

AJP-4.10(A)

**ALLIED JOINT
MEDICAL SUPPORT DOCTRINE**

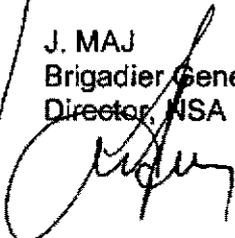
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Reference of decision for release:
NSA(MED)0562(2011)1/MedSB dated 30 May 2011

NORTH ATLANTIC TREATY ORGANIZATION
NATO STANDARDIZATION AGENCY (NSA)
NATO LETTER OF PROMULGATION

March 2006

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4/ J. MAJ
Brigadier General, POL (A)
Director, NSA


RECORD OF CHANGE

Change Date	Date Entered	Effective Date	By Whom Entered

FOREWORD

The successful planning, execution and support of military operations requires a clearly understood doctrine, and this is especially important when operations are to be conducted by Allied, multinational or coalition forces. Allied Joint Publication-01 (AJP-01) provides the 'capstone' doctrine for the planning, execution and support of Allied joint operations. Although AJP-01 is intended primarily for North Atlantic Treaty Organisation (NATO) forces, the doctrine could be applied, with adaptations where necessary and agreed by participating nations, for operations under a coalition of NATO and non-NATO nations within the framework of a Combined Joint Task Force (CJTF). Thus no distinctions are drawn within the document between solely NATO operations, non-Article 5 Crisis Response Operations (CRO) by Allied forces and CJTF operations.

The revisions in AJP-4.10 Allied Joint Medical Support Doctrine include:

- All chapters and sections have been rewritten to be more logical, readable and coherent.
- All chapters and sections have been rewritten to harmonise with concurrent doctrinal development reflecting the changes in NATO's operational capability.
- Where possible, text has been streamlined and referenced to supporting documents.
- Defence and Operational Planning section has been removed so it can be properly developed in AJP 4.10.1.

AJP-4.10 is a living document and will be amended regularly. Under the tasking authority of the Committee of the Chiefs of Military Medical Service in NATO (COMEDS), the Allied Command Transformation (ACT) Medical Section, with project management by the Military Medical Structures, Operations and Procedures (MMSOP) Working Group, will review and update AJP-4.10 as deemed appropriate. Therefore any recommended changes or development proposals are welcome, addressed to the Medical Section Head, ACT.

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CHAPTER 1

THE ALLIANCE CONCEPT OF MEDICAL SUPPORT

SECTION 1 - INTRODUCTION

General

1001. The transformation of the world security environment has had a profound impact on the North Atlantic Alliance, which in 1992 and 1999 and in the historic Prague summit of November 2002 changed its strategic concept. This was further updated in Istanbul in June 2004, with a reassertion of collective defence being the core purpose of the Alliance whilst adapting to new security challenges through its military operations and activities, its engagement with partners and its continued transformation of military capabilities. The danger to the security of North Atlantic Treaty Organisation (NATO) members is less likely to come from aggression to their collective territory, but mainly from risks to their collective interests in areas beyond their territory. The new risks may include the proliferation of Weapons of Mass Destruction (WMD), disruption of the flow of oil, terrorism, genocidal violence and wars of aggression in other regions that threaten to create great instability. The attacks of September 11th 2001 with its subsequent Article 5 declaration by NATO due to attack on one of its constituent members are an appalling example of the changing risks to NATO.

1002. These new risks have led the Alliance to deduce that it has to be more flexible and transform in order to successfully adapt to the new environment. This includes the ability to rapidly project more capable, network centric and effects focussed forces in new structures to take on missions to support NATO's wider security interests outside traditional NATO Article 5 territorial boundaries. The Combined Joint Task Force (CJTF) and NATO Response Force (NRF) concepts provide the means to generate multinational forces rapidly deployable beyond the traditional Area of Responsibility (AOR) of the Alliance, for the whole spectrum of Article 5 and non-Article 5 Crisis Response Operations (CRO). Such coalitions will include some, but not necessarily all, NATO members, and may include non-NATO members.

1003. Therefore, while Article 5 operations remain NATO's primary mission, significant changes have occurred in the way the Alliance can expect to operate in the future. NATO will also need to be able to integrate non-NATO forces, and to undertake CRO with all the commensurate additional support requirements that result from the potential lack of established infrastructure. Medical staffs must also adapt to these new situations, and further develop concepts to support multinational joint operations.

1004. The influence of medical factors upon operational decisions leads to an increasing requirement for multi-national medical solutions and a professional and influential staff to produce them. There will be continuing changes in society with increased public expectations of an individual's right to health and high quality treatment outcomes. Medicine will continue to become highly specialized and

technical, and military medical support will need to develop unique and specialist capabilities to respond to new and emerging threats and weapons technology. Future medical support systems will be able to respond to these changes by providing efficient, flexible and focused solutions in order to provide the essential timely support to the commander's effects based operations.

1005. While the massive Article 5 war, with huge numbers of casualties occurring over a large area, is still a significant concern for NATO, this scenario is appearing less and less likely. Smaller, more localised, operations such as peacekeeping and peace support, are probably going to be the most common operations for NATO in the short and medium term. Whatever the possible degree of violence in these operations, the involved nations may not necessarily consider themselves being at 'war', with all the legal constraints this implies. From the medical viewpoint, crucial aspects of the most likely types of future operations are:

- a. Joint operations (operations in which elements of more than one service participates (i.e. land, air and maritime forces)).
- b. Combined (or multinational) staffs and force structures (i.e. more than one nation).
- c. High degree of flexibility and mobility.
- d. Variable and generally lower average casualty rates than have traditionally been planned for an Article 5 scenario.
- e. Emphasis on medical support to achieve outcomes of treatment equating to best medical practice.
- f. Emphasis on medical force protection at all levels, to assess medical support readiness, share real-time lessons learned and good ideas, and identify issues for command awareness.
- g. Emphasis on environmental hazards leading to the need for preventive medicine based on accurate health information.
- h. High level of media coverage leading to more public focus on the need for adequate medical support and more influence on morale of troops and public support.
- i. Requirement to support humanitarian emergency situations together with International Organisations (IOs), Governmental and Non-Governmental Organisations (NGOs).
- j. Emphasis on asymmetric threats leading to adequate self-protection of medical assets.

