addressed in the surveillance courses that are available

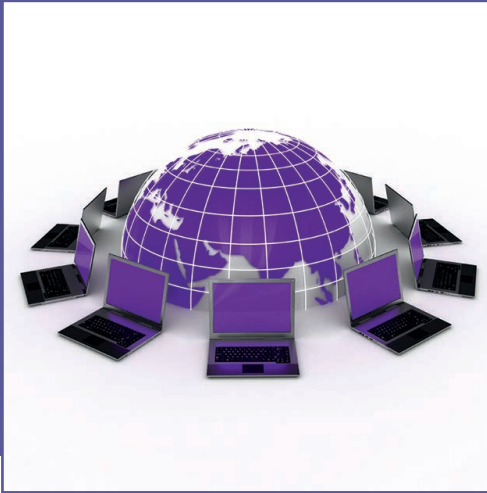
The Institute offers courses covering the principles of both traditional and new surveillance techniques. Additionally, a range of skills training is available specifically dealing with surveillance products such as ATM Surveillance Tracker and Server (ARTAS) systems, Surveillance Analysis Support System for Centre (SASS-C) software and Surveillance Data Distribution System (SDDS).

- The Surveillance Chain from Sensor to Display
- Implementation of Automatic Dependent Surveillance - Broadcast and Multilateration
- Advanced Radar Technology
- Surveillance Data Distribution System
- ARTAS: From concept to reality
- ARTAS: Tuning the Tracker to Optimal Performance
- ARTAS: Local ARTAS Maintenance and Operational Support
- Introduction to Sensor Evaluation with SASS-C
- In-depth Evaluation of the Surveillance Infrastructure using SASS-C
- Solid Surveillance Planning Based on Coverage Analysis

<p>THE SURVEILLANCE CHAIN FROM SENSOR TO DISPLAY</p> <p>SUR-CHAIN </p>	<p>This course provides an overview -relevant for both civil and military- of the complete Surveillance Chain and of surveillance relevant avionics. It includes the current sensors and the systems for data exchange, tracking and evaluation. In addition surveillance aspects in SES/SESAR are discussed.</p> <p>Duration: 5 days.</p>
<p>IMPLEMENTATION OF AUTOMATIC DEPENDENT SURVEILLANCE - BROADCAST AND MULTILATERATION</p> <p>SUR-ADS-B-MLAT </p>	<p>This course provides detailed information about ADS-B and especially multilateration implementation (e.g. required avionics, integration into existing surveillance environment, performance, CBA, security).</p> <p>Duration: 4 days.</p>
<p>ADVANCED RADAR TECHNOLOGY</p> <p>SUR-RAD-ADV </p>	<p>Through a theoretical and practical session the course gives an in-depth view of the complete radar chain (primary, secondary, including Mode S), from detection to plot output. As such the course will help to understand the radar as an important contributor to safety and performance.</p> <p>Duration: 4 days.</p>
<p>SURVEILLANCE DATA DISTRIBUTION SYSTEM</p> <p>SUR-SDDS </p>	<p>SDDS (Surveillance Data Distribution), the successor of RMCDE, is the European state-of-the-art system for Surveillance Data Distribution and as such operational in an increasing number of European States. This course leads to a basic understanding of the SDD network architecture, and to basic practical skills in configuring and managing the SDDS.</p> <p>Duration: 4 days.</p>
<p>ARTAS: FROM CONCEPT TO REALITY</p> <p>SUR-ARTAS </p>	<p>ARTAS is the European state-of-the-art SDPS (surveillance data processing system). It is operational in an increasing number of European states and is being implemented in a large number of other states for pre-operational evaluation. This course provides a theoretical and practical introduction to the most recent ARTAS version (currently V8).</p> <p>Duration: 4 days.</p>
<p>ARTAS : TUNING THE TRACKER TO OPTIMAL PERFORMANCE</p> <p>SUR-ARTAS-TRK </p>	<p>ARTAS is the European state-of-the-art SDPS (surveillance data processing system). It is operational in an increasing number of European states and is being implemented in a large number of other states for pre-operational evaluation. This course provides an in-depth understanding of the ARTAS tracking algorithm and corresponding tuning.</p> <p>Duration: 4 days.</p>
<p>ARTAS: LOCAL ARTAS MAINTENANCE AND OPERATIONAL SUPPORT – TECHNICAL WATCH OPERATOR</p> <p>SUR-ARTAS-LAMOS </p>	<p>ARTAS Local Maintenance and Operational Support course.</p> <p>As of the 1st of January 2017, this course is subject to a User-Pays-Principle. Course registration is subject to a fee for all participants.</p> <p>Duration: 5 days.</p>

INTRODUCTION TO SENSOR EVALUATIONS WITH SASS-C SUR-VERIF-INTRO	 Duration: 5 days.	Surveillance Analysis Support System for Centre (SASS-C) is a software program for the evaluation and analysis of surveillance sensors. This course leads to basic skills in surveillance sensor evaluation and is designed for SASS-C users with little or no experience. The course also describes the role of SASS-C within the Single European Sky context.
IN-DEPTH EVALUATION OF THE SURVEILLANCE INFRASTRUCTURE USING SASS-C SUR-VERIF-ADV	 Duration : 3 days.	Surveillance Analysis Support System for Centre (SASS-C) is a software program for the evaluation and analysis of surveillance sensors. This course leads to advanced skills in surveillance sensor evaluation and is designed for experienced SASS-C users.
SOLID SURVEILLANCE PLANNING BASED ON COVERAGE ANALYSIS SUR-PREDICT	 Duration: 2 days.	In this course CAPTv2, a SASS-C-V7 module for coverage analysis and planning, is the enabling software tool for achieving the main objective, i.e. planning surveillance system installations, based on solid and objective coverage analysis.





DATA PROCESSING

The data processing domain addresses all systems which process flight data and environment data in support of integrated ATM operations. The domain is therefore one of the enablers for the achievement of integration and interoperability between systems, and contributes to the strategic objectives of uniformity and capacity. The domain is a main contributor to the development of community specifications and implementing rules in the context of the mandates provided by the European Commission to EUROCONTROL in support of the Single European Sky regulation programme.

The course provides an overview of how the flight data processing system (FDPS) and the surveillance data processing system (SDPS) manage and integrate data through all phases of flight. Value Added Tools are as well looked into in order to provide a comprehensive understanding of the full data processing chain.

- Understanding the Data Processing Chain in ATM

UNDERSTANDING THE DATA PROCESSING CHAIN IN ATM

DPS-DPC



This course provides a basic foundation of knowledge and understanding of the principles used in ATM data processing (flight data processing [FDP], surveillance data processing [SDP] and added value functions) and an overview of their use in ATM operations. All data processing aspects are related to the Single European Sky (SES) implementing rules.

Duration: 5 days.



SAFETY MANAGEMENT

In spite of a downturn in traffic over recent years, air traffic in Europe is increasing again, and the implementation of the Single European Sky will see new air navigation system technology and concepts for ATM/ANS being introduced, with increasing interactions with other fields of civil aviation such as airworthiness, air operations and aerodromes. The regulatory framework applicable to ATM/ANS requires that service providers be able to demonstrate that the system is being managed in an effective and proactive manner and that it is delivering high(er) safety performance.

These courses help providers of ATM/ANS services to understand how to safely manage their services in a manner which adds value and is compliant with the EU legislation in force.

The range of courses is designed to offer everything, from a general introduction to the topic to specialist knowledge of specific safety management techniques.

Note that most of the courses available are consistent with new common requirements and oversight regulation (2017/373) and its Acceptable Means of Compliance and Guidance Material applicable from 2nd January 2020.

The diagrams shown on the following pages summarise this visually.

The courses in this domain are part of a number of training programmes described in the 'Programme' section.

All the courses shown may be delivered on site, on request. IANS is willing, as far as possible, to tailor these courses to the specific needs of its customers.

Please note that attendance of some courses is subject to meeting pre-requisites.

Participants must check these pre-requisites and ensure that they meet them before requesting registration.

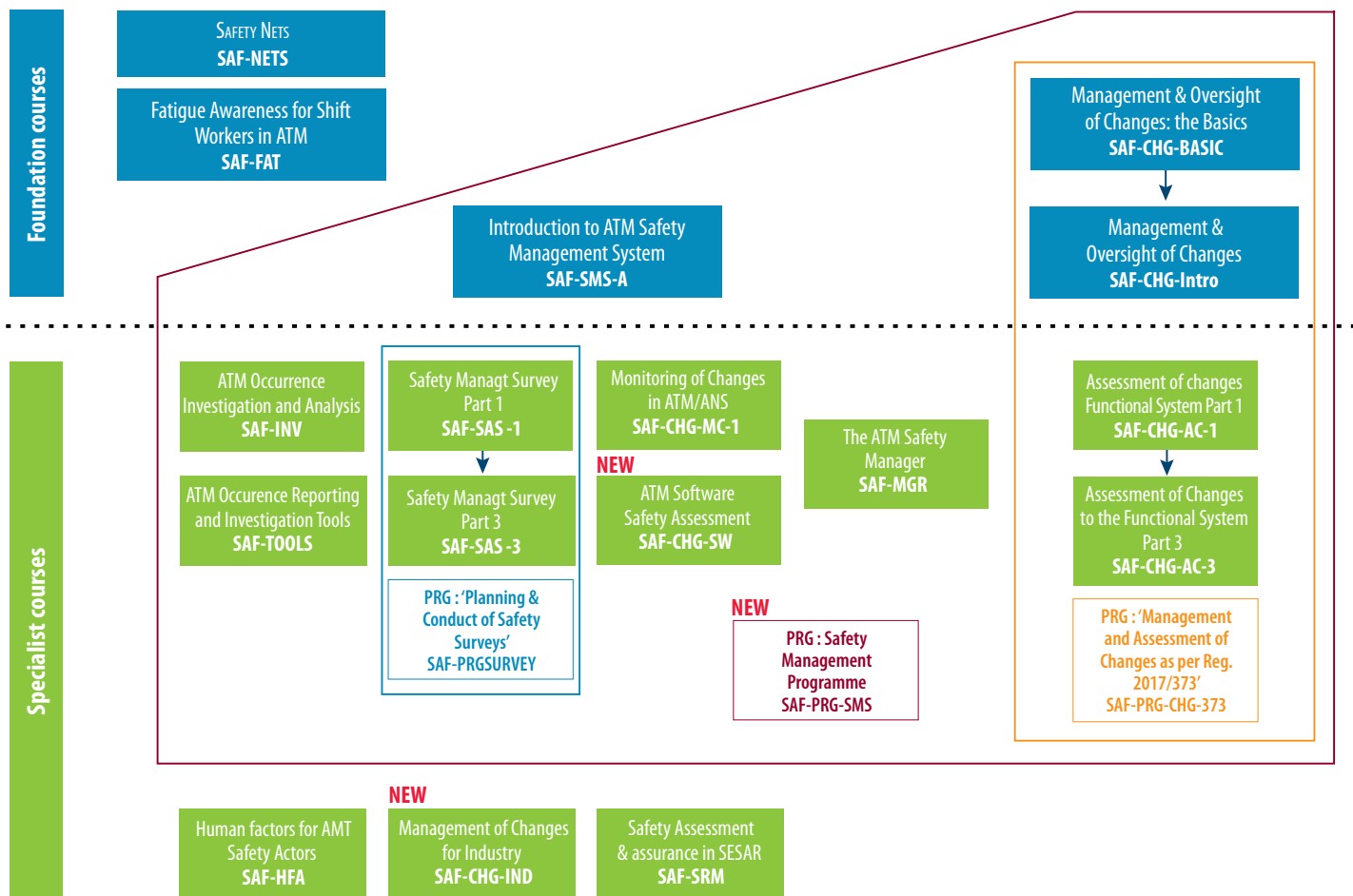
Foundation courses:

