# NATO STANDARD AATMP-46

# NATO MINIMUM REQUIREMENTS FOR PERSONNEL PROVIDING AIR TRAFFIC MANAGEMENT (ATM) AND AIR NAVIGATION SERVICES (ANS) IN NATO-LED OPERATIONS



NORTH ATLANTIC TREATY ORGANIZATION
ALLIED AIR TRAFFIC MANAGEMENT PUBLICATION

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## NORTH ATLANTIC TREATY ORGANIZATION (NATO) NATO STANDARDIZATION OFFICE (NSO) NATO LETTER OF PROMULGATION

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- The enclosed Allied Air Traffic Management Publication AATMP-46, Edition A. Version 1, NATO MINIMUM REQUIREMENTS FOR AIR TRAFFIC MANAGEMENT (ATM) AND AIR NAVIGATION SERVICES (ANS) PERSONNEL PROVIDING SERVICES IN NATO-LED OPERATIONS, which has been approved by the nations in the AIR TRAFFIC MANAGEMENT - COMMUNICATIONS, NAVIGATION AND SURVEILLENCE ADVISORY GROUP, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 7204.
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Zoltán GULYÁS

hmaglows Deputy Director NSC Brigadier General, HUNAF Branch Head P&C

Director, NATO Standardization Office

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#### **RECORD OF RESERVATIONS**

CHAPTER	RECORD OF RESERVATION BY NATIONS	

Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.

### **RECORD OF SPECIFIC RESERVATIONS**

[nation]	[detail of reservation]

Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.

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VIII

Edition A Version 1

#### CHAPTER 1 - ADMINISTRATIVE

#### 1. SCOPE

#### 1.1. Scope.

The requirements for ANS/ATM personnel shall be in compliance with the Standards and Recommended Practices (SARPs) of the International Civil Aviation Organization (ICAO) Annex 1, ICAO Annex 2, ICAO Annex 11, ICAO Doc 4444, and WMO Technical Regulations, Basic Documents No. 2, Volume I General Meteorological Standards and Recommended Practices, and further STANAG 1183, except as otherwise indicated.

#### 1.2. Purpose.

This allied publication specifies standards for the requirements to be applied to ANS/ATM personnel providing air traffic services (ATS), communication, navigation and surveillance services (CNS), aeronautical meteorological services (MET services), aeronautical information services (AIS), airspace management (ASM) and air traffic flow management (ATFM) to military and civil air traffic as well as the requirements to be applied to such personnel by national authorities and/or ANS providers.

#### 1.3. Use of AATMP-46.

This document is divided into three main subject areas: Administrative, Requirements to be applied by national authorities and ANS providers and Requirements to be applied to individual personnel.

**Terms and Acronyms** are identified in Annex A.

#### 1.4. Word meanings.

Word meanings as used in this manual:

- 1. **Shall** means that application of the criteria is mandatory.
- 2. **Should** means that application of the criteria is recommended.
- 3. **May** means that application of the criteria is optional.

## CHAPTER 2 - REQUIREMENTS TO BE APPLIED BY NATIONAL AUTHORITIES AND ANS PROVIDERS

## 2. REQUIREMENTS TO BE APPLIED BY NATIONAL AUTHORITIES AND ANS PROVIDERS.

National authorities and/or ANS providers/organizations providing ANS shall ensure that personnel responsible for tasks in the provision of air traffic services (ATS), aerodrome information flight information service (AFIS), communication, navigation and surveillance services (CNS), aeronautical meteorological services (MET services), aeronautical information services (AIS), airspace management (ASM) and air traffic flow management (ATFM) are adequately trained and competent for their job functions. In particular, the appropriate authorities/organizations providing ANS of contributing states shall ensure that air navigation services and their air traffic management functions are provided by appropriately trained and/or duly licensed personnel.