Aim

1006. The aim of this publication is to provide medical support doctrine for NATO multinational joint operations and essential introduction for medical planning staffs. AJP-4.10, as one of the supporting Joint Doctrine publications of AJP-4.0, is at the head of a medical hierarchy of Joint Doctrine publications, prime amongst these subsidiary documents is AJP-4.10.1 (Allied Joint Medical Planning Doctrine), which collates and updates ACE Directive 85-8 (Medical Support Principles, Policies and Planning Parameters) and its maritime counterpart Maritime Medical Planning Guidance (MMPG).

Scope

1007. This document forms a doctrinal bridge between medical support principles and policies included within Military Committee (MC) 326/2 and planning guidelines developed at the strategic, regional and sub-regional levels. It is consistent with AJP-4, which refers to supporting doctrinal publications, in which medical doctrine is further developed and then explained to provide medical and non-medical staff with a greater overview of the finer points and complexities of medical support planning and execution.

1008. NATO medical support doctrine allows considerable flexibility. It does not reflect nor exclude any particular nation's approach to medical support, it does however constitute a basic framework upon which to base actual operational contingencies. The doctrinal framework is focused on "how to think" rather than "what to think" and does not preclude close cooperation between the nations, even if some differences in national doctrines exist. Hence different options for cooperation in medical support are mission-tailored on a case-by-case basis.

1009. This publication provides a detailed overview of the interactions between medical and other staffs. The statement that "in NATO, Medical is part of Logistics", as reflected in MC 319/2, as to be considered but is incomplete. It poorly reflects the span of collaboration and interactions across the entire spectrum of the command staff elements that is required from the medical staffs in operations, especially with regard to the medical support resulting of the new threats and new types of operation that NATO is facing. In fact medical staffs operate in a highly specialised and multifaceted environment, which involves linkages and interface with all NATO commander staff elements, of which logistics is only one part.

1010. Novel terminology not yet defined in the NATO Glossary of Terms and Definitions (AAP-6) or the NATO Glossary of Medical Terms and Definitions (AMedP-13) is defined in the Glossary to this publication.

1011. The custodian for this document is the Medical Section of Headquarters Supreme Allied Command Transformation (SACT) to whom all comments, proposed amendments and updates should be forwarded. The tasking authority for the document is the Committee of the Chiefs of Military Medical Service in NATO (COMEDS) who

have directed the Military Medical Structures, Operations and Procedures (MMSOP) Working Group to act as Medical Doctrine Project Sponsor.

Allied Joint Doctrine

1012. Allied operations are defined as “operations carried out by forces of two or more NATO nations”. Combined operations are defined as “operations carried out by two or more nations consisting of NATO and non-NATO countries”. Joint operations are defined as “operations in which elements of more than one service participate”. These should be prepared, planned and conducted in a manner that makes the best use of the relative strengths and capabilities of the participating countries and the forces they offer for the operation.

1013. A common doctrine supported by standardisation of equipment and procedures, validated through participation in Allied, joint and combined training exercises, provides the basis of force interoperability. At the operational level, emphasis must be placed on the integration of the Contributing Nations’ (CN) forces and the synergy that can be attained. This will have a decisive effect on a multinational force’s ability to achieve the commander's objectives.

Levels of Combined Joint Operations

1014. Operations by Combined Joint Forces (CJF) are directed, planned and conducted at three levels:

- a. The Military Strategic Level. At this level, armed forces are employed with other instruments of power to secure the strategic objectives of the Alliance. Allied Command Operations (ACO) may be directed to draft an outline plan which, subject to North Atlantic Council (NAC) approval, would be passed to the operational commander for development as an operational plan. Thereafter, Supreme Allied Commander Europe (SACEUR), through his headquarters ACO, would monitor the operation to ensure that the operational commander continues to have, inter alia, the correct mission, Rules of Engagement (ROE), forces, etc.
- b. The Operational Level. At the operational level, armed forces are employed to attain strategic and/or campaign objectives within a designated AOR. Normally this will require sustained operations with simultaneous and/or sequential actions by the committed forces. It is at the operational level that tactical successes achieved in engagements and major operations are combined to achieve strategic objectives. To that end an operational level commander will refine a campaign within a designated AOR, create an operational plan and direct operations.
- c. The Tactical Level. At the tactical level, forces are employed to conduct military tasks and to accomplish military objectives of less magnitude than those defined at strategic level. Successful accomplishment of these objectives is designed to achieve operational results.

1015. The key to delineation of these levels is that normally strategic authority allocates objectives and resources, setting necessary limitations; while, at the operational level, the commander orders the activities of his assigned formations in pursuit of his own campaign plan. At tactical level, commanders employ units for combat in order to achieve the military objectives of the campaign.

SECTION 2 - MEDICAL SUPPORT ORGANISATION

Medical Mission in NATO Operations

1016. The mission of medical support in military operations is to support the mission, through conservation of manpower, preservation of life and minimisation of residual physical and mental disabilities. Appropriate medical support makes a major contribution to both force protection and morale by the prevention of disease, rapid evacuation and treatment of the sick, wounded and injured and the return to duty of as many individuals as possible.

1017. In order to accomplish the mission a spectrum of services is required. The principal components of operational health care, around which the medical system is built, are Medical Force Protection, Emergency Medicine, Primary Health Care (PHC), Secondary Health Care (SHC) and Evacuation.