- Management and Oversight of Changes : The Basics
- Management and Oversight of Changes
- Safety Nets
- Introduction to ATM Safety Management System
- Fatigue awareness for shift workers in ATM

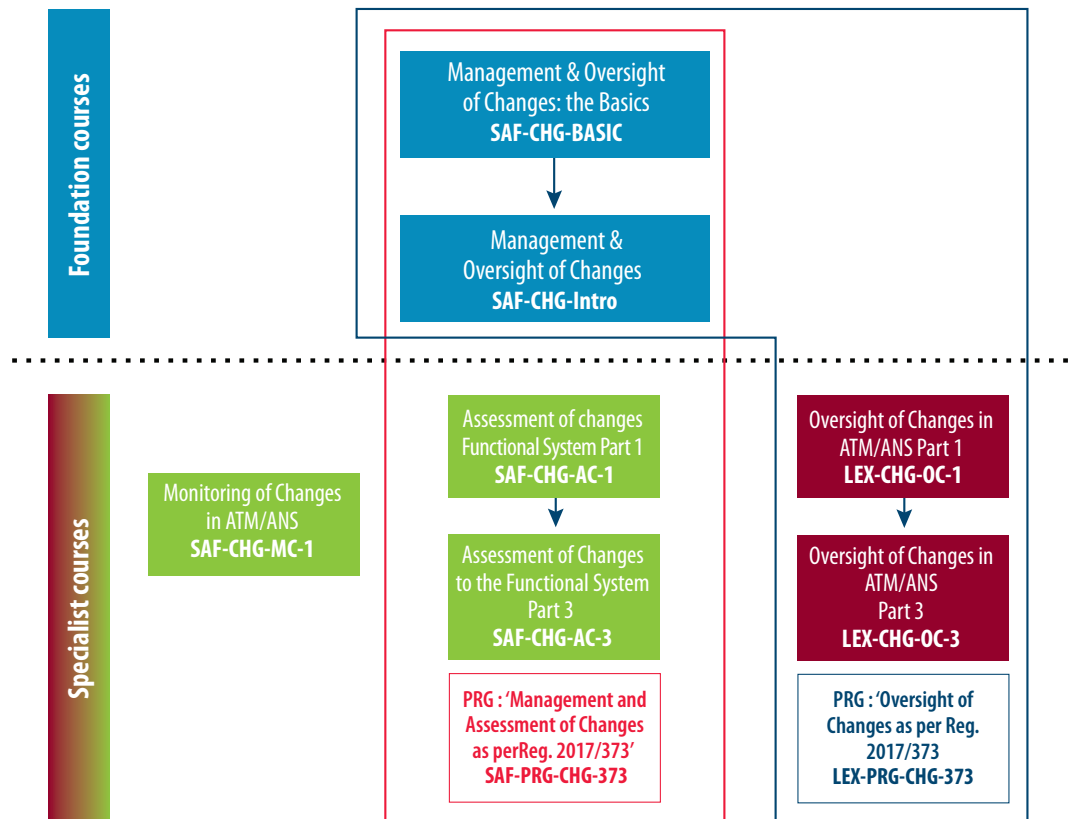
Specialist courses:

- Human Factors for ATM Safety Actors
- ATM Occurrence Investigation and Analysis
- ATM Occurrence Reporting and Investigation Tools
- Safety Management Survey stage 1
- Assessment of changes to the functional system Part 1 & 3
- Monitoring of Changes in ATM/ANS Part 1
- Safety Assessment and Assurance in SESAR
- The ATM Safety Manager
- Management of Changes for Industry
- ATM Software Safety Assessment

SAF Training Programmes





IANS Courses & Training Programmes on ATM/ANS Changes



<p>MANAGEMENT AND OVERSIGHT OF CHANGES: THE BASICS</p> <p>SAF-CHG-BASIC</p> <p>E</p>	<p>This course introduces participants to the concepts and principles of safety management of changes in ATM/ANS as per 2017/373. It explains the context within which these changes take place, and presents the definitions and concepts that are necessary to engage in this subject.</p> <p>Duration: 7 hours.</p>
<p>MANAGEMENT AND OVERSIGHT OF CHANGES</p> <p>SAF-CHG-INTRO</p> <p>C</p>	<p>This course provides an overview of:</p> <ul style="list-style-type: none"> • the management of changes • the process of change assessment (safety perspective), and • the process of oversight of changes <p>It is consistent with the new Regulation 2017/373 laying down common requirements for ATM/ANS service providers and its AMC-GM.</p> <p>Duration: 5 days.</p>
<p>SAFETY NETS</p> <p>SAF-NETS</p> <p>E</p>	<p>This awareness package allows you to discover safety nets and STCA, STCA implementation and STCA key messages.</p> <p>Duration: 1 hour.</p>
<p>FATIGUE AWARENESS FOR SHIFT WORKERS IN ATMT</p> <p>SAF-FAT</p> <p>E</p>	<p>This course supports shift workers in safety critical industries such as Air Traffic Control to understand better the concept of fatigue and introduces useful notions for the individual management of fatigue.</p> <p>Duration: 1 hour.</p>
<p>INTRODUCTION TO ATM SAFETY MANAGEMENT SYSTEM</p> <p>SAF-SMS-A</p> <p>C</p>	<p>The course provides an introduction to all theoretical aspects together with the implementation issues of safety management systems within ATM with the aim of improving the safety awareness of participants, including their understanding of safety roles and responsibilities.</p> <p>Duration: 3 days.</p>
<p>HUMAN FACTORS FOR ATM SAFETY ACTORS</p> <p>SAF-HFA</p> <p>C</p>	<p>This course covers the fundamentals of human factors and is accompanied by actual ATM operational examples. It is designed for a wide audience to improve the understanding of the human role in keeping the ATM system safe.</p> <p>Duration: 5 days.</p>
<p>ATM OCCURRENCE INVESTIGATION AND ANALYSIS</p> <p>SAF-INV</p> <p>C</p>	<p>The course provides the theoretical knowledge and practical skills to enable ATM unit investigators to conduct internal Systemic ATM Occurrence Investigations.</p> <p>Duration: 5 days.</p>

Safety Management

<p>ATM OCCURRENCE REPORTING AND INVESTIGATION TOOLS</p> <p>SAF-TOOLS</p> <p>C</p>	<p>This course is designed to introduce participants to the use of the taxonomy and different tools available to support safety occurrence reporting, investigation, data analysis and data exchange developed by EUROCONTROL.</p> <p>Duration: 5 days.</p>
<p>SAFETY MANAGEMENT SURVEY-STAGE 1</p> <p>SAF-SAS-1</p> <p>C</p>	<p>Safety survey activities complement other SMS activities to help ensure the on-going safety of service provision. Whereas many aspects of an SMS focus on failure, the value of surveys is that they identify the positive factors that contribute to safety. The course will be of particular benefit to ATM staff conducting safety surveys within an SMS.</p> <p>Duration: 3 days.</p>
<p>ASSESSMENT OF CHANGES TO THE FUNCTIONAL SYSTEM PART 1</p> <p>SAF-CHG-AC-1</p> <p>C</p>	<p>The course provides an overview of the steps for the safety assessment and safety support assessment of a change to the functional system, as per Regulation No. 2017/373 & its AMC/GM.</p> <p>Exercises are based on an attractive change: remote tower operations at an international, medium-size airport.</p> <p>Duration: 5 days.</p>
<p>ASSESSMENT OF CHANGES TO THE FUNCTIONAL SYSTEM PART 3</p> <p>SAF-CHG-AC-3</p> <p>C</p>	<p>This course provides participants with a place to present their work ('Part 2') and get feedback from the instructional team and other course participants.</p> <p>It is consistent with Regulation No. 2017/373 (laying down common requirements for providers of ATM/ANS and their oversight) and its AMC/GM.</p> <p>Duration: 2 days.</p>
<p>MONITORING OF CHANGES IN ATM/ANS PART 1</p> <p>SAF-CHG-MC-1</p> <p>C</p>	<p>The course covers all aspects of the safety monitoring of changes in operations. It addresses issues relating to the maintenance/update of safety cases and/or safety support cases, the follow-up of safety requirements during operations and the migration/move towards a unit safety case.</p> <p>Duration: 4 days.</p>
<p>SAFETY ASSESSMENT AND ASSURANCE IN SESAR</p> <p>SAF-SRM</p> <p>C</p>	<p>This course provides a theoretical and practical guide on how to do safety assessment and develop safety assurance in SESAR. Through this course certificate, you can build the safety knowledge and develop the safety skills you need to accompany the SESAR development and deployment.</p> <p>Duration: 5 days.</p>
<p>THE ATM SAFETY MANAGER</p> <p>SAF-MGR</p> <p>C</p>	<p>The course is designed for those responsible for developing, implementing and participating in a systematic approach to managing ATM safety via the SMS, including the necessary organisational structures, accountabilities, policies and procedures.</p> <p>Duration: 5 days.</p>

MANAGEMENT OF CHANGES FOR INDUSTRY SAF-CHG-IND NEW 	<p>This course provides an overview, from the perspective of industrial partners, of the management of changes in ATM/ANS, the process of change assessment. It also highlights the typical relationship between providers of ATM/ANS and contractors (industry). It is a mandatory introduction to SAF-CHG-SW.</p> <p>Duration: 2 days.</p>
ATM SOFTWARE SAFETY ASSESSMENT SAF-CHG-SW NEW 	<p>This course provides guidance on the management of software safety assurance activities for ATM systems. The course addresses the concepts of safety assessment as per Regulation N° 2017/373 and its associated AMC/GM. The course is based on industrial standards ED-109A and ED-153.</p> <p>Duration: 3 days.</p>



SECURITY MANAGEMENT

A security incident may have a very negative impact on flight safety, but it can also impact the provision of air navigation services, the availability of ATM/CNS (Communications Navigation Surveillance) infrastructure or the confidentiality, integrity and availability of data.

Future operational concepts such as SESAR and NextGen will increasingly rely on information-sharing and the use of new technologies. It is therefore vital to protect ATM assets if we are to enable the level of safety, integration and interoperability required under future operational concepts. ATM assets include aircraft, people (e.g. passengers, crew and ATM personnel), physical infrastructures, Communication, Navigation & Surveillance (CNS systems), ICT (Information and Communications Technologies) systems, operational data and air navigation services.




These courses support air navigation service providers and NSA staff in understanding how to ensure the required level of security in managing their services in a manner that is compliant with the regulations in force.

The range of courses is designed to offer a basic understanding of security regulation and management and to explain in more detail the role of cyber security in ATM.

All the courses shown may be delivered on site, on request. IANS is willing, as far as possible, to tailor these courses to the specific needs of its customers.

Please note that attendance of some courses is subject to meeting pre-requisites. Participants must check these pre-requisites and ensure that they meet satisfy them before requesting registration.