## CHAPTER 3 - REQUIREMENTS TO BE APPLIED TO INDIVIDUAL PERSONNEL

#### 3. REQUIREMENTS TO BE APPLIED TO INDIVIDUAL PERSONNEL

#### 3.1. Requirements to be applied to air traffic controller (ATCO)

- 3.1.1 Air traffic controller license or certificate of competence shall contain one or more of the ratings described below (national nomenclatures may vary):
- 1. aerodrome control rating: to provide or to supervise the provision of aerodrome control service for the aerodrome for which the license holder is rated;
- 2. approach control procedural rating: to provide or to supervise the provision of approach control service for the aerodrome or aerodromes for which the license holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control service;
- 3. approach control surveillance rating: to provide and/or supervise the provision of approach control service with the use of applicable ATS surveillance systems for the aerodrome or aerodromes for which the license holder is rated, within the airspace or portion thereof, under the jurisdiction of the unit providing approach control service;
- 4. approach precision radar control rating: to provide and/or supervise the provision of precision approach radar service at the aerodrome for which the license holder is rated:
- 5. area control procedural rating: to provide and/or supervise the provision of area control service within the control area or portion thereof, for which the license holder is rated; and
- 6. area control surveillance rating: to provide and/or supervise the provision of area control service with the use of an ATS surveillance system, within the control area or portion thereof, for which the license holder is rated.
- 3.1.2 An air traffic controller has a valid Class 3 Medical Assessment;
- 3.1.3 An air traffic controller is able to speak and understand English to the equivalent of Level 4 (OPERATIONAL) or higher in accordance with the Language Proficiency Rating Scale as specified in ICAO ANNEX 1.

## 3.2. Requirements to be applied to aerodrome flight information service personnel

3.2.1 Personnel responsible for the provision aerodrome flight information service shall be a holder of the valid AFIS dispatcher license.

Note: Guidance on the qualifications to be met by these personnel can be found in ICAO Circular 211.

## 3.3. Requirements to be applied to personnel providing aeronautical information service

- 3.3.2 Personnel responsible for the provision of aeronautical information service shall be a holder of the valid license that contains one or more of the ratings listed below (national nomenclatures may vary):
- 7. aeronautical information service specialist rating (AISS);
- 8. aeronautical station operator rating (ASO);
- 9. flight data operator rating (FDO);
- 10. assistant controller rating (AC);
- 11. flight operations officer/flight dispatcher license (FOO), or
- 3.3.2 if licensing of such category of the ANS personnel is not implemented, non-licensed personnel shall be able to carry out their duties at least in one of the positions referred above or equivalent post.
  - 3.4. Requirements to be applied to personnel providing communication, navigation and surveillance services air traffic safety electronic personnel (ATSEP)
- 3.4.3 Air traffic safety electronic personnel shall:
- 12. comply with national requirements and schemes to ensure current and ongoing competence;
- 13. be properly trained and qualified to perform the assigned tasks;
- 14. have and maintain sufficient knowledge to ensure a sound understanding of the ATM services they are supporting, and the actual and potential effects of their work on the safety of those services;
- 15. have and maintain sufficient knowledge of the appropriate working limits to be applied when performing safety related tasks;

- 16. not undertake safety related tasks if they know or suspect that their physical or mental condition renders them unfit to undertake such tasks;
- 17. systematically and consistently report safety occurrences; and
- 18. initiate appropriate remedial measures, if the above requirements are not met.
  - 3.5. Requirements to be applied to personnel providing meteorological services
- 3.5.1 An aeronautical meteorological forecaster shall be able to:
- 19. Analyze and monitor continuously the weather situation;
- 20. Forecast aeronautical meteorological phenomena and parameters;
- 21. Warn of hazardous phenomena;
- 22. Ensure the quality of meteorological information and services; and
- 23. Communicate meteorological information to internal and external users for the area and airspace of responsibility, in consideration of the impact of meteorological phenomena and parameters on aviation operations, and in compliance with aviation user requirements, international regulations, local procedures and priorities for the area and airspace of responsibility, in consideration of the impact of meteorological phenomena and parameters on aviation operations, and in compliance with aviation user requirements, international regulations, local procedures and priorities.
- 3.5.2 An aeronautical meteorological observer shall be able to:
- 24. Monitor continuously the weather situation;
- 25. Observe and record aeronautical meteorological phenomena and parameters;
- 26. Ensure the quality of system performance and of meteorological information;

and

27. Communicate meteorological information to internal and external users for the area and airspace of responsibility, in consideration of the impact of meteorological phenomena and parameters on aviation operations, and in compliance with aviation user requirements, international regulations, local procedures and priorities for the area and airspace of responsibility, in consideration of the impact of meteorological phenomena and parameters on aviation operations, and in compliance with aviation user requirements, international regulations, local procedures and priorities.