1018. Medical capabilities must be commensurate with the force strength and the assessed risks to the deployed forces, operational risk management being conducted in consultation with the relevant medical authorities. The medical support must be heavily involved in the pre-deployment preparation and also must be deployed at the initiation of the Reception, Staging, Onward Movement and Integration (RSOI) process to support the deployment process. The operational medical support capabilities must deploy with the forces they are tasked to support, being held at the same readiness state as the forces they support. Robust and comprehensive capability must be available at the initiation of operations, expand progressively as force strength expands and risks increase, decrease progressively as the force strength and risks decrease, and there must be a surge capability to meet peak casualty rates in excess of expected daily rates.

Standards of Medical Care

1019. Military medicine is highly specialised due to the environment and conditions it is frequently practised in and the procedures will not always be the same as practised during peacetime. The standards of care available can have a permanent effect upon outcome and the effects of poor quality can rarely be reversed later. The four main aspects affecting clinical quality are organisation, training, environment and equipment.

1020. Medical support to NATO forces must meet standards acceptable to all participating nations. Even in crisis or conflict, the aim is to provide a standard of medical care to achieve outcomes of treatment equating to best medical practice. The

application of this principle must be guided by the principles embodied within the concepts of Clinical Governance, Evidence Based Medicine and war surgery.

Time-Related Constraints of Medical Care

1021. Time is a fundamental factor in patient survival and recovery. This applies to all medical emergencies, however this document will focus on surgical emergencies. Hence, time is the major driver dictating the type and location of medical assets in operations and conflicts, and timeliness in providing appropriate intervention to the wounded or ill is crucial. This timeliness is strongly dependent on appropriate organisation, training, equipment and environment.

1022. In order to reduce the mortality or disability rate of casualties and the required period of hospitalisation, resuscitation and stabilisation should be initiated as soon as possible on the field, primarily within the first hour of trauma management, sometimes called “the golden hour.” A proportion of severely wounded casualties resuscitated will deteriorate or remain unstable. These casualties will require primary surgery as soon as possible. Where primary surgery can be provided forward the number of casualties saved can be increased, and the degree of disability can be minimised. The principal medical planning timeline for deployments should be to provide primary surgery for critically injured patients within one hour. However, when this is not feasible (determined by the operational planning process and operational and political risk management), the planning timelines may be extended to two hours for the provision of Damage Control Surgery (DCS) and four hours for Primary Surgery.

1023. In conclusion, among the medical principles, responsiveness, which is providing timely and effective medical care, is a cornerstone. All these considerations about time constraints of medical care in operations are summarised in the guidance that “primary surgery must be provided as soon as possible, ideally within the first hour but not later than four hours from wounding”.

Continuity of Care

1024. Patients passing through the medical system must be given care, which is continuous and relevant. Casualties must be managed continually until they reach definitive care. In transit care must be available during medical evacuation and the clinical condition of the individual is the key factor governing the timing, means and destination of the patient’s evacuation.

1025. Medical care is normally provided in a progressive manner through the four roles that identify the capability of medical facilities, from point of injury or sickness through evacuation to specialised care and eventually to definitive treatment and rehabilitation, although specific injuries or diseases might require to bypass a role as they require specialist care at an early stage.

Casualty Management

1026. The medical support system in military operations depends on well-organised pre-hospital treatment and medical evacuation. It utilises different and successively staged techniques and protocols to treat the casualties.

1027. Emergency care (resuscitation and stabilization) and surgery when necessary render the casualty transportable to a suitable Medical Treatment Facility (MTF) for definitive treatment. Surgery at a medical treatment facility might not be definitive surgical treatment, rather it may be the initial effort required to save life and limb and preserve function to the greatest extent possible. This publication follows MC 326/2 in that it uses just two types of surgery; primary surgery and DCS, both these are surgical procedures conducted by surgical teams consisting of necessary specialists and equipment.

- a. DCS are emergency surgical procedures and treatment by a surgical team to stabilise casualties, in order to save life, limb or function. DCS techniques are applied when the magnitude of tissue and organ damage are such that primary surgery is likely to exceed the casualty's physiological limits. The concept is that only the minimum is done to deal with life-threatening problems. Examples include: methods for rapid control of bleeding, control of enteric spillage without restoration of gut continuity, tracheotomy for penetrating lung injury, rapid amputation of a mangled limb in the presence of other equally serious injuries and temporary restoration of blood flow to a limb using vascular shunts. Primary surgery is then delayed until various physiological and other relevant parameters have been restored to as near normality as possible. This places a strong emphasis on continuity and quality of care during MEDEVAC between Roles 2 and 3.
- b. Primary surgery describes the surgery directed at repair of the local damage caused by wounding, rather than correcting the generalised effects. Delays to primary surgery allow further generalised effects to develop that may lead to an increase in mortality, morbidity and residual disability.

1028. This means that a patient may require a series of surgical interventions in different MTFs with different and generally increasing medical capabilities. This concept of casualty management allows forward medical facilities to be more mobile and concentrate more resource-intensive casualty care in more secure areas where medical facilities are not required to move with the changing tactical situations. In a combined operation medical treatment might well be delivered by personnel of different nationalities at various MTFs along the evacuation chain. This calls for a high degree of standardisation of casualty treatment regimes and equipment.

1029. Casualty management requires the creation and the maintenance of a comprehensive patient management system with a common information base, which includes treatment information to be recorded using a standardised NATO format. This

system will facilitate patient tracking, patient regulating, epidemiology, and medical documentation and record keeping within and between theatre medical facilities. This common information base should be accessible to entitled personnel by means of the Communications and Information System (CIS) assets available for the operation.

Medical Capabilities

1030. Within NATO, the medical resources and assets are usually distributed into four tiers on a progressive basis to conduct treatment, evacuation, re-supply and other functions essential to the maintenance of the health of the force. All component medical facilities are categorised into four Roles, defined according to the minimum clinical capability available in a facility, not the capacity or manoeuvrability. A single organisation of unit may provide several types of MTF and therefore span several roles, and carry out other functions. Therefore units should not be described by their role unless that role is the highest capability within the unit. The differences between them will be discussed later in this document, in paragraphs 1037-1052. "Capability" describes what the MTF can do with capability increasing from Role 1 to Role 4.