- [Cyber Security in ATM](#)
- [Managing Security in ATM](#)
- [Oversight of Security Management System](#)

CYBER SECURITY IN ATM SEC-CYBER		This course describes the various cyber threats, including impact and vulnerabilities, to the ATM system. Cyber in this context means CNS and Information Management. A concrete case is presented to illustrate this. The course also explains how to manage cyber security incidents. Duration: 4 days.
MANAGING SECURITY IN ATM SEC-MS		This ATM security course provides participants with a systematic approach to managing ATM security risks, including a security risk assessment and the implementation of security controls. It describes the fundamentals in the area of scope, regulatory framework and the security management systems. Duration: 3 days.
OVERSIGHT OF SECURITY MANAGEMENT SYSTEM LEX-SEC - C		This course helps participants conduct the effective regulatory oversight of ATM service provider organisations' security management systems (SEC MS). Duration: 2 days.



HUMAN PERFORMANCE IN ATM

Welcome to the “people” training domain! Competency, teamwork, safety and accountability are the values of ATM that IANS addresses through HUM training, with a focus on human factors. We work with people in control of complex systems and operations. Our goal, besides matching the system and operations with ATM staff competencies, is to go one step beyond: to empower professionals to step outside their own performance, analyse the competency they are applying and develop it further.

With that in mind, IANS addresses human performance aspects of ATM through a selection of courses that incorporates the human factors aspects of the ATM network, Single European Sky and SESAR programmes. Our courses fall under one of three “subgroups- generic HF courses, courses for HF practitioners, trainers and/or ATCOs and courses for ATCOs.

* We recommend the following courses to managers, operational staff and administrators with an interest in HF: *Human Factors for ATM Safety Actors HFA; Stress and Fatigue Management SFM; Systems Thinking SYS and TRM in ATM TRM-A.*

* Courses we recommend for trainers, HF practitioners and/or ATCOs are: *Integrating HF in ATM Projects HF Case; Design and Assessment of Systems Using Human Centered Approaches ; Human Error Analysis HERA; Theoretical Training Instructor TTI; TRM Facilitator TRM-F and the courses listed above.*

* Courses recommended for ATCOs, besides those listed before are: *Practical Training Instructor skills for OJTI/STDI; Controller Competency Assessor CCA; Design of ATC Simulation Exercises and Courses SIM, Energy Management EM and Operational Supervisor SUP; including the REF courses.*

Aside from the suggestions above (*), IANS is looking forward to welcoming you to any HUM domain course of your choice, provided you fulfil the pre-requisites (see course descriptions).

The HUM domain courses reflect all the EU regulatory requirements and ICAO recommendations affecting both the staff and the service providing entities.

Courses may be delivered on-site and on request. IANS is willing, as far as possible, to tailor these courses to the specific needs of its customers. Dedicated support to operational implementation of elements of the training acquired either at IANS or on-site can be provided on request.

This year we include two new entries in our portfolio of well established courses: Design and Assessment of Systems Using Human Centered Approaches - DESIGN and Energy Management - EM courses.











We are looking forward to meeting you! HUM Domain team.

- Theoretical Training Instructor Skills
- Design of ATC Simulation Exercises and Courses
- Practical Training Instructor skills for OJTI and STDI
- Controller Competency Assessor
- Operational Supervisor
- TRM in ATM
- TRM Facilitator
- Systems Thinking for Safety
- Introduction to the effects of Stress
- Fatigue awareness for shift workers in ATMStress and Fatigue management
- Energy Management
- Human Factors for ATM Safety Actors
- Design and Assessment Using Human Centered Approaches
- Integrating Human Factors in ATM Projects Human Error Analysis with HERA
- Practical Training Instructor Skills for OJTI and STDI - Refresher
- Controller Competency Assessor – Refresher
- Operational Supervisor – Refresher
- OJTI Blended Training Materials
- Presentation Skills
- ATSEP Human Factors Training Material
- Team Resource Management – Refresher

Human Performance in ATM

<p>THEORETICAL TRAINING INSTRUCTOR SKILLS</p> <p>HUM-TTI C</p>	<p>This course is appropriate for colleagues who will be asked to design, develop and deliver theoretical training for ATM staff and/or presentation on ATM related events. It aims at fulfilling criteria from AMC to Part-ATCO, subpart C, Section 1 (Instructors) for Commission Regulation (EU) 2015/340.</p> <p>Duration: 5 days.</p>
<p>DESIGN OF ATC SIMULATION EXERCISES AND COURSES</p> <p>HUM-SIM C</p>	<p>This course explains from both theoretical and practical perspectives the principles for creating effective ATC simulation exercises and courses and developing ATC simulation courses.</p> <p>Duration: 8 days over 2 weeks.</p>
<p>PRACTICAL TRAINING INSTRUCTOR SKILLS FOR OJTI AND STDI</p> <p>HUM-OJTI C</p>	<p>The OJTI/STDI Training Programme provides theoretical knowledge and practical skills for radar controllers who will undertake OJTI/STDI duties. This course is open to all “would-be” OJTIs/STDIs but has the added value of being an approved course (Belgian Supervisory Authority), for those requiring it; which includes an examination and assessments in both theory and practical OJTI/STDI skills.</p> <p>As of 1st of January 2015 this course is subject to a User-Pays-Principle – course registration is subject to a fee for all participants.</p> <p>Duration: 10 days</p>
<p>CONTROLLER COMPETENCY ASSESSOR</p> <p>HUM-CCA C</p>	<p>This course is provided for air traffic controllers who will assess the competence of other controllers. The assessment task can involve the issue of a licence or new unit endorsement. As part of a local competence scheme, the assessment task can also include the renewal of an existing unit endorsement.</p> <p>As of 1st of January 2015 this course is subject to a User-Pays-Principle – course registration is subject to a fee for all participants.</p> <p>Duration: 5 days.</p>
<p>OPERATIONAL SUPERVISOR</p> <p>HUM-SUP C</p>	<p>This course is primarily intended to equip newly appointed ATS supervisors to perform effectively in their supervisory role. It may also be of value to experienced supervisors who wish to broaden their knowledge.</p> <p>Duration: 5 days.</p>
<p>TRM IN ATM</p> <p>HUM-TRM-A C</p>	<p>The TRM-A course supports ATCO ATSEP AIM and other professionals in their effort in addressing human factors in ATM ops. This three-day course provides an understanding of TRM, an awareness of the benefits of TRM for the operational safety culture and the methods preferably employed in a TRM program.</p> <p>Duration: 3 days.</p>
<p>TRM FACILITATOR</p> <p>HUM-TRM-F C</p>	<p>Team Resource Management is an operational HF concept for ATCOs and other interested ATM staff. The Team Resource Management Practical Facilitation Skills course enables ANSPs to implement and maintain TRM activities by training their staff to facilitate TRM sessions.</p> <p>Duration: 5 days.</p>

Human Performance in ATM

<p>SYSTEMS THINKING FOR SAFETY</p> <p>HUM-SYS </p>	<p>The HUM-SYS course is delivered in a workshop format and explores concepts of safety and systems, perspectives of the people in systems, system conditions, system behaviour and outcomes. The course can help with practical implementation of Safety-II.</p> <p>Duration : 3 days.</p>
<p>INTRODUCTION TO THE EFFECT OF STRESS</p> <p>HUM-STRESS </p>	<p>STRESS is an important factor that impacts performance in ATM. We all have heard the term and have an idea about it but are we aware of the definitions? Are we aware of what causes STRESS? What are the effects? This E-learning gives you the basics on what is STRESS.</p> <p>Duration : 2 hours.</p>
<p>FATIGUE AWARENESS FOR SHIFT WORKERS IN ATM</p> <p>SAF-FAT </p>	<p>This course supports shift workers in safety critical industries such as Air Traffic Control to understand better the concept of fatigue and introduces useful notions for the individual management of fatigue.</p> <p>Duration : 1 hour.</p>
<p>STRESS AND FATIGUE MANAGEMENT</p> <p>HUM-SFM </p>	<p>Based on EASA regulations, EUROCONTROL provides a safety related course on fatigue and stress management. The course will enable participants through practise and discussions to grasp the key factors producing stress and fatigue, to evaluate and recognise impacts and develop coping strategies.</p> <p>Duration: 3 days.</p>
<p>ENERGY MANAGEMENT</p> <p>HUM-EM  </p>	<p>It's known that ATM professionals who are mentally and physically fit, find more pleasure in their work and perform better. This energy management course focuses on resilience and energy management for sustainable human performance.</p> <p>Duration : 3 days.</p>
<p>HUMAN FACTORS FOR ATM SAFETY ACTORS</p> <p>SAF-HFA </p>	<p>This course covers the fundamentals of human factors and is accompanied by actual ATM operational examples. It is designed for a wide audience to improve the understanding of the human role in keeping the ATM system safe.</p> <p>Duration: 5 days.</p>
<p>DESIGN AND ASSESSMENT USING HUMAN CENTERED APPROACHES</p> <p>HUM-DESIGN  </p>	<p>The new HUM-DESIGN course in IANS will provide knowledge, examples and hands-on exercises in the field of user-centric design processes and techniques for authorities, managers, air traffic service providers, and all aviation professionals involved in safety-critical activities.</p> <p>Duration: 3 days.</p>
<p>INTEGRATING HUMAN FACTORS IN ATM PROJECTS</p> <p>HUM-HF-CASE </p>	<p>This course presents a practical process to address and manage Human Factors (HF) benefits and issues throughout an ATM project life-cycle. In terms of validation, this is a crucial step to ensure that a concept or a system will deliver its intended (human) performance.</p> <p>Duration: 4 days.</p>



