

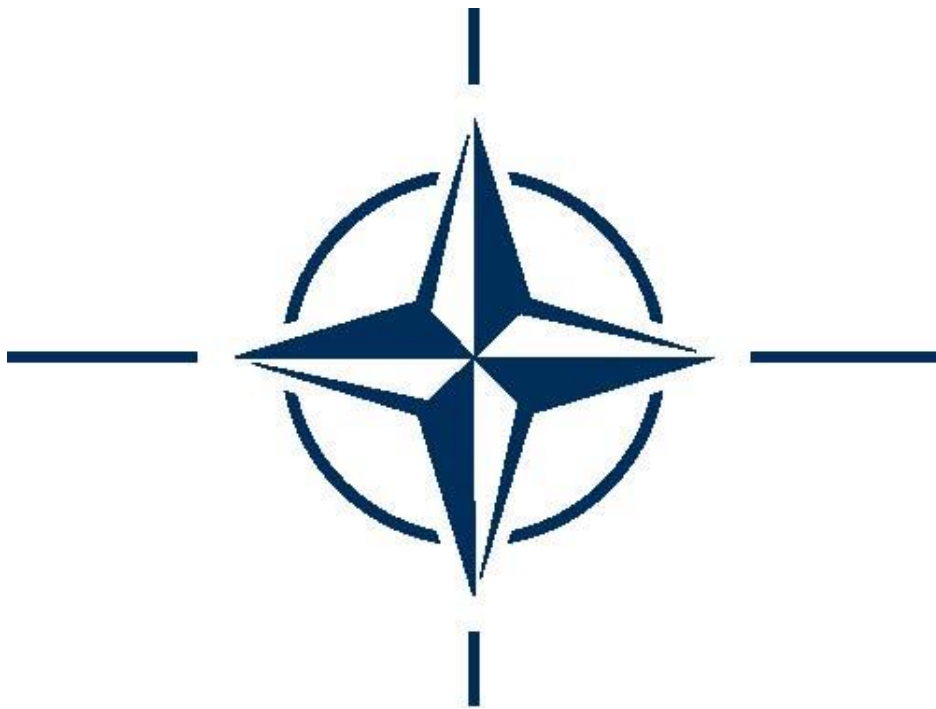
**NATO STANDARD**

**AMedP-9.1**

**MODULAR APPROACH FOR  
MULTINATIONAL MEDICAL  
TREATMENT FACILITIES (MTF)**

**Edition A Version 1**

**NOVEMBER 2018**



**NORTH ATLANTIC TREATY ORGANIZATION**

**ALLIED MEDICAL PUBLICATION**

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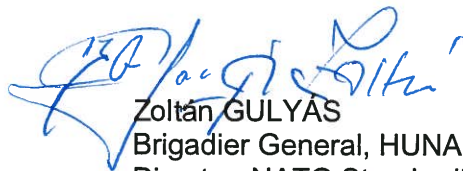
**NORTH ATLANTIC TREATY ORGANIZATION (NATO)**

**NATO STANDARDIZATION OFFICE (NSO)**

**NATO LETTER OF PROMULGATION**

9 November 2018

1. The enclosed Allied Medical Publication AMedP-9.1, Edition A, Version 1, MODULAR APPROACH FOR MULTINATIONAL MEDICAL TREATMENT FACILITIES (MTF), which has been approved by the nations in the Military Committee Medical Standardization Board, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 6506.
2. AMedP-9.1, Edition A, Version 1, is effective upon receipt.
3. No part of this publication may be reproduced, stored in a retrieval system, used commercially, adapted, or transmitted in any form or by any means, electronic, mechanical, photo-copying, recording or otherwise, without the prior permission of the publisher. With the exception of commercial sales, this does not apply to member or partner nations, or NATO commands and bodies.
4. This publication shall be handled in accordance with C-M(2002)60.



Zoltán GULYÁS  
Brigadier General, HUNAF  
Director, NATO Standardization Office

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## RECORD OF SPECIFIC RESERVATIONS