1031. The minimum capabilities of each Role are in principle intrinsic to each higher Role, that is a Role 3 facility has the ability to carry out Role 1 and Role 2 functions. A MTF cannot be reduced below the minimum capabilities of its given numeric descriptor. Therefore a medical asset cannot be described as Role X "minus" (e.g. there is no Role 2-).

1032. MC 326/2 defines the standard capability of the Role 2 MTF. However there is wide recognition that Role 2 in particular has evolved to include a wide range of clinical capabilities, particularly with the general inclusion of DCS at Role 2. Therefore this publication introduces delineation between the traditional Role 2 capabilities providing advance trauma care and resuscitation designed for warfighting type manoeuvre (light manoeuvre – Role 2LM) and the evolved and more clinically capable variant providing light secondary health care (enhanced – Role 2E).

1033. As a general rule, as medical support capabilities are increased, they do so at the price of increased requirements for complex equipment, personnel and supplies, which in turn requires increased lift and other support, thereby limiting their mobility. Highly sophisticated medical facilities in the combat zone could encumber the commander and restrict his freedom of movement. However, if the nature of the operation allows it, sophisticated MTFs should be positioned near to the point of wounding.

1034. Under battle conditions the flow of casualties generally follows the pattern from Role 1 to Role 3 facilities. Then medical evacuation to Role 4 care takes place as appropriate. But this is a medical organisational pattern and not a matter of rigid prescription. One or more Roles may be bypassed on grounds of efficiency and patients' needs.

1035. The number and types of treatment assets and their location will be determined by a whole spectrum of planning issues (detailed in AJP 4.10.1). Without the consideration of operational aspects, the main planning elements are sound casualty estimates and the

time required for transportation from point of wounding or sickness to the required treatment resource, keeping in mind the time related constraint of medical care. The availability and type of transport assets to be utilised, the length and difficulty of the evacuation route, the operational environment and its limitations and the theatre holding policy will have an impact on the size and capability of medical facilities.

Medical Treatment Facilities (MTFs)

1036. MTFs should, where appropriate, be as mobile and robust as the units they need to support, within the time related constraints of medical care and the provision of medical evacuation assets. An integral part of the definitions of capabilities is the determination of its output. A medically qualified doctor will provide supervised care at every Role. This planning factor will however be addressed in AJP 4.10.1, Medical Planning. Furthermore, the MTFs should be described by their capability and capacity as detailed in AMedP-16.

Role 1 MTF

1037. The Role 1 MTF provides primary health care, specialised first aid, triage, resuscitation and stabilisation. Generally Role 1 medical support is ultimately a national responsibility and it must be readily and easily available to all force personnel.

1038. Included within the basic Role 1 capabilities are: basic occupational and preventative medical advice to the chain of command, routine sick call and the management of minor sick and injured personnel for immediate return to duty, as well as casualty collection from the point of wounding and preparation of casualties for evacuation to the higher level MTF.

1039. Whenever a national contingent is unable to meet these criteria an increase in capability or medical support from another contingent's medical resources should be negotiated.

1040. In accordance with the mission, Role 1 medical capabilities may include the following:

- a. Minimal patient holding capacity.
- b. Primary dental care.
- c. Basic laboratory testing.
- d. Initial stress management.

Role 2 MTF

1041. MC 326/2 significantly recognised the clinical enhancement at Role 2 and defined Role 2 as: "A Role 2 MTF is a structure capable of the reception and triage of casualties, as well as being able to perform resuscitation and treatment of shock to a higher level than Role 1. It will routinely include DCS and may include a limited holding facility for the short

term holding of casualties until they can be returned to duty or evacuated". It may be enhanced to provide basic secondary care including primary surgery, ITU and nursed beds.

1042. The deployment of Role 2 MTFs is mission-dependent, especially when:

- a. There are large numbers of personnel or a risk of high numbers of casualties.
- b. Geographic, topographic, climatic or operational factors may limit medical evacuation capability to Role 3 to comply with treatment timelines, especially when lines of communication are extended.
- c. The size and/or distribution of the force does not warrant the deployment of a full Role 3 capability.

1043. It is in light of this mission dependency and the need to ensure quality of outcome in the most efficient and effective manner that NATO countries felt the need to increase the clinical capability of their Role 2 MTFs. Therefore Role 2 MTFs are now classified into Role 2 Light Manoeuvre and Role 2 Enhanced.

Role 2 Light Manoeuvre (2LM)

1044. Role 2LM MTFs are light, highly mobile MTFs to support component formations (normally brigade equivalent level). Normally these are only used for initial crisis or warfighting deployments. These MTFs act as a focal point for Role 1 MTFs in the formation, but may be bypassed if situation and resources allow. A Role 2LM MTF is able to conduct triage and advanced resuscitation procedures up to DCS. It will usually evacuate its post surgical cases to Role 3 (or Role 2E) for stabilisation and possible primary surgery before evacuation to Role 4.

1045. In addition to Role 1, Role 2LM will include:

- a. Specialist medical officer led resuscitation with the elements required to support it.
- b. Routinely DCS with post-operative care.
- c. Field Laboratory capability.
- d. Basic imaging capability.
- e. Reception, regulation and evacuation of patients.
- f. Limited holding capacity.

Role 2 Enhanced (2E)

1046. Role 2 Enhanced (2E) MTFs are effectively small field hospital. They provide basic secondary health care, built around primary surgery, ICU and nursed beds. A Role 2E MTF is able to stabilise post-surgical cases for evacuation to Role 4 without needing to put them through a Role 3 MTF first. They have two principle uses:

- a. As a light mobile manoeuvre hospital in advance of Role 3.
- b. As a theatre or regional secondary health care hub mainly on stable operations where full capability Role 3 units are not justified. A Role 2E will normally replace both Role 2LM and full Role 3 units as an operation stabilises.