Human Performance in ATM

<p>HUMAN ERROR ANALYSIS WITH HERA</p> <p>HUM-HERA</p> <p>C</p>	<p>This course offers the opportunity to become familiar with the HERA technique and to be able to use it when analysing errors within the framework of an ATM incident investigation. Additionally, it provides a general understanding of Human Factors in order to help participants make the most of the technique.</p> <p>Duration : 4 days.</p>
<p>PRACTICAL TRAINING INSTRUCTOR SKILLS FOR OJTI AND STDI - REFRESHER</p> <p>HUM-OJTI-R</p> <p>C</p>	<p>This course provides experienced air traffic controller OJTIs/STDIs with refresher training that highlights and reinforces the knowledge and techniques required to conduct effective on-the-job training. It is required that this course is taken by suitably qualified OJTIs/STDIs at least every 3 years.</p> <p>As of 1st January 2015 this course is subject to a User-Pays-Principle – course registration is subject to a fee for all participants. The course contains a practical OJTI session which is subject to examination.</p> <p>Duration: 4 days.</p>
<p>CONTROLLER COMPETENCY ASSESSOR - REFRESHER</p> <p>HUM-CCA-R</p> <p>C</p>	<p>This course provides experienced air traffic controllers who are competency assessors with refresher training that highlights and reinforces the knowledge and skills required to conduct effective assessments and is compliant with Commission Regulation (EU) 2015/340. It is required that this course is taken by suitably qualified assessors at least every 3 years. A valid assessor endorsement will be required for all course participants.</p> <p>As of 1st January 2015 this course is subject to a User-Pays-Principle - course registration is subject to a fee for all participants.</p> <p>Duration : 2 days.</p>
<p>OPERATIONAL SUPERVISOR - REFRESHER</p> <p>HUM-SUP-R</p> <p>C</p>	<p>This course provides experienced ATC Supervisors with a refresher training that highlights, reinforces and broadens the knowledge and techniques necessary to perform effectively in their supervisory role.</p> <p>Duration : 3 days.</p>
<p>OJTI BLENDED TRAINING MATERIALS</p> <p>HUM-OJTI-B</p> <p>B</p>	<p>This e-learning part of the practical instructional techniques course aims at providing future OJTIs/STDIs with the theoretical knowledge necessary to progress to the second stage of the training containing practical application of the learned practical instructional techniques and skills.</p>
<p>PRESENTATION SKILLS</p> <p>HUM-PRES</p> <p>C</p>	<p>Delivering a presentation is an important element from the set of professional skills for ATM personnel, be it for info sharing or training purpose. The course participants will have an opportunity to develop basic presentation skills by practising both preparation and delivery of presentations.</p> <p>Duration: 3 days.</p>
<p>ATSEP HUMAN FACTORS TRAINING MATERIAL</p> <p>ATSEP-HUM</p> <p>P</p>	<p>This training material supports classroom-based teaching of Human Factors objectives in the ATSEP Common Core Content Initial Training Specification. It includes; Introduction to Human Factors, Working Knowledge and Skills, Psychological Factors, Medical, Organisational and Social Factors, etc.</p>
<p>TEAM RESOURCE MANAGEMENT – REFRESHER</p> <p>HUM-TRM-R</p> <p>NEW C</p>	<p>With TRM being de facto standard when addressing human factors in continuation training of air traffic controllers, comes the need to provide to facilitators, what we require to be provided to the operational staff: refresher training.</p> <p>Duration : 3 days</p>



EU LEGISLATION FOR THE SINGLE EUROPEAN SKY (ATM/ANS)

EU legislation for the Single European Sky is developing rapidly, and impacts more and more the way regulated parties operate. It is therefore important to become familiar with the relevant EU legislation in force, to keep up-to-date with on-going regulatory developments, and to understand how it will affect the way you operate.

This domain includes a number of courses which support:

- staff working for competent authorities in ATM/ANS (including NSAs) in fulfilling their tasks effectively;
- staff working for providers of ATM/ANS services in implementing relevant EU legislation effectively.

All the courses shown may be delivered on site, on request. IANS is willing, as far as possible, to tailor these courses to the specific needs of its customers.

Please note that attendance of some courses is subject to meeting pre-requisites. Participants must check these pre-requisites and ensure that they meet satisfy them before requesting registration.

NB: a number of courses from other training domains address in more detail specific implementing rules (and their related AMC/GM or community specification, if any).

Foundation courses

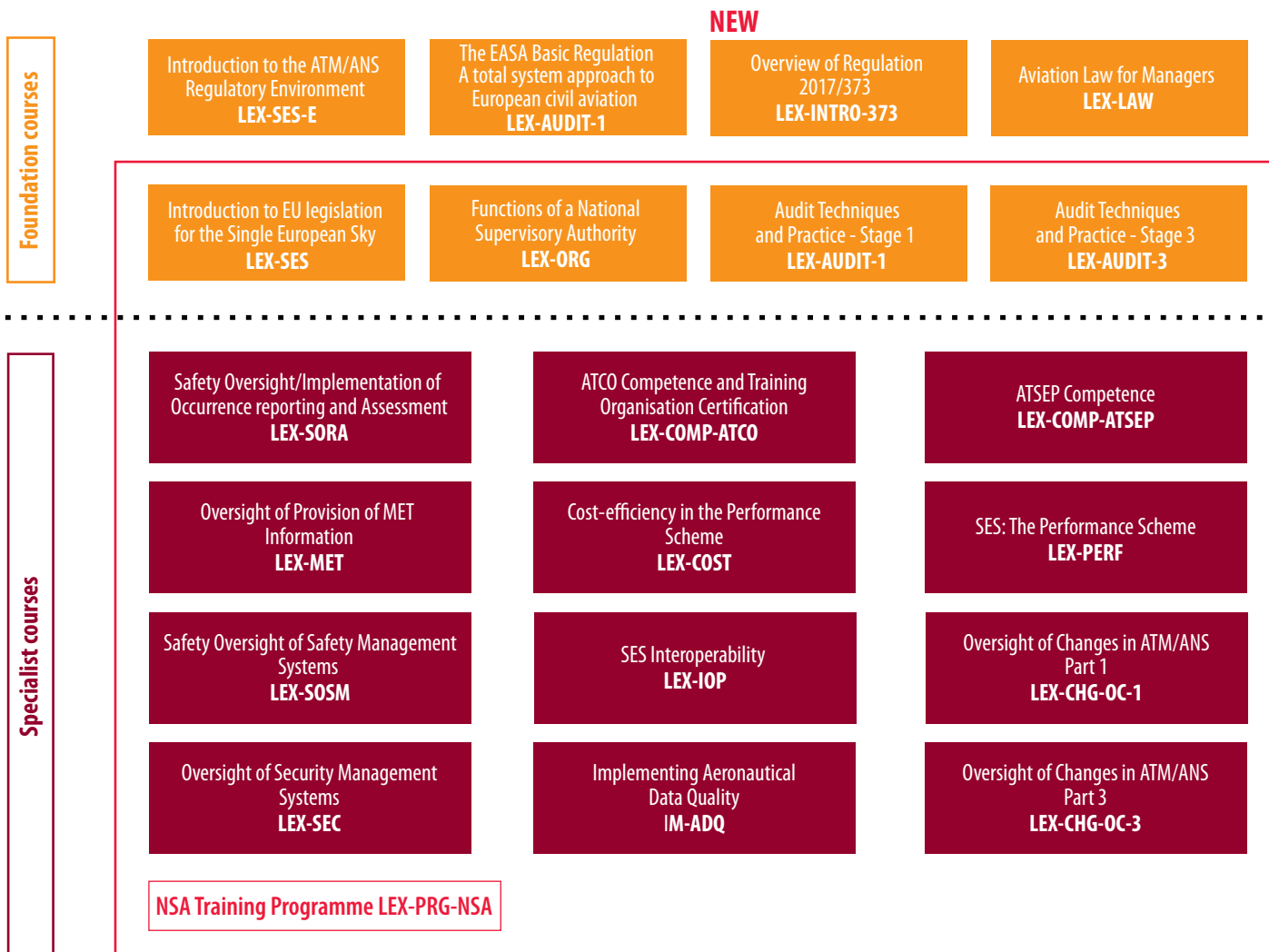
- Introduction to the ATM/ANS Regulatory Environment
- Aviation Law for Managers
- The EASA Basic Regulation (N° 2016/2008)
- Introduction to EU Legislation for SES
- Functions of a National Supervisory Authority
- Audit Techniques and Practice - Stage 1 & 3
- Management & Oversight of Changes: The basics
- Overview of Regulation 2017/373

Specialist courses

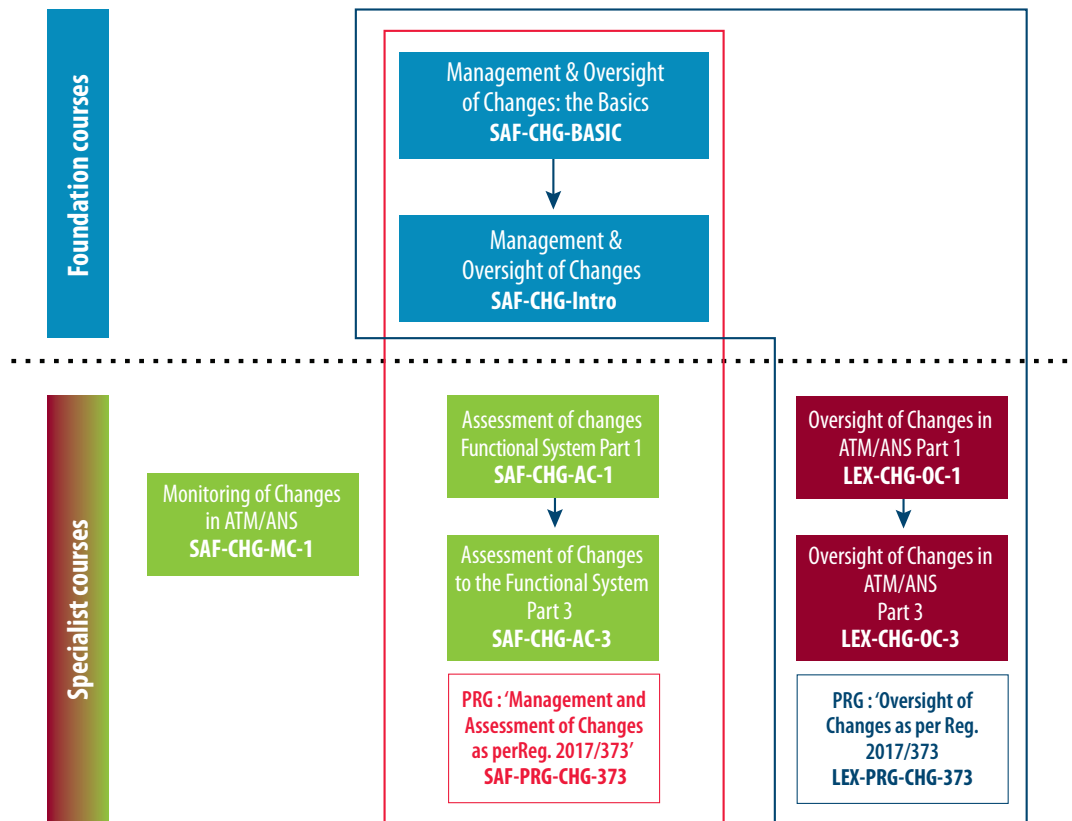
- Safety Oversight of Safety Management Systems
- Safety Oversight of Changes in ATM/ANS
- Safety Oversight/Implementation of Safety Occurrence Reporting and Assessment
- The SES Performance Scheme: from RP2 to RP3
- SES Interoperability
- Oversight of Provision of MET information
- Implementing Aerautical Data Quality
- Oversight of Security Management System
- Oversight of Changes in ATM/ANS Part 1 & 3
- ATSEP Competence
- ATCO Competence and Training Organisation Certification
- Overview of the financing of Air Navigation Services in Europe

EU Legislation for the Single European Sky (ATM/ANS)

Portfolio of LEX courses



IANS Courses & Training Programmes on ATM/ANS Changes



EU Legislation for the Single European Sky (ATM/ANS)