## 3.6. Requirements to be applied to personnel providing airspace management

- 3.6.1 Personnel responsible for the provision of airspace management shall be a holder of the valid license that contains the airspace management officer (AMO) rating (national nomenclatures may vary).
- 3.6.2 If licensing of such category of the ATM personnel is not implemented, non-licensed personnel shall be able to carry out their duties in the Airspace Management Cell (AMC) or equivalent office positions.

## 3.7. Requirements to be applied to personnel providing air traffic flow management

3.7.1 ATFM personnel shall be able to carry out their duties in the Air Traffic Flow Management Unit (ATFMU) or equivalent office positions (e. g.: Air Traffic Reporting Office).

#### **ANNEX A**

Safety Considerations in Implementing STANAG 7204 - NATO Minimum Requirements for Personnel Providing Air Traffic Management (ATM) and Air Navigation Services (ANS) in NATO-led Operations

#### Introduction:

This Annex is intended for NATO-led operations service providers in implementing this STANAG during deployed operations.

It includes general considerations such as the suitability of the STANAG/AATMP for the required operations, currency with regard to edition number and amendments, applicability of related documents, nations ratifying and reservations.

Specific safety considerations are identified by the custodian of the STANAG/AATMP and national SMEs along with consequences and possible mitigations.

Custodian POC. For users to provide any comments and lessons learned: Lt Col Slavomir Koncir (Czech republic) koncirs@army.cz

#### General:

In the implementation of any STANAG/AATMP, the NATO Led Service Provider should verify the items listed below using the NATO Standardization Office (NSO) password protected Website <a href="https://nso.nato.int">https://nso.nato.int</a>.

A. Suitability	Review STANAG 7204 (ATMP-46) NATO Minimum Requirements for Personnel Providing Air Traffic Management and Air Navigation Services (ANS) in NATO-led Operations if the STANAG/AATMP is suitable for the type of operation required.		
B. Currency	Ensure that STANAG/AATMP Edition and any Amendments are the most current as shown on the NSA website.		
C. Related Documents	Obtain related documents cited in the STANAG/AATMP and, in particular, review those documents where criteria as been adopted. STANAGs are available on the NSO Website whereas civilian documents, such as ICAO, may be available from your Aviation or Engineering Commands.		
D. Implementation Status	n Review the ratification status along with any reservations to the STANAG/AATMP on the NSA Website and, in particularly, the status for those for nations taking part in the operation.		

For existing airfield facilities and procedures, determine if they are		
in compliance with the criteria and standards specified in the STANAG/AATMP.		

#### Specific:

The safety considerations, consequences and possible mitigations listed below by the STANAG/AATMP Custodian assisted by Subject Matter Experts are by no means exhaustive or fully applicable to all environments or situations.

Full safety surveys in accordance with STANAG 4720 NATO Standard for Air Traffic Management (ATM) Safety Management System (SMS), shall be conducted.

Safety Considerations	Consequences	Possible Mitigations		
Non-qualified, incompetent or insufficiently trained air traffic management (ATM) and air navigation services (ANS) personnel are involved in providing ATM and ANS.	Provided services would lead to significant safety impact for both operational and general air traffic.  Increased chance of major safety related incident occurring.	Ensure air traffic controllers, air traffic safety electronics personnel, meteorological personnel and other ATM personnel involved in providing ATM and ANS are competent and trained to an appropriate level. This could be conducted through verifying their competency and qualification with national authorities.		