1047. In addition to Role 2LM, Role 2E will include:

- a. Primary surgery.
- b. Surgical and medical intensive care capability.
- c. Nursed beds.
- d. Enhanced field laboratory including blood provision.
- e. Casualty decontamination facilities for Chemical Warfare (CW) and Biological Warfare (BW) casualties dependent on the operational risk assessment.

1048. Role 2 may have additional capabilities such as:

- a. Preventive medicine and environmental health capability.
- b. Primary dental care.
- c. Operational stress management, psychiatry or psychology.
- d. Tele-medicine capability.
- e. Patient evacuation coordination capability.

Comparison between Role 2LM and Role 2E

	Op Environment Examples	Tactical Mobility	Clinical Capability	Position in Deployed System
Role 2LM	Potential high intensity combat, support to manoeuvre. Mainly land or amphibious ops	Highly mobile, quick to establish and redeploy	Advanced trauma care and specialist medical officer led resuscitation routinely including DCS	Will usually need to evacuate post-surgical cases to Role 3 (or Role 2E)
Role 2E	Potential low intensity combat: a. Manoeuvre, light forward hospital. b. Non-warfighting, manoeuvre limited. c. Enduring PSO. Land or maritime ops	Medium to low mobility, may be set up in fixed accommodation	Primary surgery, ICU and nursed ward beds	May be last MTF before strategic AE for post-surgical cases

Role 3 MTF

1049. Role 3 MTFs are designed to provide theatre secondary health care within the restrictions of the Theatre Holding Policy. Role 3 medical support is deployed hospitalisation and the elements required to support it. It basically includes surgical at primary surgery level, ICU, nursed beds and diagnostic support. Depending on mission characteristics it includes a mission-tailored variety of clinical specialities, focussed on the provision of emergency medical care. This does not exclude nations to include other specialities as well.

1050. In addition to beds, including surgical and medical intensive care capabilities, required for the seriously ill and injured, the holding capacity will be sufficient to allow diagnosis, treatment and holding of those patients who can receive adequate treatment and be returned to duty within the Joint Operations Area (JOA), dependent on the Theatre Holding Policy. Resupply of Role 2 facilities and either control of, or ready access to, patient evacuation assets are included within the minimum capability. It is important to note that the mobility of Role 3 facilities depends significantly on the operational scenario. Many need only to be deployable in order to be deployed into theatre and will not require subsequent redeployment. However, in a highly mobile conflict some will also require to be redeployable in order to be able to continue supporting the manoeuvring formations.

1051. Role 3 MTFs can include mission tailored clinical specialities, of which the addition dependant on the need for medical/clinical assets to ensure emergency medical care, limit the repatriation of patients to Role 4 within the theatre holding policy and ensure adequate survivability during transport from Role 3 to 4. They can include

- a. Specialist surgery (neuro-surgery, maxillo-facial, burns, etc).

- b. Advanced and specialist diagnostic capabilities to support clinical specialists (CT scan, arthroscopy, sophisticated lab tests, etc).
- c. Major medical, nursing specialities (Internal medicine, neurology, intensive care, ophthalmology).

Role 4 MTF

1052. A Role 4 MTF provides the full spectrum of definitive medical care that cannot be deployed to theatre or is too time consuming to be conducted there.

1053. Role 4 would normally include definitive care specialist surgical and medical procedures, reconstructive surgery and rehabilitation.

1054. This care is usually highly specialised, time consuming and normally provided in the casualty's country of origin or the home country of another Alliance member. In many member nations Role 4 care is provided for by military hospitals, but there are also models within the national (civilian) health care system.

Component Medical Support

Land Operations

1055. Land operations vary considerably in mission type and characteristics. Examples are static deployment or highly mobile manoeuvre. There is the overall size of the AOR with dispersion of the force to consider, with few potential battlefields without the presence of civilians or non-combatants. Land operations also include amphibious, airmobile, airborne and follow-on force deployments. Weapon systems, ammunition types and equipment may vary considerably, dependent on the mission. Medical support requirements for land operations are additionally heavily influenced by MEDINT factors.

1056. Medical support must be provided for the deployed forces, however must also take into account likely provision for EPW and other parties such as civilians or refugees. There is the requirement to provide the same level of medical support for Lines of Communication, which may be prolonged, using the medical treatment timelines as the primary planning factor. The AOR may be large enough to have two distinct support areas, the Rear Support Area (RSA), where most operational level support functions are performed and the Forward Support Area (FSA), where tactical support functions take place. There may be a mixture of these support area types throughout the JOA.

1057. Medical capabilities for land operations should include a robust medical health protection capability. Types of deployed MTFs will depend on the mission type and dispersion of the forces to be supported, varying from highly mobile warfighting units to small static facilities, which may provide linear or 'hub and spoke' incremental support. The latter is where the SHC MTF (Role 2E or 3) could be placed centrally with the sending MTFs arranged round it in a 'hub and spoke' organisation. Location of MTFs

will be mission dependent. There must be provision of PHC and SHC, with graduated incident response capabilities.

1058. Medical evacuation means will primarily be based on both ground ambulances with air assets providing rapid specialist transportation for those requiring urgent treatment (either transfer to a MTF or deploying a medical Incident Response Team) or where the ground evacuation is too long or insecure. Air evacuation assets may be assigned or dedicated, on priority call or opportune lift¹. Air assets, both rotary and fixed wing, should be made available for evacuation between roles of Land medical care; this requires close coordination with the Air component.

1059. Key to successful medical support for land operations is having a clear and responsive medical C3, which must include patient tracking and regulating capabilities. Access to robust and secure data communications is essential, which is particularly difficult during highly mobile land operations, in environments not conducive to radio communications or over long distances.

1060. Civilian casualties, including children, continue to be a feature of war. Medical NGOs may not be present during or immediately after the war-fighting stage or in a hostile or high-risk environment. Where appropriate, medical units should maintain a limited capability to treat in case of acute emergency non-combatants including senior citizens, pregnant women and children before NGOs arrive to fulfil this task.