[nation]	[detail of reservation]
FRA	<p>The structuring of “role 2” and “role 3” into modules only relates to the modular approach concept for the build up of multinational medical treatment facilities.</p> <p>Beyond this scope, roles and medical treatment facilities are defined based on their capabilities, as provided for in AJP-4.10</p>
GBR	<p>Chapter 1</p> <p>In principle, the United Kingdom (UK) continues to support the development of multinational approaches to the provision of medical support on Alliance operations and initiatives such as Smart Defence and the Framework Nations Concept. The UK believes that to date, the only proven approach is the Lead Nation approach and that multinational approaches such as pooling and sharing and framework nations groupings remain conceptual in nature and unproven in application. Therefore, the UK national preference is for a Lead Nation approach to deployed multinational medical treatment facilities.</p> <p>The UK believes that the modular approach is useful for nations when defining the functional component parts of a medical treatment facility. In addition, the approach assists medical commanders and planners in identifying the interoperability requirements needed to successfully operate a group of modules as a whole capability. In the context of multinational approaches, the approach is of similar value; however, its value is currently limited when seeking solutions to problems generated by factors such as differing national: defence priorities; legislation and policy; medical education and regulation; and, clinical standards and governance.</p> <p>Chapter 3</p> <p>The UK adopts a specific form of the Lead Nation approach in the context of medical treatment facilities. This approach is necessary to obviate complex factors relating to national sovereignty that often act as barriers to ‘medical multi-nationality’. These barriers include differences in nations legislation and policy; medical education and regulation; professional roles; and, clinical standards and governance. In addition, the UK believes that its approach promotes, achieves and maintains high levels of interoperability which is an essential requirement. In the specific context of a multinational medical treatment facility, the UK (as the Lead or Troop Contributing Nation) currently understands the Lead Nation approach to mean:</p> <p>(1) The Lead Nation is responsible for the planning and execution of the assigned medical mission;</p>

	<p>(2) The Lead Nation has OPCOM or OPCON authority over forces assigned from Troop Contributing Nations;</p> <p>(3) The Lead Nation has responsibility for all appropriate capability lines of development (for example, NATO DOTMLPF-I: Doctrine, Organization, Training, Material, Leadership, Personnel, Facilities, Interoperability);</p> <p>(4) Troop Contributing Nations will provide personnel only (with the required specialist skills) to work within the Lead Nation construct;</p> <p>(5) The assigned Troop Contributing Nations' forces must meet the Lead Nation's familiarisation, training, exercise, rehearsal and certification requirements; and,</p> <p>(6) The authorities, responsibilities and requirements will be detailed in a bi-lateral agreement(s) between the Lead Nation and Troop Contributing Nation(s)</p>
<p>USA</p>	<p>(1) RE: 2.3.2.7. US military pharmacies procure, dispense, recommend or use only drugs approved by the Food and Drug Administration (FDA). War reserve materiel and in-use equipment must be in compliance with US FDA regulations standards. Additionally, medical equipment used in the aeromedical evacuation domain must be approved as safe and effective to operate in strategic airlift platforms.</p> <p>(2) RE: 3.2.1. Some US deployable capabilities are not designed for independent operation and rely on base support for life support which may or may not be expandable to co-located partner nation capabilities.</p>
<p>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.</p>	

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<b>CHAPTER 1 INTRODUCTION</b>
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## **1.1 BACKGROUND**

1.1.1 Historically, provision of medical support to NATO operations has been a national responsibility. However, in the last few years the gap between the requirements to be met and the availability of national military medical treatment facilities has been continually increasing. Therefore, on recent deployments the adoption of multinational approaches to medical support has become increasingly common as a means to share operational burdens and mitigate national capability shortfalls. So far, these multinational solutions, in which elements of more than one nation contribute to the overall provision of medical support for the purpose of improving medical operational effectiveness, while taking into account the diversity amongst the nations, have been based on bi- or multilateral agreements between Nations.

1.1.2 The great difficulty for NATO Nations to keep pace with the changing operational environment while developing their deployable military medical support capabilities led the Military Committee to identify Medical as one of the critical shortfalls that could hamper the achievement of NATO Level of Ambition. The task to provide proposals on how the NATO Military Authorities intend to overcome the identified critical shortfalls was assigned to the Committee of the Chiefs of Military Medical Services in NATO (COMEDS). In this context, the joint efforts of national representatives in all COMEDS substructures and the medical elements of International Military Staff (IMS), Allied Command Operations (ACO) and Allied Command Transformation (ACT) led to the establishment of a medical shortfall mitigation plan (Reference A), endorsed by both the Military Committee and the COMEDS. The plan specifies a number of complementary approaches needed to resolve or mitigate medical shortfalls and the requirement for an alignment of effort within NATO. To achieve this, shared concepts are required as a starting point for national engagement and commitment.

1.1.3. In the meantime the Smart Defence (SD) initiative, aimed to facilitate the achievement of NATO Level of Ambition in a context defined by diminishing resources, was launched. The SD initiative is all about setting priorities, developing capabilities together, getting the best possible return on defence investment and thus increasing efficiency. Therefore, it was considered as an ideal umbrella under which medical shortfalls could be mitigated. For this reason, a Medical Project, was proposed (Reference B) and classified as a Tier 1 project: Tier 1.15 - Pooling and sharing of multinational medical treatment facilities.