<p>INTRODUCTION TO THE ATM/ANS REGULATORY ENVIRONMENT</p> <p>LEX-SES-E</p> <p>E</p>	<p>This course provides an overview of EU legislation for SES. It describes:</p> <ul style="list-style-type: none"> • the ICAO regulatory framework; • the EU regulatory framework; • the EASA rulemaking procedure; • the scope, objective and content of the Single European Sky (SES) initiative; • the roles & responsibilities of the main actors. <p>Duration: 7 hours.</p>
<p>AVIATION LAW FOR MANAGERS</p> <p>LEX-LAW</p> <p>C</p>	 <p>This course focuses on the international legislative environment within which the aviation industry operates.</p> <p>Duration: 5 days.</p>
<p>THE EASA BASIC REGULATION (NO. 216/2008) - A TOTAL SYSTEM APPROACH TO EUROPEAN CIVIL AVIATION</p> <p>LEX-EASA-BR</p> <p>C</p>	 <p>This course covers the main requirements of the Basic Regulation, the EU regulatory framework, the rulemaking mechanisms used in civil aviation, EASA functions and tasks, and its rulemaking procedure. It lightly addresses the main implementing rules to the Basic Regulation.</p> <p>Duration: 2 days.</p>
<p>INTRODUCTION TO EU LEGISLATION FOR THE SINGLE EUROPEAN SKY</p> <p>LEX-SES</p> <p>C</p>	<p>This course provides an overview of EU legislation for the Single European Sky, in the field of ATM/ANS. It also describes how the regulatory developments will further affect the stakeholders involved in ATM/ANS (ATM/ANS service providers, competent authorities including NSAs, network manager, EASA, ATM/ANS manufacturers, etc.).</p> <p>Duration: 4 days.</p>
<p>OVERVIEW OF REGULATION 2017/373</p> <p>LEX-INTRO-373</p> <p>C</p>	<p>This course provides an overview of Reg. 2017/373 (laying down common requirements for providers of ATM/ANS and other ATM network functions and their oversight). The course focuses on the main changes introduced by Reg. 2017/373, including differences to existing applicable EU legislation.</p> <p>Duration: 3 days.</p>
<p>FUNCTIONS OF A NATIONAL SUPERVISORY AUTHORITY</p> <p>LEX-ORG</p> <p>C</p>	<p>This course covers the role and function of a national supervisory authority. It provides participants with an overview of the responsibilities of an NSA and discusses methods by which these responsibilities can be met. The course is designed to assist participants in identifying and implementing efficient and effective working methods.</p> <p>Duration: 4 days.</p>
<p>AUDIT TECHNIQUES AND PRACTICE – STAGE 1</p> <p>LEX-AUDIT-1</p> <p>C</p>	<p>This course offers sufficient understanding of the basic principles of auditing to enable participants to conduct in-depth and searching regulatory audits of ATM services as required by Commission Regulation. The course consists of three stages; all three stages MUST be followed.</p> <p>Duration: 5 days.</p>

EU Legislation for the Single European Sky (ATM/ANS)

<p>AUDIT TECHNIQUES AND PRACTICE – STAGE 3</p> <p>LEX-AUDIT-3</p> <p>C</p>	<p>This course offers sufficient understanding of the basic principles of auditing to enable participants to conduct in-depth and searching regulatory audits of ATM services as required by Commission Implementing Regulation (EU) No. 1034/2011. The course consists of three stages; all three stages MUST be followed.</p> <p>Duration: 4 days.</p>
<p>MANAGEMENT AND OVERSIGHT OF CHANGES: THE BASICS</p> <p>SAF-CHG-BASIC</p> <p>E</p>	<p>This course introduces participants to the concepts and principles of safety management of changes in ATM/ANS as per 2017/373. It explains the context within which these changes take place, and presents the definitions that are necessary to engage in this subject.</p> <p>Duration: 4 hours.</p>
<p>SAFETY OVERSIGHT OF SAFETY MANAGEMENT SYSTEMS</p> <p>LEX-SOSM</p> <p>C</p>	<p>This course provides assistance to participants in conducting effective regulatory oversight of ATM service provider organisations' safety management systems (SMS). The course focuses on providing an in-depth understanding of the relevant requirements and on the way in which an NSA can conduct effective and efficient regulatory oversight of a service provider's formal SMS.</p> <p>Duration: 4 days.</p>
<p>SAFETY OVERSIGHT/IMPLEMENTATION OF SAFETY OCCURRENCE REPORTING AND ASSESSMENT</p> <p>LEX-SORA</p> <p>C</p>	<p>Part of the NSA Training Programme, the course is designed to support the implementation of the reporting and assessment of ATM safety occurrences at ANSP and State level.</p> <p>Duration: 4 days.</p>
<p>THE SES PERFORMANCE SCHEME: FROM RP2 TO RP3</p> <p>LEX-PERF</p> <p>C</p>	<p>This 2019 revamped LEX-PERF course focuses on providing the participants with insights on the latest available information and decisions related to the Performance Scheme regulation for RP3.</p> <p>Duration: 3 days.</p>
<p>SES INTEROPERABILITY</p> <p>LEX-IOP</p> <p>C</p>	<p>This course is designed for staff working for the National Supervisory Authorities (NSA), Air Navigation Service Providers (ANSP) and industry who are following the course to acquire awareness of SES interoperability and the necessary ANSP – NSA interactions.</p> <p>Duration: 4 days.</p>
<p>OVERSIGHT OF PROVISION OF MET INFORMATION</p> <p>LEX-MET</p> <p>C</p>	<p>The aim is to provide a comprehensive course on:- The structure of meteorological information services provision and the role in the ATM system.- The regulatory framework.- The role of NSA's in meteorological services oversight.- Practical experience organising oversight on meteorological information services.</p> <p>Duration: 2 days.</p>
<p>IMPLEMENTING AERONAUTICAL DATA QUALITY</p> <p>IM-ADQ</p> <p>C</p>	<p>This course aims to provide stakeholders with the necessary understanding, tools, and experience to proceed with implementation of the ADQ regulation, Commission Regulation (EU) N° 73/2010.</p> <p>Duration: 5 days.</p>



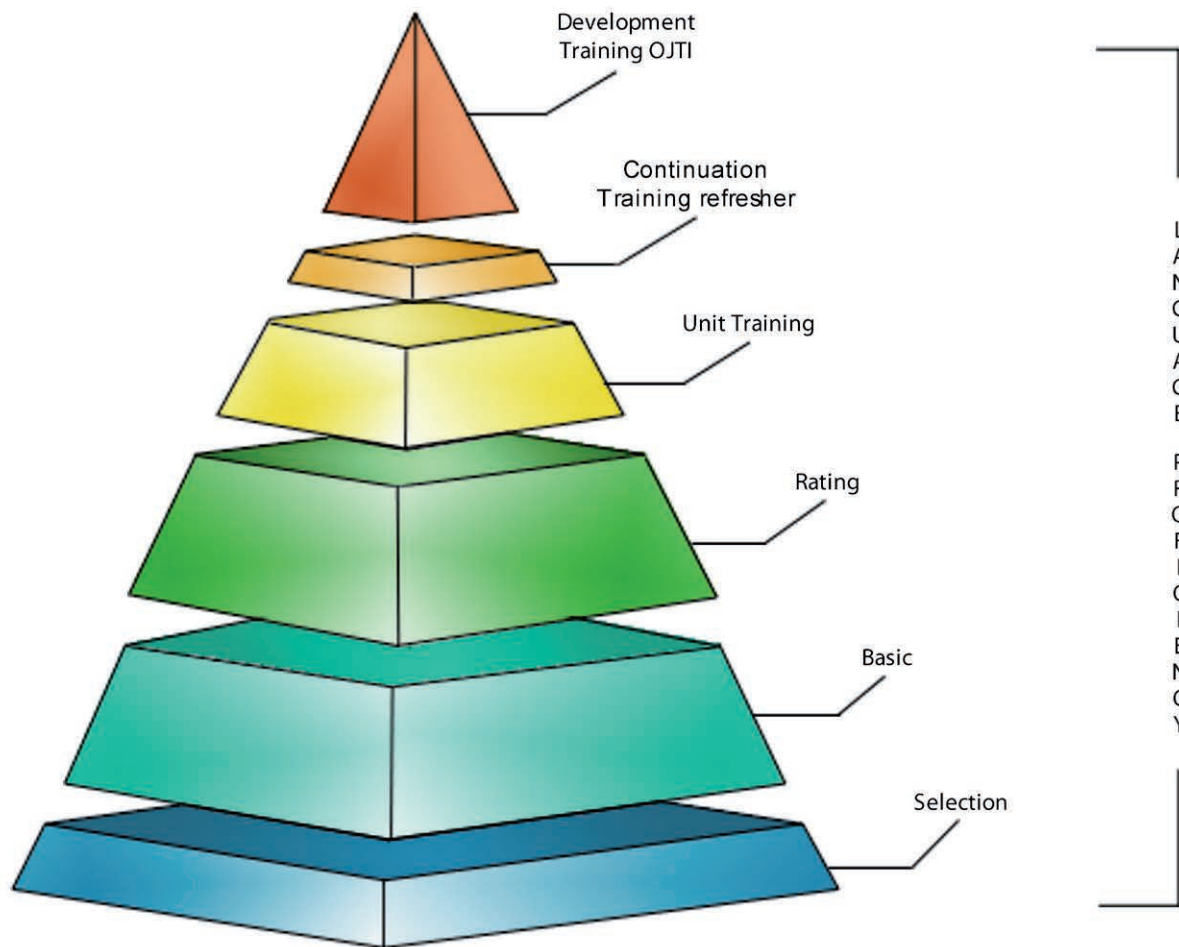
EU Legislation for the Single European Sky (ATM/ANS)

<p>OVERSIGHT OF SECURITY MANAGEMENT SYSTEM</p> <p>LEX-SEC C</p>	<p>This course helps participants conduct the effective regulatory oversight of ATM service provider organisations' security management systems (SEC-MS).</p> <p>Duration: 2 days.</p>
<p>OVERSIGHT OF CHANGES IN ATM/ANS PART 1</p> <p>LEX-CHG-OC-1 NEW C</p>	<p>This course focuses on the tasks of competent authorities in ATM/ANS as regards the oversight of changes in ATM/ANS. It is consistent with Regulation N° 2017/373 (laying down common requirements for providers of ATM/ANS and other ATM network functions and their oversight).</p> <p>Duration: 5 days.</p>
<p>OVERSIGHT OF CHANGES IN ATM/ANS PART 3</p> <p>LEX-CHG-OC-3 NEW C</p>	<p>This course provides participants with a place to present their work ('Part 2') and get feedback from the instructional team and other course participants.</p> <p>It is consistent with Regulation No. 2017/373 (laying down common requirements for providers of ATM/ANS and their oversight) and its AMC/GM.</p> <p>Duration: 2 days.</p>
<p>ATSEP COMPETENCE</p> <p>LEX-COMP-ATSEP NEW C</p>	<p>The course focuses on the roles of both a Competent Authority and a Service Provider regarding ATSEP personnel training and competence assessment. Most of these requirements are defined in Annex XIII of the Commission IR (EU) 2017/373.</p> <p>Duration: 3 days.</p>
<p>ATCO COMPETENCE AND TRAINING ORGANISATION CERTIFICATION</p> <p>LEX-COMP-ATCO C</p>	<p>The course focuses on the role of ANSPs in the implementation of the ATCO competence and of the Competent Authority (CA) to perform the oversight of such arrangements as defined by Commission Regulation (EU) 2015/340 together with its associated acceptable means of compliance (AMC) and guidance material (GM).</p> <p>Duration: 4 days.</p>
<p>OVERVIEW OF THE FINANCING OF AIR NAVIGATION SERVICES IN EUROPE</p> <p>LEX-COST C</p>	<p>In line with RP3, this course will give you information about the financing of both en-route and terminal Air Navigation Services in Europe, the role of the various actors involved and the link between ANS charges and the performance scheme of the EU.</p> <p>Duration: 3 days.</p>



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Structure of Air Traffic Controller Training





ATC TRAINING

The EUROCONTROL Training Institute has developed a wealth of resources and solutions to support stakeholders' ATCO training. From small, focused modules of training to fully developed multimedia packages, we offer content and solutions for all phases of ATC training that will reduce your development times and improve the effectiveness of your training.