Air Operations

1061. Medical support to the air component is designed to support both the intricacies of flying operations and the other components, particularly in the specialised area of Aeromedical Evacuation (AE) (forward, tactical or strategic). Due to the specific nature and organisation of air components, Role 3 MTFs are often not integral to the air component on joint operations. Deployed Operating Base (DOB) medical support must therefore be closely co-ordinated with the other components, but must also ensure full aeromedical and emergency medical support for 24-hour, all weather flying operations.

1062. Aviation medicine specialists are required for effective 24-hour, all weather air operations. These should ideally be deployed to form an integral part of the DOB medical support structure. Support for air operations is a highly technical industrial process, therefore occupational health capabilities are required to advise and support commanders in their responsibility for ensuring related preventive health measures.

1063. Forward aeromedical evacuation is one of the main interfaces with the other components. Maximum use of appropriate air assets (fixed wing and rotary) should be used for medical evacuation of suitable casualties between roles of medical care in order to conform to the clinical response timelines for the best quality of treatment outcome. Deployed Casualty Staging Units may be required to support aeromedical evacuation and should have access to or include appropriate Aviation Medicine expertise.

¹ Opportune lift and CASEVAC are terms in common usage by a few nations and appear to describe evacuation of ill or injured persons without in-transit medical care. These are not medical terms.

1064. Emergency medical response provision within the DOB will most likely be the responsibility of the Air component. When that DOB lies within the AOR of another component, such as the Land component, a co-ordinated approach to emergency medical response must be incorporated and proved, ensuring the most efficient and effective employment of component medical support assets through closely linked medical C3 structures.

Maritime Operations

1065. In maritime operations, support to a deployed maritime force has two facets: shore support and afloat support. Shore support encompasses all the activities in direct support of a maritime force. Afloat support is the responsibility of the commander at sea who controls all assigned assets, including medical.

1066. The fundamental precept of the maritime support is to provide shore-centralised distribution and support sites so that units, while afloat, can be self-sufficient. While the concept is flexible and specific capabilities and organisation will be mission dependant, generally it calls for Advanced Logistic Support Sites (ALSSs) in support of the entire force, and smaller, more mobile Forward Logistic Sites (FLSs) located closer to the supported force. The distribution of medical resources, assets and capabilities between the maritime force and the shore medical facilities will be scenario dependent and subject to contingency planning.

1067. In common with the other components, Role 1 medical maritime support afloat is that integral to the unit. Specific titles used for MTFs in the maritime environment are the Primary Casualty Receiving Ship (PCRS), range of capability between Role 2 and Role 3, and the Hospital Ship, Role 3 afloat. Although the minimum medical capabilities for medical treatment facilities were covered in Paras 1036-1054, these capabilities will have a considerable degree of variation in the maritime environment. As with land operations, these variations will depend on the composition of the force, the remoteness of the deployment, as well as the specific requirements of the mission.

1068. The concentration of manpower within the relatively small volume of a ship's hull means that casualties are likely to occur in groups, and this has resource implications. Transfer of casualties between a damaged unit and supporting medical/surgical facilities either afloat or ashore requires helicopter assets since they are the fastest, most efficient and safest means of evacuation. Further, in a ship, the organic medical personnel stand more chance of becoming casualties themselves and the timely transfer of additional medical personnel to the damaged unit can be done better by air. Even though surface transportation may be used, afloat surgical facilities are less effective without either dedicated MEDEVAC helicopter assets, or the usage of organic helicopters in combination with mobile medical teams (to ensure in-flight medical care), this is to move casualties between the damaged ship and the Role 2/3 MTFs (afloat or ashore). Therefore, maritime force medical and evacuation assets overall, available either afloat or ashore, should be sufficient to meet the requirement to treat the estimated number of casualties.

1069. Resupply is also different in the maritime environment. Medical supplies are usually stored for the duration of the mission and if resupply is required this is often from tanker/resupply vessels or from ports of call. An independent maritime force deploying beyond the evacuation range of the ALSS and FLS must be provided with a higher ratio of medical support relative to its size, since it cannot rely on medical assistance from adjoining or supporting forces and will have to hold more patients.

1070. The nature of the maritime environment requires specially trained personnel and equipment, for example the difficulties of aircrew 'landing on' requires specific training and only certain airframes can be used. Specific medical support for submarine rescue and hyperbaric medicine for underwater operations are also a major component of maritime medical support planning. Maritime operations also require access to deployed specialist support from aviation medicine, occupational health and force health protection specialists. Communications suites available to maritime units provided the added bonus of allowing robust tele-consulting opportunities.

1071. The inherent difference between maritime and land force operational medical support may generate different solutions, but integration of the total theatre land and maritime medical support should be considered to achieve economies of scale. This is certainly true for medical support ashore where there will be a strong linkage for Land-based medical care from Role 1-3 MTFs, particularly the latter. Alternative possibilities to support land and air component from afloat Role 2 or 3 MTFs, especially during early stages of initial entry, should be considered (medical sea-basing).

Special Forces Operations

1072. Special Forces operations involve specific doctrine and engagements with significant time and space challenges in austere conditions and environment. They cover all other components or environments, air, sea and land. The forces involved are held on a short response time therefore they require robust preventative medicine measures such as immunizations. The factors, which make provision of robust medical support to Special Forces Operations particularly challenging, are:

- Heightened or increased security needs
- High mobility
- Limited logistics support availability requiring a small footprint and high mobility
- No redundancy or equipment backup
- Difficulties of support over long and often insecure lines of communication
- Special Forces generally won't compromise mission for the sake of medical concerns
- Special Forces are a priority Theatre asset
- Medical support requires an ability to rapidly adjust to the special operational tempo

1073. Therefore to ensure robust Special Forces medical support, Special Forces operators have additional specialized training requirements. Their equipment must generally be man-portable and be multipurpose. Operators must be trained for

multifunctional roles (for example 'patrol medics') and there must be an increased emphasis placed on 'physician extenders'. Medical support capability requirements are a heavy reliance on Role 1. Medical evacuation routes must be well defined, and maybe aided by placing rehearsed surgical capability within rotary or fixed wing Special Forces airframes and as Combat Search and Rescue (CSAR). Medical support providers must also utilise compact medical devices and therefore there is a need to ensure the insertion of the latest in medical technology.