1.1.4 In addition, and compatible with Smart Defence, the Framework Nations Concept (FNC) assists Allies in delivering the capabilities required, both quantitative and qualitative, to meet the NATO Level of Ambition, including responding collectively and robustly to any conceivable Article 5 contingency and successfully undertaking the

three essential core tasks of the 2010 Strategic Concept: collective defence; crisis management; and cooperative security. The FNC seeks to achieve better synergy from the multitude of forces and capabilities that are available to the Alliance and aims at facilitating the provision of coherent sets of forces in multinational groupings that will be in place over the long-term. Such coherent sets of forces should aim to provide a broad spectrum of capabilities, including enabling and high end capabilities, which are trained and prepared, and therefore usable for the full range of Alliance missions. This applies to medical contributions and could help accelerate the achievement of a sustainable agile military medical posture that, within the context of the Force Generation Process, is able to respond quickly when called upon.

1.1.5 To set a conceptual basis for the SD Medical Project implementation, two concepts were developed by ACT and approved by the Military Committee (Reference C): a Multinational Approach to healthcare and a Modular Approach to medical support capability. Both these concepts have served as a basis for the Project development.

## **1.2 AIM**

The aim of this document is to set the basis for the creation of standardized component modules of personnel and equipment able to be rearranged, replaced, combined and interchanged easily in order to create Multinational Medical Treatment Facilities (MTFs) able to meet specific operational requirements. To achieve this, each Multinational MTF must function under the coordination of a Lead Nation (LN) and be made up of modules provided by other Nations (Contributing Nations – CNs) with various degrees of participation. Possible LN and CNs responsibilities are depicted further in this document. The resulting Multinational MTFs can be employed across the whole spectrum of operations, including warfighting, deterrence, contingency operations, peacetime engagement, crisis response and humanitarian relief. This will help to provide to NATO the means to:

- Mitigate Role 2 shortfalls;
- Improve multinationality and partnerships;
- Enhance multinational medical engagement;
- Meet specific operational requirements; and
- Improve standards of care and interoperability.

The document has been built on the work carried out in the context of the SD Project Tier 1.15 and takes into account the principles set out at Reference C. Furthermore, it refers to the Role 2 Basic, Role 2 Enhanced and Role 3 Medical Treatment Facilities as described at Reference D,

**1.3 SCOPE**

The scope of the document incorporates the definition and standardization of modular components and the provision of the basic conceptual work for pre-deployment training and evaluation of a Multinational MTF. It does not include other issues (legal, financial, etc.), which, while recognized as fundamental, need further analysis, with the contribution of experts other than medical. In any case, these issues will need to be included in the agreements (Memoranda of Understanding, Technical Agreements, Implementation Agreements etc.) that Nations participating in the Multinational MTF will need to establish among themselves (see Chapter 3).

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<b>CHAPTER 2    MODULES</b>
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## **2.1    MODULAR COMPONENTS**

2.1.1 The Modular Approach is based on predetermined groupings of personnel and equipment defined as standardized units (modules) for ease of management and greater flexibility of employment. The individual modules can be provided from a variety of sources, both national and non-national, military as well as civilian. Their common feature will be functional interoperability for the creation of a collective capability. Each Module represents a self-contained entity that includes personnel, equipment, materiel and procedures whose final output is a specific functional capability. Representing a functional capability, in principle a Module cannot be split. However, considering that what is really important is the final output and in order to allow for the maximum flexibility, this does not prevent the possibility to integrate contributions (especially personnel) from different nations into the module itself. But in this case only one nation will remain in charge and will be responsible for the capability that must be provided.

2.1.2. In order for this document to be used both in the Operations Planning Process (OPP) and in the NATO Defence Planning Process (NDPP), each module should be defined taking into account the required capabilities, capacities and personnel skill set. AMedP-1.7 and AMedP-1.8 (STANAG 2560 – Reference E and F) describe the capabilities and skills required for each module. It should be noted that the definition neither includes the personnel number nor any equipment list. The equipment will be determined by the purpose and tasks of the modules, while the personnel can be deduced according to the specific national situation from the detailed skill set. In this respect, the experiences gained during previous deployments and in the civilian environment should be taken into account. As far as the capacities are concerned, during the OPP they will be dictated by the requirements of the specific operation and negotiated in the context of the Force Generation process. For the NDPP it will be necessary to refer to the relevant Capability Packages.