In each section of this chapter you will find a description of the resources and services available for a different phase of training. Depending on the phase of the training, resources may include:

- student support content (e.g. student notes, self-study e-learning modules, revision tests, etc.);
- instructor support content (e.g. training plans, instructors' notes, classroom presentations, exam questions, etc.);
- specifications, guidelines and guidance material.

For more information on the products or the access policy, please contact:

ians.partnership@eurocontrol.int












- ATC Basic Training
- ATC Rating Training
- ATC Unit Training
- ATC Refresher Training
- ATC Development Training
- Aircraft Performance Database











ATC BASIC TRAINING








In this section you will find a series of training resources intended for use in ATC basic training. These resources have the primary objective of teaching parts of the ATCO Common Core Content Initial Training and as such have been aligned to the Common Core Content for Air Traffic Control training objectives.

In addition to the materials presented, EUROCONTROL also offers:

- exercises developed for the Radar Skills Trainer which can be used for basic training. Refer to the page on the Radar Skills Trainer for more information;
- several guidelines and specifications and various study materials for developing basic training and learning about best practices. These publications are available via the training publications catalogue in the EUROCONTROL Training Zone.

<p>INTRODUCTION TO ATM</p> <p>INSIDE ATM  </p>	<p>This course will provide participants with an overview of how European Air Traffic Management system works today.</p> <p>Duration: 2 hours.</p>
<p>ATCO BASIC TRAINING MATERIAL</p> <p>ATC-I-BASIC-P  </p>	<p>This is a training material that can be used for the delivery of ATC BASIC training aligned to the ATCO Common Core Content basic syllabus. It includes training documents, training event plans, classroom presentations and self-study and self-test elements for participants. The training material covers the following subjects: INTRB, LAWB, ATMB, METB, NAVB, ACFTB, HUMB, EQPMB, PENVB and practical training.</p> <p>Duration: The actual duration varies depending on the items used.</p>
<p>ATCO BASIC FIS BLENDED TRAINING MATERIAL</p> <p>ATC-I-BASIC-FIS  </p>	<p>This material covers the CCC objectives of the ATCO Basic training sub-topic: Flight Information Service, which comes under ATM. It supports both classroom-based training and self-study. It will enable ATCO ab-initio students to describe the basic principles of the flight information service.</p> <p>Duration: 2 x 45-minutes. lessons, plus 3 hours self-study.</p>
<p>HEADING GAMES</p> <p>ATC-I-HDG </p>	<p>For a radar controller, judging the heading to give to an aircraft is one of the basic skills. The game proposed here aims to assist ab-initio and student ATCOs learning these skills while having fun trying to achieve the highest score!</p>
<p>SAY AGAIN? THE PHRASEOLOGY DATABASE</p> <p>ATC-PHRA  </p>	<p>This database is used by participants to improve the use of standard ICAO phraseology by indicating correct syntax and by explaining when a particular phrase could be used.</p>
<p>ATCO BASIC METEOROLOGY</p> <p>ATC-I-BASIC-MET  </p>	<p>The aim of this package is to provide the essential meteorological knowledge required by ATCOs for basic training.</p> <p>It focuses on the meteorological information relevant to the aviation environment and the impact of weather phenomena on aviation.</p> <p>Duration: Package of 13 modules - 10 hours.</p>

<p>ATCO BASIC AIRCRAFT</p> <p>ATC-I-BASIC-ACFT</p> <p> </p>	<p>This is a self-study course covering the objectives of the ATCO Common Core Content basic training subject Aircraft. It covers the topics of and includes progress assessments for the principles of flight, engines, instruments, aircraft categories and data.</p> <p>Duration: Package of 7 modules – 33 hours.</p>
<p>ATCO BASIC HUMAN FACTORS TRAINING MATERIAL</p> <p>ATC-I-BASIC-HUM</p> <p> </p>	<p>This human factors training material supports classroom-based teaching of Subject 7 of the ATCO Common Core Content basic syllabus, which covers an introduction to human factors, professional conduct, human performance, stress, ergonomics and automation, teamwork, communication and human error.</p> <p>Duration: 10 x 60-minutes. classroom-based lessons.</p>
<p>ATC RATING TRAINING</p>	
<p>In this section you will find a series of training resources intended for use in ATC rating training. These resources have the primary objective of teaching parts of the ATCO Common Core Content Initial Training and as such have been aligned to the Common Core Content for Air Traffic Control training objectives.</p> <p>Several guidelines and specifications and various study materials are also available for developing rating training and learning about best practices. These publications are available via the training publications catalogue in the EUROCONTROL Training Zone.</p>	
<p>HYDRAULIC FAILURE</p> <p>ATC-R-HYDF</p> <p></p>	<p>This course may form part of an ATC Refresher training programme for Area Surveillance Controllers. Its main objective is to refresh and/or enhance ATCO knowledge on what to expect from an aircraft experiencing hydraulic problems.</p> <p>Duration: 2 hours.</p>
<p>HANDOVER TAKEOVER</p> <p>ATC-R-HDVR</p> <p></p>	<p>This module provides awareness of the importance of good position handovers and aims to decrease the frequency of incidents and accidents which occur due to poor handovers.</p> <p>Duration: 1 hour.</p>
<p>STABILISED APPROACHES</p> <p>ATC-R-STAP</p> <p></p>	<p>This course may be used as part of an ATC Refresher training programme for Approach Surveillance Controllers. The main objective is to refresh ATCO knowledge and skills in managing stabilised/unstabilised approaches.</p> <p>Duration: 2 hours.</p>
<p>SAY AGAIN? THE PHRASEOLOGY DATABASE</p> <p>ATC-PHRA</p> <p> </p>	<p>This database is used by participants to improve the use of standard ICAO phraseology by indicating correct syntax and by explaining when a particular phrase could be used.</p>
<p>ATCO RATING HUMAN FACTORS TRAINING MATERIAL</p> <p>ATC-I-RAT-HUM</p> <p></p>	<p>This training material supports classroom-based teaching on human factors for any of the rating syllabuses in the ATCO Common Core Content Specification. The material covers psychological factors, stress, human error, social and organisational factors, medical and physiological factors, working knowledge, working methods, working environment, collaborative work and safety management.</p> <p>Duration: 18 x 60-minute sessions.</p>

<p>UNUSUAL AND EMERGENCY SITUATIONS</p> <p>ATC-UNINC </p>	<p>This module helps ATCOs to understand the characteristics or circumstances of 15 selected unusual or emergency situations. It provides background information about how these situations may arise and their effect on aircraft and crew. The focus is on urgent and essential actions which ATCOs should take to manage the situation and assist the aircrew.</p> <p>Duration: 3 hours..</p>
<p>ATC UNIT TRAINING</p>	
<p>Unit training is, as the name indicates, ATCO training that is specific to a unit's local requirements. Consequently, there is a limited amount of common training content and solutions for this phase of training. There are, however, several EUROCONTROL publications that can support units in developing their training and learning about best practices in unit training. These publications contain general information, guidance materials and specifications, and are available via the training publications catalogue in the EUROCONTROL Training Zone.</p>	
<p>ATC REFRESHER TRAINING</p>	
<p>EUROCONTROL offers a number of training resources which can be used by air navigation service providers as part of the continuation training necessary to keep ratings and unit endorsements valid. Guidelines and study materials are available to ATC units for developing refresher training and learning about best practices. These publications are available via the training publications catalogue in the EUROCONTROL Training Zone.</p>	
<p>HYDRAULIC FAILURE</p> <p>ATC-R-HYDF </p>	<p>This course may form part of an ATC Refresher training programme for Area Surveillance Controllers. Its main objective is to refresh and/or enhance ATCO knowledge on what to expect from an aircraft experiencing hydraulic problems.</p> <p>Duration: 2 hours.</p>
<p>STABILISED APPROACHES</p> <p>ATC-R-STAP </p>	<p>This course may be used as part of an ATC Refresher training programme for Approach Surveillance Controllers. The main objective is to refresh ATCO knowledge and skills in managing stabilised/unstabilised approaches.</p> <p>Duration: 2 hours.</p>
<p>ACAS</p> <p>ATC-ACAS  </p>	<p>The objective of this module is to provide an overview of the airborne collision avoidance system (ACAS), a description of the responsibilities of both flight crew and air traffic controllers during a TCAS resolution advisory encounter, and an understanding of the TCAS II logic and its operation.</p> <p>Duration: 2 hours.</p>
<p>SAY AGAIN? THE PHRASEOLOGY DATABASE</p> <p>ATC-PHRA  </p>	<p>This database is used by participants to improve the use of standard ICAO phraseology by indicating correct syntax and by explaining when a particular phrase could be used.</p>




<p>ALL CLEAR? AIR-GROUND COMMUNICATIONS FOR CONTROLLERS AND PILOTS</p> <p>ATC-R-ALCL</p> <p>E</p>	<p>The objectives of this training package are to refresh air traffic controllers' knowledge of issues surrounding air-ground communication, with a focus on human behaviour in relation to expectation bias, and to provide hints and tips relating to the way improved knowledge of how humans operate can help controllers improve communications with colleagues and flight crews.</p> <p>Duration: 1 hour.</p>
<p>HANDOVER TAKEOVER</p> <p>ATC-R-HDVR</p> <p>E</p>	<p>This module provides awareness of the importance of good position handovers and aims to decrease the frequency of incidents and accidents which occur due to poor handovers.</p> <p>Duration: 1 hour.</p>
<p>LEVEL BUST</p> <p>ATC-R-LVLB</p> <p>E</p>	<p>The aim of this module is to increase the awareness of pilots and ATCOs of the fundamental causes of level busts and to suggest means by which they can be prevented. It highlights a number of different issues which have been identified as prime sources of level busts or are relevant to making a situation safe again.</p> <p>Duration: 1 hour.</p>
<p>MACH NUMBER TECHNIQUE</p> <p>ATC-R-MACH</p> <p>E</p>	<p>The objectives of this module are to refresh understanding of the use of speed control in the upper airspace, the implications of this on aircraft performance and the limitations imposed on flight crews, and to provide a number of practical suggestions.</p> <p>Duration: 2 hours.</p>
<p>AREA NAVIGATION IN EUROPEAN TERMINAL CONTROL AREAS (TMAS)</p> <p>NAV-PRNAV-RNAV1</p> <p>E</p>	<p>This generic e-learning module describes the use of Performance Based Navigation (PBN) in the TMA, specifically RNAV1 which within Europe is termed Precision RNAV (P-RNAV). The package addresses aircraft functionality, the benefits of RNAV SIDs/STARs, the different types of waypoint and how turn performance is affected, and a number of ATC best practices, including RTF phraseology, specifically related to RNAV operations. This package has been updated to reflect both PBN and the latest changes in the ATC Flight Plan.</p> <p>Duration: 2 hours.</p>
<p>UNUSUAL AND EMERGENCY SITUATIONS</p> <p>ATC-UNINC</p> <p>E</p>	<p>This module helps ATCOs to understand the characteristics or circumstances of 15 selected unusual or emergency situations. It provides background information about how these situations may arise and their effect on aircraft and crew. The focus is on urgent and essential actions which ATCOs should take to manage the situation and assist the aircrew.</p> <p>Duration: 3 hours.</p>
<p>FATIGUE AWARENESS FOR SHIFT WORKERS IN ATM</p> <p>SAF-FAT</p> <p>E</p>	<p>This course supports shift workers in safety critical industries such as Air Traffic Control to understand better the concept of fatigue and introduces useful notions for the individual management of fatigue.</p> <p>Duration: 1 hour.</p>

ATC DEVELOPMENT TRAINING

In this section you will find a series of training courses intended for use in ATC development training. These courses are focused mainly towards on-the-job training as part of development training. Please refer to the Human Performance domain for other classroom courses supporting ATC development training.