Theatre Support Operations

1074. Theatre Support operations can provide support for all components, dependent on the operational scenario. It is here that Reception, Staging, Onward Movement and Integration (RSOI) of the force may occur, taking the deploying force from arrival into theatre via all the available disembarkation facilities, mainly the Airport of Disembarkation (APOD) and Seaport of Disembarkation (SPOD) and transferring it up a potentially long line of communication (LOC). Medical support is required during this RSOI process with the provision of area medical coverage of primary health care nodes, blue light paramedic ambulance matrix and graduated incident response linked with equipment recovery, signals and provost support. This area medical coverage must link into appropriate MTFs capable of conducting secondary health care, such as Role 3 or Role 2E MTFs. To ensure this medical support is available for the deploying force, theatre medical support assets must be deployed and have the appropriate level of operational capability prior to the arrival of the deploying force. Their readiness to deploy must reflect this enabling requirement.

1075. Maintenance of the LOC is required throughout the operation to ensure the mobility of all supported components. Area Medical support linked to theatre Role 3 MTFs is essential. Subsequent redeployment of the force requires this area medical coverage, including the Airports of Embarkation (APOE) and Seaports of Embarkation (SPOE), to retain its full capability only reducing in size commensurate with the force reduction, likened to rolling up a carpet.

Enemy Prisoners of War (EPW)

1076. The medical support doctrine applicable to Enemy Prisoners of War (EPW) is based on medical ethics and international law, including the Geneva Conventions. For example, international law requires that appropriate medical treatment be given to EPWs, captured medical personnel are afforded a special status as "retained personnel" being non-combatants, and captured medical materiel is not to be destroyed if it is serviceable and safe. It is appropriate to make use of enemy medical facilities or personnel if appropriate for wounded EPWs in order to minimise additional workload on friendly medical facilities. It can be difficult to calculate the holding capacity required for EPW because they do not fit into the Theatre Holding Policy for own troops having no easy access to Role 4 or out-patient rehabilitation facilities, therefore consideration should be given during planning to surge MTF holding capacities.

1077. EPWs are to be treated, evacuated and returned to normal EPW facilities using the same clinical criteria that are applied to the capturing nation's own injured. Nations

may wish to cooperate to provide centralised EPW treatment facilities, although legally the capturing nation remains responsible for EPWs wherever they are held or treated.

1078. EPWs must be treated in accordance with set principles in regard to medical or health matters. These require the following actions:

- a. To treat the prisoners humanely and never to endanger their health.
- b. To take all necessary measures to ensure the cleanliness and healthfulness of camps and prevent epidemics.
- c. To give the prisoners an adequate diet and suitable medical care.
- d. To supply free of charge to the prisoners the appliances necessary for their maintenance in good health, such as spectacles, dentures and other prostheses.
- e. To transfer to specialised establishments those prisoners whose state of health requires special treatment or surgery.
- f. Not to prevent prisoners from presenting themselves to the medical authorities for examination.
- g. To carry out medical inspections of prisoners at least once a month.
- h. To make regular checks on the fitness for work of those prisoners who work and to exempt those who are unfit.

1079. Enemy medical facilities captured intact should be immediately reported through the chain of command. Their incorporation into the capturing nation's medical organisation for the treatment of EPWs should be considered. Similar consideration should be given to captured enemy medical personnel. These can contribute to the management of EPWs, particularly where there would otherwise be language or cultural difficulties. They are also useful where the captured enemy medical personnel have a particular expertise of endemic disease not normally seen in the CNs, and in the management of psychological disorders in EPWs.

1080. Medical services need to be involved in the planning and running of EPW holding areas, particularly when EPWs may pose a risk to those guarding them from bad hygiene practices or endemic disease. The medical authorities will need to develop for the EPWs a preventive medicine strategy, provide a primary health care service, ideally utilising enemy medical personnel, and ensuring that the guarding force has adequate medical support. Details of any injured EPWs who have been treated in the Holding Nation's facility must be passed to the International Committee of the Red Cross (ICRC).

Disaster Relief Operations

1081. Comprehensive NATO guidance exists in relation to disaster relief operations. MC 327 provides policy on the planning and conduct of non-Article 5 Crisis Response Operations. MC 343 outlines the principles of military assistance in humanitarian emergencies not connected to any NATO military operation. MC 411 addresses civil-military interfaces, including military support for humanitarian emergencies within the context of other operations when NATO forces are already deployed or to be deployed. AMedP-15 provides detailed guidance on Military Medical Support in Humanitarian and Disaster Relief.

1082. These principles specifically do not cover the provision of medical support to deployed NATO troops and do not change if the deployment is for humanitarian relief. The term “disaster relief” is used here to include humanitarian assistance, refugee care, and comparable missions not directly related to combat or peacekeeping.

1083. International Disaster Relief Operations (IDROs) can either be carried out within the framework of another ongoing operation, or in the form of a stand-alone humanitarian operation. In the latter case, the operation often involves a considerable degree of logistic and military protection or support, including medical support. The major contribution of medical support to such an operation is threefold: medical support to the NATO force, replacing or supplementing the existing local assets and assisting with their regeneration or development coordinated with the NGOs. Coordination with NGOs is highly demanding, and exceeds purely medical support issues by impacting on the total force mission.

1084. It is most likely that these missions will be carried out in concert with other governmental and non-governmental agencies. It is critical that the cultures, capabilities, structures, and organisational function of these agencies be clearly understood by the NATO commanders and NATO medical staff.