2.1.3. In accordance with Reference D, modules are classified into three different groups: core modules, enhancing modules, and complementary contributions.

## **2.2    CORE MODULES**

2.2.1 Seven different core modules have been identified:

1. Emergency Area
2. Surgery
3. Specified Diagnostic (including imagery and field laboratory)
4. Patient holding (intended to briefly hold treated patients prior to evacuation)
5. Post operative, high dependency

6. Command, Control, Communication, Computer and Information (C4I)
7. Medical Supply

2.2.2 In accordance with Reference D, a Role 2 Basic includes all seven Core modules. A Role 2 Basic can be established in tents as a very mobile facility or with a more static approach in tents/containers, in fixed buildings or on naval platforms. Since a highly mobile Role 2 Basic in tents comprises only a very small number of personnel, it provides fewer possibilities for multinational cooperation, which, however, cannot be excluded.

### **2.3 ENHANCING MODULES**

2.3.1 'Enhancing' refers to an incremental increase in the level of care provided at Role 2 Basic level: Enhancing Modules can be added to the Core Modules to establish a Role 2 Enhanced, which must provide all the capabilities of a Role 2 Basic, but has enhanced capabilities as a result of additional facilities and greater equipment/personnel resources, including the capability of stabilizing and preparing casualties for strategic aeromedical evacuation.

A Role 2 Enhanced must not necessarily include all the Enhancing modules. The enhancing modules can be selected from the so called NATO medical toolbox. Depending on requirements with regards to operational needs, host nation support, climatic and epidemiological circumstances, planned duration, geographic and environmental situation of a mission, a task-tailored Role 2 Enhanced MTF can be created.

2.3.2 Fourteen different enhancing modules have been defined:

1. Surgery
2. Imagery
3. CT Scan
4. Ward
5. Intensive Care Unit
6. Laboratory
7. Pharmacy
8. Dental
9. Mental Health
10. Internal Medicine
11. Isolation Ward
12. Hospital Management
13. Sterilisation
14. Primary Healthcare

## 2.4. COMPLEMENTARY CONTRIBUTIONS

Besides Core and Enhancing modules a third group of modular components has been identified, defined as Complementary Contributions. They do not necessarily constitute a functional capability or a non-divisible unit. They might reflect specific national demands, special environmental requirements of the host nation or imperatives related to the type of mission. The Complementary Contributions can be added either to a Role 2 Basic or to a Role 2 Enhanced to form a more capable MTF. The following list is not intended to be exhaustive:

1. Oxygen production
2. Hyperbaric Medicine
3. Frozen blood products (blood bank)<sup>1</sup>
4. Animal Care
5. Physiotherapy
6. Preventive Medicine
7. Telemedicine
8. Mortuary
9. CBRN (Decon& treat patients)
10. Additional Clinical Specialties
11. In transit/response ambulances
12. Magnetic Resonance Imaging
13. Specialist surgery.

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<sup>1</sup> Whole and derivative blood products due to the diverse blood products available in the military blood banking system (e.g. frozen blood, frozen platelets, freeze dried plasma, and fresh whole blood).

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<b>CHAPTER 3      RESPONSIBILITIES</b>
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### **3.1 INTRODUCTION**

3.1.1 One of the guiding principles of the Modular Approach is flexibility. Therefore, the responsibilities depicted in this chapter, built on the experience gained in previous deployments and exercises and/or already agreed upon in other NATO standards might change significantly. The establishment of a Multinational MTF will always require for the participating Nations to reach an agreement depicting the respective tasks and responsibilities, which may differ according to the situation. For example, the establishment of long-term standing Multinational MTFs and the establishment of Multinational MTFs during the Force Generation process for a specific operation represent completely different situations. In both cases the Modular Approach can be used, but the tasks and responsibilities of the LN and the CNs could be significantly different.

3.1.2 In any case, different types of agreements (Status of Force Agreements, Memoranda of Understanding (MoU), Technical Arrangements, Implementation Agreements etc.) will cover all aspects of Multinational MTF establishment and functioning, as well as the LN and CN responsibilities, commitments, cost sharing principles and procedures, legal aspects etc. Templates for MoUs can be found in AMedP-9.2 (STANAG 2552 – Reference G).

Annex B provides a graphic description of the actions to be performed at various levels to establish a Multinational MTF.