In addition to the materials presented, EUROCONTROL also offers:

- Radar Skills Trainer and exercises developed for the Radar Skills Trainer which can be used for on-the-job training. Please refer to the page on the Radar Skills Trainer for more information;
- several guidelines and specifications and various study materials to support development training. They include guidelines on OJT syllabuses and management training for operational ATM supervisors. These publications are available via the training publications catalogue in the EUROCONTROL Training Zone.

<p>PRACTICAL TRAINING INSTRUCTOR SKILLS FOR OJTI AND STDI</p> <p>HUM-OJTI</p> <p></p>	<p>The OJTI/STDI Training Programme provides theoretical knowledge and practical skills for radar controllers who will undertake OJTI/STDI duties. This course is open to all “would-be” OJTIs/STDIs but has the added value of being an approved course (Belgian Supervisory Authority), for those requiring it; which includes an examination and assessments in both theory and practical OJTI/STDI skills.</p> <p>As of 1st of January 2015 this course is subject to a User-Pays-Principle – course registration is subject to a fee for all participants.</p> <p>Duration: 10 days.</p>
<p>PRACTICAL TRAINING INSTRUCTOR SKILLS FOR OJTI AND STDI - REFRESHER</p> <p>HUM-OJTI-R</p> <p></p>	<p>This course provides experienced air traffic controller OJTIs/STDIs with refresher training that highlights and reinforces the knowledge and techniques required to conduct effective on-the-job training. It is required that this course is taken by suitably qualified OJTIs/STDIs at least every 3 years.</p> <p>As of 1st of January 2015 this course is subject to a User-Pays-Principle – course registration is subject to a fee for all participants. The course contains a practical OJTI session which is subject to examination.</p> <p>Duration: 4 days.</p>
<p>CONTROLLER COMPETENCY ASSESSOR</p> <p>HUM-CCA</p> <p></p>	<p>This course is provided for air traffic controllers who will assess the competence of other controllers. The assessment task can involve the issue of a licence or new unit endorsement. As part of a local competence scheme, the assessment task can include the renewal of an existing unit endorsement.</p> <p>As of 1st of January 2015 this course is subject to a User-Pays-Principle – course registration is subject to a fee for all participants.</p> <p>Duration: 5 days.</p>

<p>CONTROLLER COMPETENCY ASSESSOR - REFRESHER</p> <p>HUM-CCA-R</p>	<p>This course provides experienced air traffic controllers who are competency assessors with refresher training that highlights and reinforces the knowledge and skills required to conduct effective assessments and is compliant with Commission Regulation (EU) 2015/340. It is required that this course is taken by suitably qualified assessors at least every 3 years. A valid assessor endorsement will be required for all course participants.</p> <p>As of 1st January 2015 this course is subject to a User-Pays-Principle - course registration is subject to a fee for all participants.</p> <p>Duration: 2 days.</p>
<p>OPERATIONAL SUPERVISOR</p> <p>HUM-SUP</p>	<p>This course is primarily intended to equip newly appointed ATS supervisors to perform effectively in their supervisory role. It may also be of value to experienced supervisors who wish to broaden their knowledge.</p> <p>Duration: 5 days.</p>
<p>OPERATIONAL SUPERVISOR - REFRESHER</p> <p>HUM-SUP-R</p>	<p>OPERATIONAL SUPERVISOR - REFRESHER course provides experienced ATC Supervisors with a refresher training that highlights, reinforces and broadens the knowledge and techniques necessary to perform effectively in their supervisory role.</p> <p>Duration : 3 days</p>
<p>TRM IN ATM</p> <p>HUM-TRM-A</p>	<p>TRM-A course supports ATCO ATSEP AIM and other professionals in their effort in addressing human factors in ATM ops. This three-day course provides an understanding of TRM, an awareness of the benefits of TRM for the operational safety culture and the methods preferably employed in a TRM program.</p> <p>Duration : 3 days</p>
<p>THEORETICAL TRAINING INSTRUCTOR SKILLS</p> <p>HUM-TTI</p>	<p>This course is appropriate for colleagues who will be asked to design, develop and deliver theoretical training for ATM staff and/or presentation on ATM related events. It aims at fulfilling criteria from AMC to Part-ATCO, subpart C, Section 1 (Instructors) for Commission Regulation (EU) 2015/340.</p> <p>Duration : 5 days</p>
<p>TRM FACILITATOR</p> <p>HUM-TRM-F</p>	<p>Team Resource Management is an operational HF concept for ATCOs and other interested ATM staff. Team Resource Management Practical Facilitation Skills course enables ANSPs to implement and maintain TRM activities by training their staff to facilitate TRM sessions.</p> <p>Duration : 5 days</p>
<p>DESIGN OF ATC SIMULATION EXERCISES & COURSES</p> <p>HUM-SIM</p>	<p>This course is designed for ATC instructors who are, or will be, involved in simulation courses and developing ATC simulation courses.</p> <p>Duration : 8 days over 2 weeks.</p>

AIRCRAFT PERFORMANCE DATABASE

The Aircraft Performance Database allows users to search for one or more aircraft and view associated data, including: recognition, ICAO/IATA type designators, aircraft performance data for all stages of flight and other supplementary information.

Version 3 of the Aircraft Performance Database has been released in March 2012. The new version is compatible across different browsers and devices. It comes in a desktop and mobile version.

The desktop version offers two additional features when accessed from the EUROCONTROL Training Zone. Students can create user specific custom groups and allocate aircraft to them according to individual needs. Additionally, a self-test is provided for students to follow their individual progress over time. The feedback provided is very precise (question based) and is directing students to areas requiring further study. Questions are randomly selected from a pool of more than 500, making the tests reliable and effective while at the same time interesting and challenging for students. Both these features support the individual learning process.

To access the Aircraft Performance Database, go to <https://contentzone.eurocontrol.int/aircraftperformance/>. To take full advantage of the new version, log in the EUROCONTROL Training Zone through the "Aircraft Performance Database [ATC-PFDB]" course.



TRAINING TOOLS

SELECTION: FEAST – FIRST EUROPEAN ATCO SELECTION TEST

FEAST Service

The First European ATCO Selection Test (FEAST) service provides a cost-effective set of tools to assist recruiters with selecting the most suitable candidate for ATC training. The service also provides full implementation support and a helpdesk service to air navigation services and training providers.




The FEAST service is currently in use in 48 civil and military organisations. It assesses the knowledge, skills and abilities of applicants for the ATCO job. The aim is to improve the quality of selection decisions, contribute to the cost efficiency of the overall recruitment and selection process and to increase the success rate in training. Since the release of FEAST in 2004, more than 81,000 air traffic controller candidates have been tested using the FEAST tool.






The tests are delivered over the internet in a way that enables users to carry out online testing of applicants in a secure and confidential way. Tests are administered and marked automatically and the results are stored in a central database that users can consult at all times.

Licence agreements and non-disclosure agreements with users govern access to FEAST. For more information please e-mail the FEAST service team at feast-service@eurocontrol.int

As of 1st of January 2015 FEAST is provided subject to a User-Pays-Principle – the license agreement is based on a fee per tested candidate.

To support the use and administration of FEAST by its users, the Institute offers training courses for users and for administrators as a prerequisite to accreditation. Refresher training is also available. For more information on FEAST visit : <http://feast-info.eurocontrol.int/>

<p>FEAST - ADMINISTRATOR TRAINING (INCLUDING TESTS)</p> <p>FEAST-ADM-T</p> <p></p>	<p>This training module offers a full training on the FEAST Administrator role. The course is suitable for staff which is newly appointed to the FEAST Administrator role.</p> <p>Duration: 2 days.</p>
<p>FEAST - ADMINISTRATOR TRAINING (NO TESTS)</p> <p>FEAST-ADM-NT</p> <p></p>	<p>This course refers only to already accredited FEAST Administrators or Users. The training is designated for FEAST Administrators who are interested in refresher training.</p> <p>This Administrator training will introduce participants to the two software platforms that host the FEAST tests and the FEAST databases. The course will cover candidate registration and reporting and as well as the management of the candidate recruitment workflow. It does not offer a familiarization with the FEAST tests.</p> <p>The role of the FEAST administrator is to assure quality in selection procedures, to prepare, organise and supervise testing sessions.</p> <p>Duration: 1 day.</p>
<p>FEAST - USER TRAINING</p> <p>FEAST-USER</p> <p></p>	<p>This course is designed firstly as a refresher course for accredited FEAST users. It is also intended for those who will be newly appointed in their organization in a FEAST role and who are now required to undergo accreditation training in order to use FEAST. FEAST users take an active part in the selection decision in their organization. The course provides a detailed knowledge of the FEAST system, understanding of psychometrics, test interpretation and the use of test results. The use and interpretation of FEAST I, FEAST DART and MULTI-PASS is covered in this course.</p> <p>Duration: 1 day.</p>

<p>FEAST PERSONALITY QUESTIONNAIRE</p> <p>FEAST-FPQ</p> <p></p>	<p>The FPQ course provides training on the use of the FEAST Personality Questionnaire (FPQ). The FPQ was developed and is specifically designed for the selection of ab initio students and allows the assessment of personality characteristics relevant in the training of ATC students. The training gives an introduction to personality assessment methods and provides an overview on the background and design of the FPQ tool. Using practical examples participants learn how to interpret scores and how to use the tool as part of their selection system.</p> <p>The FPQ training is accompanied by an optional second day of training, the Basic Interview Skills training. The optional training module is offered for FEAST users with little experience in interviewing and for those with no experience in the use of personality questionnaires in interviews. The Interviews Skills training places particular emphasis on the use of the FPQ during the job interview. Participants who are interested in this optional second training module need to register for the FEAST-SelSk course in addition. Accreditation as a FEAST user is a prerequisite for participation to this course.</p> <p>Duration: 1 day.</p>
<p>BASIC INTERVIEWING SKILLS AND USE OF THE FPQ</p> <p>FEAST-SELISK</p> <p></p>	<p>This course gives a concise introduction to developing and using interviewing skills and techniques for ab-initio selection. It is aimed at those who participate in ATC selection interview boards and panels. In addition, the course focuses on the use of the FPQ in the job interview. Practical examples demonstrate how the FPQ can be applied to give the recruiter additional valuable information for the interview process.</p> <p>Duration: 1 day.</p>
<p>BEHAVIOURAL OBSERVATION SCALE</p> <p>FEAST-BOS</p> <p></p>	<p>The BOS course offers training on the use of the BOS form as a tool for validating the FEAST selection tests. It reviews the purpose and method of validating the FEAST tests, completion of the BOS form, and best practice and advice for those who will be involved in the planning and implementation of BOS assessments. ATC training personnel who wish better understand FEAST validation are also welcome.</p> <p>Duration: 1 day.</p>
<p>INTRODUCTION TO FEAST CLASSIC AND FEAST PLUS</p> <p>FEAST-PLUS</p> <p> </p>	<p>This training module offers an introduction to FEAST Plus. FEAST Plus is a new optional module in the FEAST test system which will include 5 new tests that may be chosen to complement the current FEAST test system.</p> <p>Duration: 1 day.</p>

ENGLISH LANGUAGE PROFICIENCY FOR AERONAUTICAL COMMUNICATION (ELPAC)

ELPAC is an ICAO Aviation English language proficiency test designed for ATC controllers and commercial pilots to meet the ICAO language proficiency requirements. The ELPAC test was developed by EUROCONTROL and is maintained together with our partners, the ZHAW Zurich University of Applied Sciences and ENOVATE. The ELPAC test is recognized by ICAO for being in conformance with ICAO standards and recommendations for language proficiency requirements (see <https://www4.icao.int/aelts>).