#### **ANNEX B**

#### **LEXICON**

#### **B.1. TERMS AND DEFINITIONS**

- 1. Aerodrome Control Service An air traffic control service for aerodrome traffic. [ICAO Annex 11]
- 2. Air Navigation Services (ANS) means air traffic services; communication, navigation and surveillance services; meteorological services for air navigation, and aeronautical information services; [EUROCONTROL]
- 3. Air Navigation Service Providers (ANSP) means any public or private entity providing air navigation services for general air traffic; [EUROCONTROL]
- 4. Air Traffic Control (ATC) means a service provided for the purpose of:
  - preventing collisions:
  - between aircraft, and
  - in the maneuvering area between aircraft and obstructions; and
  - expediting and maintaining an orderly flow of air traffic;

[EUROCONTROL] [ICAO Annex 11]

- 5. Air Traffic Flow Management (ATFM) means a function established with the objective of contributing to a safe, orderly and expeditious flow of air traffic by ensuring that ATC capacity is utilized to the maximum extent possible, and that the traffic volume is compatible with the capacities declared by the appropriate air traffic service providers; [EUROCONTROL]
- 6. Air Traffic Management (ATM)
  The dynamic, integrated management of air traffic and airspace including air traffic services, airspace management and air traffic flow management safely, economically and efficiently through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions.

  [ICAO Doc 4444]

#### 7. Air Traffic Management (ATM)

means the aggregation of the airborne and ground-based functions (air traffic services, airspace management and air traffic flow management) required to ensure the safe and efficient movement of aircraft during all phases of operations. [EUROCONTROL]

- 8. Air Traffic Services Reporting Office (ARO) means an ATS unit established for the purpose of receiving reports concerning ATS and flight plans submitted before the first delivery of an air traffic control clearance. [EUROCONTROL]
- 9. Air traffic safety electronic personnel (also Air traffic safety electronic personnel) (ATSEP)

Air traffic safety electronic personnel is generic term for those technical specialists working to provide and support the electronics and software which enable ATS systems to function. ATSEP comprise engineers, technicians, and computer hardware and software specialists who are responsible for the specification, procurement, installation, calibration, maintenance, testing and certification of ground electronic systems used to help control aircraft movements.

[EUROCONTROL]

#### 10. Air Traffic Service (ATS)

A generic term meaning variously flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

[ICAO Annex 11]

#### 11. Airspace Management (ASM)

means a planning function with the primary objective of maximizing the utilization of available airspace by dynamic time-sharing and, at times, the segregation of airspace among various categories of airspace users on the basis of short-term needs; [EUROCONTROL]

#### 12. Airspace Management Cell (AMC)

is a joint civil/military cell responsible for the day-to-day management and temporary allocation of national or sub-regional airspace under the jurisdiction of one or more ECAC State(s).

[EUROCONTROL]

#### 13. Alerting Service (ALR)

means a service provided to notify relevant organizations regarding aircraft in need of search and rescue aid, and to assist such organizations as required.

[EUROCONTROL]

#### 14. Approach Control Service (APP)

Air traffic control service for arriving or departing controlled flights. [ICAO Annex 11]

#### 15. Area Control Service (ACC)

Air traffic control service for controlled flights in control areas. [ICAO Annex 11]

#### 16. Communication Services (CNS)

means aeronautical fixed and mobile services to enable ground-to-ground, air-to-ground and air-to-air communications for ATC purposes.
[EUROCONTROL]

#### 17. Control Area

A controlled airspace extending upwards from a specific limit above the earth. [AAP-6]

#### 18. Flight Information Service (FIS)

means a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.
[EUROCONTROL]

#### 19. General Air Traffic (GAT)

means all movements of civil aircraft, as well as all movements of State aircraft (including military, customs and police aircraft) when these movements are carried out in conformity with the procedures of the ICAO.
[EUROCONTROL]

#### 20. (Local) Air Traffic Flow Management Unit (ATFMU)

means a flow management entity operating on behalf of one or more other flow management entities as the interface between the central unit for ATFM and an ATS unit or a group of such units.

[EUROCONTROL]

#### 21. Meteorological Services (METS)

means those facilities and services that provide aircraft with meteorological forecasts, briefs and observations as well as any other meteorological information and data provided by States for aeronautical use.

[EUROCONTROL]

#### 22. Navigation Services

means those facilities and services that provide aircraft with positioning and timing information.

[EUROCONTROL]

#### ANNEX B TO AATMP-46

#### 23. Rating

An authorization entered on or associated with a license and forming part thereof, stating special conditions, privileges or limitations pertaining to such license. Note: in this context a license is understood to include a certificate of competence. [ICAO Annex 1]

24. Surveillance services (SUR) means those facilities and services used to determine the respective positions of aircraft to allow safe separation; [EUROCONTROL]

## **AATMP-46(A)(1)**