### **3.2 MULTINATIONAL MTF LEAD NATION RESPONSIBILITIES**

3.2.1 In principle, the responsibilities of the LN of a Multinational MTF will encompass the following areas<sup>2</sup>:

- mission analysis: this will include coordination with the relevant NATO authorities (ACO and/or relevant JFC, Force Commander, Medical Director etc.) to ensure the best possible integration of the facility within the overall medical organization, as well as the capabilities/capacities the MTF has to provide to accomplish the mission,
- operational planning, including facility composition, module capabilities, required manning etc.,
- provision (as applicable) of key enabling capabilities, that could pertain to real life support (supply of food, water, power supply, fuel, laundry, waste and biohazard disposal, social welfare, accommodation, environmental protection, force protection etc.), medical logistics (drugs, medical gasses, blood and blood products, consumables, medical equipment maintenance etc.), communication equipment etc.,

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<sup>2</sup> This list is not intended to be exhaustive nor to be applied as a whole in every situation.

- establishment of interoperability requirements as needed<sup>3</sup>, especially with regards to power supply (plugs, connectors, converters and power consumption), water (piping, connectors, pressure and quality), oxygen (production, connectors, bottles), medical waste management (procedures and materiel) and shelter/tent connections,
- facility deployment arrangements, in close coordination with NATO Movement agencies,
- medical C2 arrangements, including the provision at the earliest possible stage of the Multinational MTF Commanding Officer/Clinical Director,
- facility SOP development<sup>4</sup>,
- clinical governance principles and procedures, which will be coordinated with the Multinational MTF CNS<sup>5</sup>.
- medical records production and distribution<sup>6</sup>,
- an adequate and mission tailored integration and pre-deployment training programme<sup>7</sup>, and
- Level III evaluation and validation procedures in accordance with AMedP-1.6 (STANAG 2560 – Reference H), including the appointment of the Multinational Evaluation Team Leader.

3.2.2 The capabilities for which the LN is responsible do not have to be provided by the LN itself. The LN may reach agreements with other Nations concerning the actual provision, but remains responsible for their availability.

### 3.3 MULTINATIONAL MTF CONTRIBUTING NATIONS RESPONSIBILITIES

Nations agreeing to contribute to the establishment of a Multinational MTF should:

- cooperate with the LN in the preliminary conceptual work (mission analysis, operational planning, etc.),
- ensure the optimal functioning of the medical equipment contributed to the Multinational MTF, making all efforts to keep it up to date,
- deploy nationally certified and properly trained medical personnel, that ideally should have attended all of the training modules depicted in AMedP-8.3 (STANAG 2249 – Reference I);
- conduct the module Self Assessment and ensure Level I (individual) and II (module) evaluation in accordance with AMedP-1.6 (STANAG 2560 – Reference H),

<sup>3</sup> Taking into account the existing relevant NATO standards.

<sup>4</sup> A list of non-clinical SOPs can be found in AMedP-9.2 (STANAG 2552 – Reference G)

<sup>5</sup> In any case, both LN and CNS, as module providers, remain responsible for quality management and must comply with agreed standards of care and best medical practice.

<sup>6</sup> Taking into account medical confidentiality.

<sup>7</sup> Ideally, training should be conducted before deployment. If this is not possible, LN and CN modules will train separately and integration and common training will be conducted in theatre prior to FOC declaration. In any case training should follow the regulations laid out at Reference I.

- participate in the integration and pre–deployment training programme set up by the LN,
- if contributing a module with personnel provided by another Nation, train, evaluate (mainly Level II) and certify that personnel in accordance with AMedP-8.3 (STANAG 2249 – Reference I) and
- guarantee module functionality as close as possible to 100% on a 24/7 basis. As a consequence, national tasks or activities should be kept to a minimum and in any case priority must be given to Multinational MTF functionality as a whole.

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<b>ANNEX A REFERENCE PUBLICATIONS</b>
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References:

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- C. IMSWM-0169-2012, Conceptual Basis for a Multinational Approach to Military Healthcare and a Modular Approach to Medical Support Capability, 16 July 2012
- D. AJP-4.10 (B), Allied Joint Doctrine for Medical Support (STANAG 2228), May 2015
- E. AMedP-1.7, Capability Matrix (STANAG 2560), January 2016
- F. AMedP-1.8, Skills Matrix (STANAG 2560), January 2016
- G. AMedP-9.2, Guidelines for a Multinational Medical Unit (STANAG 2552), January 2013
- H. AMedP-1.6, Medical Evaluation Manual (STANAG 2560), January 2016
- I. AMedP-8.3, Training Requirements for Health Care Personnel in International Missions, (STANAG 2249), June 2013

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**ANNEX B RESPONSIBILITIES FOR A MULTINATIONAL MTF BUILD UP FOR A SPECIFIC OPERATION**

**NATO**



**LEAD NATION**



**CONTRIBUTING NATIONS**



**AMedP-9.1(A)(1)**