The ELPAC test is available to Air Operators, Air Navigation Service Providers, Civil and Military Aviation Authorities and Training Organisations. We strongly believe that ELPAC can support various organisations in meeting the ICAO language proficiency requirements. In particular, the implementation model of the ELPAC test is attractive in that it is delivered locally by operational experts and language experts. As a result, ELPAC will support an organisation in reaching the required standards, while at the same time fostering a culture of awareness and commitment to these standards.

To support the effective use of the ELPAC test by organisations that have signed an ELPAC licence agreement, EUROCONTROL offers a number of courses to train nominated ELPAC test administrators, markers and examiners in the use of the test and in their role as ELPAC test examiner and assessor to prepare them for accreditation by their regulatory authority. EUROCONTROL also offers periodic refresher courses for accredited markers and examiners. For experienced ELPAC examiners ELPAC Level 6 examiner courses are being organised on request.

As of 1st of January 2015 ELPAC is provided subject to a User-Pays-Principle – the ELPAC license agreement includes a fee per tested candidate. ELPAC training at IANS Luxembourg is included in the ELPAC licence agreement.

For more information on ELPAC visit www.elpac.info

<p>ELPAC ACCREDITATION COURSE</p> <p>ELPAC-ACR</p> 	<p>EUROCONTROL regularly organises training and accreditation courses for organisations that have signed an ELPAC licence agreement with Eurocontrol. The course provides training for staff intending to work with the ELPAC test to become test administrators, Paper 1 markers and Paper 2 examiners.</p> <p>Duration: 5 days.</p>
<p>ELPAC EXAMINER REFRESHER COURSE</p> <p>ELPAC-REF</p> 	<p>EUROCONTROL regularly organises refresher courses for ELPAC test administrators, markers and examiners. The courses provide an excellent opportunity to review and practise the required examining standards and to share experience and benchmark with markers and examiners from other organisations.</p> <p>Duration: 2 days.</p>
<p>ELPAC LEVEL 6 EXAMINER COURSE</p> <p>ELPAC –L6E</p> 	<p>EUROCONTROL organises accreditation courses for experienced ELPAC examiners wishing to become ELPAC Level 6 examiner. Course participants will be introduced to the challenges of assessing language proficiency at ICAO level 6 and the ELPAC L6 test format.</p> <p>Duration: 2 days.</p>
<p>ELPAC EXAMINER REFRESHER ONLINE COURSE</p> <p>ELPAC-REF-O</p> 	<p>EUROCONTROL organises online refresher courses for ELPAC test administrators, markers and examiners. The course provides an excellent opportunity to train marking and examining to maintain the required standards.</p> <p>Duration: 3 hours over 2 weeks.</p>

RST - RADAR SKILLS TRAINER

The radar skills trainer (RST) is an advanced tool that:

- enables users to perform pre-simulation (task practice and skill acquisition);
- provides a realistic environment for ATC training in basic surveillance and OJTI/Assessors skills;
- includes exercises to support basic controller and OJTI training.

How does it work?

The RST works on the basis of objective measurement. For any given exercise, a combination of predetermined objectives and airspace designs serves as a scenario for teaching specific skills.

The RST simulates the controller working position (CWP) and the pilot working position (PWP) with an additional hybrid option where piloting is possible directly in the label of the CWP. Trainers can utilise the Exercise Preparation Tool (EPT) to create teaching exercises or use the exercise scenarios supplied with the software.

A replay function is provided, to both instructors and students, so that exercises may be analysed at a later stage. In practice the student completes the exercises and receives a debriefing from the programme. The trainer can then review the exercise using the replay function and debrief the student on techniques and other items.

A networked course management system (CMS) version, offers additional facilities for managing the delivery of courses and exercises to a group of students and to monitor their progress.

"Radar Skills Trainer (RST) - Open Window" [ATC-RST] is a short module that contains a number of practical exercises delivered over the web from the EUROCONTROL servers. It aims to show current and potential RST users how the RST can be used in ATC training.

Access:

The RST is available as a standalone tool installed on a PC or for use via the EUROCONTROL Training Zone.

The RST is available free of charge to organisations in the EUROCONTROL Members States which have signed an RST license agreement. The RST is also available to organisations worldwide subject to a license agreement and a yearly license fee.

For more information on the Radar Skills Trainer, visit <http://trainingzone.eurocontrol.int/rst.htm> or e-mail the development team at vladimir.bubalo@eurocontrol.int.

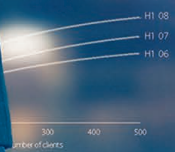
RADAR SKILLS TRAINER (RST) - OPEN WINDOW

ATC-RST



This is a short module that contains a number of practical exercises delivered over the web from the EUROCONTROL servers. It aims to show current and potential RST users how the RST can be used in ATC Training.

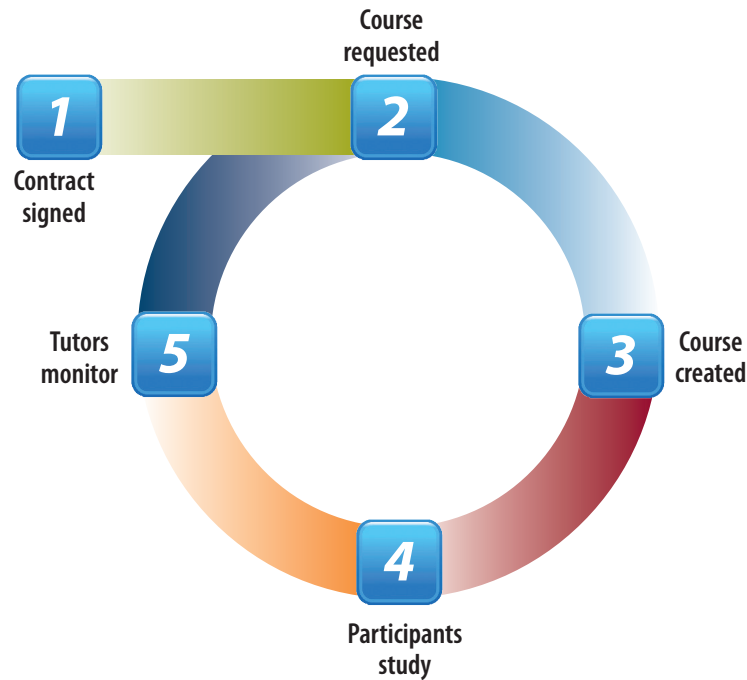




TRAINING SUPPORT SERVICES

5

The diagram below shows the usual process for using Training Zone as an organisation:



In practice, this works as follows:

- The contract is signed.
- The training provider's training manager designs a course, chooses instructors and participants, and submits this to the EUROCONTROL Training Zone Operations desk.
- The Operations desk inputs the course into Training Zone, and notifies the training manager.
- The training provider's students can now study the course.
- In the meantime, the training provider's instructors monitor the students' progress.

TRAINING ZONE FOR ORGANISATIONS

The EUROCONTROL Training Zone is a digital learning environment that supports classroom and e-learning training.

EUROCONTROL offers the use of the Training Zone to training organisations. This enables a training provider to create, manage, and administer e-learning or blended training for its students. The training provider defines the training content of their course, assigns students and instructors to their courses. During the training delivery, the assigned instructors can monitor the student's progress. EUROCONTROL provides assistance and offers a technical helpdesk to all users.

The use of Training Zone by training organisations is subject to a contract between the training provider and EUROCONTROL.

For more information on the EUROCONTROL Training Zone, contact us by email at: trainingzone.operations@eurocontrol.int.

LICENCE TO USE EUROCONTROL TRAINING MATERIAL

Organisations can use training material developed by EUROCONTROL and deliver them using their own local instructor.

Much of the training material developed is available on request. The training material can be used in its original form and delivered by local staff or incorporated into other training courses to serve local needs.

These arrangements are administered through license agreements which guarantee fair use of the training material amongst the stakeholders. If you are interested in licensing any of EUROCONTROL's training material, please contact us by email at: ians.partnership@eurocontrol.int.

ATC SIMULATION FACILITIES

Our Training Institute offers hi-fidelity ATC simulation facilities which can be rented by organisations.

The simulator facilities comprise two separate platforms, the Flexible Luxembourg Training Platform (FLTP) and the UFA Approach/Tower Simulator. Together, the two facilities provide a complete gate-to-gate simulation environment, including ramp, aerodrome, approach and en-route capabilities. Moreover, the FLTP is one of the few facilities in Europe capable of supporting a fully stripless ATC environment. The two simulator facilities are independent and can be used simultaneously. Multiple simultaneous use of the FLTP is also possible. For more information contact the ians.partnership@eurocontrol.int.

Access to Training Content for Organisations

ON-SITE AND/OR TAILOR-MADE TRAINING COURSES

EUROCONTROL regularly delivers courses on-site in response to requests received from training organisations, authorities or companies to provide external (on-site) training in an area closely linked to our training expertise and missions at their places of work. We aim to meet all acceptable requests subject to the availability of training experts and internal demands.

For more information please contact ians.partnership@eurocontrol.int.

TRAINING EXPERTISE

The EUROCONTROL Training Institute has unique expertise in the field of harmonised training and innovative training methodologies. It can help you design or improve your training, ensure compliance with the latest regulation, achieve certification and implement new training methods in accordance with your local requirements.

For more information on availability, please contact ians.partnership@eurocontrol.int.

CONFERENCE FACILITIES AND THE AVIATION LIBRARY

Subject to availability, we can put our modern facilities at your disposal for aviation-related conferences and workshops. IANS offers a range of different-sized classrooms and a large conference room with a modern and comfortable setting, high-performance equipment and access to one of the best aviation libraries. You can benefit from the unique opportunity to be exposed to and to network with course participants from different organisations from all our Member States, but also from aviation organisations worldwide.

The large lobby allows you to organise exhibitions, catering, cocktail parties and coffee breaks.

We can also provide event registration, badges and nameplates, technical assistance, free car parking, free internet access, a canteen, catering, cocktail parties, lunch, etc.

For more information, please contact the Course Reservation Office at ians.reservation@eurocontrol.int.

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