1085. The medical aspects of IDROs are likely to differ from other military operations, particularly in types of injury and illness, the population mix and the structure and type of medical response required. The particular nature of the operation concerned and the geographical location will dictate the medical skill mix required, including the personnel, equipment and materiel to treat senior citizens, pregnant women and children. Clear guidance on any legal issues such as immunity of medical personnel must be obtained prior to deployment.

1086. In considering the deployment of military medical assets in Humanitarian Assistance, a clear understanding of the philosophy behind such assistance is required in order that the affected population may be best served, both in the short and longer term. The following basic tenets must be observed:

- a. Other organisations are likely to be involved in addition to NATO. Care needs to be taken to define areas of responsibility, to avoid competition and either duplication of effort or gaps in the overall care provided. In principle, Medical Humanitarian Assistance by NATO will only be provided

on a subsidiary basis when IOs or NGOs are unable to meet the overall requirement, or if overall capabilities are exceeded.

- b. The affected population should be encouraged to help themselves and competition between their own medical structure, IOs', NGOs' and NATO's must be avoided.
- c. A careful balance between the extent of technically possible care and appropriate care is necessary taking into account aspects like the availability of medical follow-up capabilities, own means and capabilities and the need to have sufficient capabilities and capacities left for support of the NATO force.
- d. Socio-cultural and religious customs and rules.
- e. A return to the pre-crisis status quo, in terms of self-help, must be as rapid as possible to avoid long-term aid dependence.
- f. The disaster has already occurred; its affects must be mitigated by immediate medical assistance and by the application of preventive measures.
- g. Short-term humanitarian assistance usually has long-term impact. Disengagement and the transfer to permanent or semi-permanent organisations or bodies must be ensured before considering engagement and particularly withdrawal.

1087. Medical support must meet standards of medical care acceptable to both the participating nations and the receiving country. The aim is to provide treatment outcome as far as possible comparable to the normal peacetime standards of the receiving country.

1088. Comprehensive and flexible medical plans are essential for an accurate and early response to the disaster situation. To properly fulfil the mission, the deployed NATO medical staff must contain personnel with training, experience and qualifications fitting them to deal with humanitarian and disaster relief operations. The requirements of which may be different to normal military operations, AMedP-17 refers.

1089. Expertise in preventive medicine will be required to ensure that the effects of the disaster are not made worse by the breakdown of the infrastructure in the affected area. The possibility of an epidemic is only one aspect of this; more generally, poor living conditions and an absence of basic utilities will contribute towards the breakdown of health in the population.

1090. National medical support contingents must deploy with agreed quantities of medical supplies as dictated by the co-ordinating NATO HQ. All medical materials, drugs and other medical products used for disaster relief and humanitarian assistance

operations by the force are of the same quality standards as those used to medically support the force.

1091. The overall responsibility for producing an effective medical evacuation system lies with the stricken country's medical authority. Patients should not normally be removed from the country without their nation's authority, where such an authority exists.

1092. Normal considerations in respect to patient confidentiality must be observed in disaster situations. Specific policies on sharing of medical information must be developed in concert with local medical authorities.

SECTION 3 – MEDICAL INTELLIGENCE

General

1093. Medical Intelligence (MEDINT) is **“the product of the processing of medical, bio-scientific, epidemiological, environmental and other information related to human or animal health. This intelligence, being of a specific technical nature, requires informed medical expertise during its direction and processing within the intelligence cycle”**.

1094. MEDINT serves several essential purposes at the strategic and operational levels of planning. First, it is important to the intelligence and operational staffs for formation of strategic assessments. Second, it is important to the medical planning, preventive medicine, and operational staffs. MEDINT is used for:

- a. The assessment of health risks.
- b. The formation of medical estimates.
- c. The development and execution of preventive medicine actions and necessary prophylactic measures.
- d. The planning of more detailed health risk and operational risk assessments.
- e. The ongoing management of medical support services.
- f. Force Protection and Defence.

1095. In a somewhat broader context, MEDINT is useful in the following areas of military planning:

- a. Strategic intelligence assessments.
- b. Analysis of enemy capabilities and vulnerabilities.

- c. Operational planning and execution.
- d. Civil-military medical planning and operations.

1096. MEDINT provides the basis for action throughout the range of military medical operations. Throughout the operation, deployed forces will be required to notify the unit medical staff of any intelligence, which may affect medical readiness. This information will then be reported up to the theatre level for appropriate command advice on risks and recommended response. AJP 4.10.3 provides more detailed information on MEDINT.

Intelligence Requirements and Requests for Information

1097. The intelligence required for medical planning and operations must be comprehensive, rapidly available, accurate and up to date. Amongst others, it must provide information on:

- a. Geographic factors such as effects of climate, topography, flora and fauna, etc. on health.
- b. Epidemic and endemic diseases, their types and prevalence, local prophylactic measures, resistant strains, treatment, etc.
- c. Special environmental and occupational hazards such as radiation hazards, road movement hazards, pollution, toxic industrial hazards, etc.
- d. Chemical, Biological, Radiological and Nuclear (CBRN) capability of protagonists.
- e. Military and civilian medical capabilities and resources available in the JOA.

1098. Medical staffs are responsible for developing intelligence requirements in order to enable the intelligence staff to efficiently request, acquire, and disseminate the finished intelligence products needed. Intelligence requirements are often categorised as either “Standing Requirements” or “Priority Intelligence Requirements” (PIRs).

1099. Standing requirements are the recurring routine requirements for intelligence to be fulfilled in normal day-to-day strategic and operational planning. PIRs tend to be orientated to operational planning either for contingency or for crisis action planning. In the latter case, staffs develop and submit the most critical PIRs, usually just a few that are essential to plan development and the formation of estimates. In either case, both standing requirements and PIRs are usually written in the form of questions about a specific topical area and can be used interchangeably.

1100. There will be times, especially during evolving crises, where intelligence is either insufficient or absent. In these situations, the medical planning staff will need to forward “Requests for Information” (RFI) to the supporting intelligence staff. RFIs will usually be

submitted in a format similar to a PIR, but should be very well defined, narrow in scope, and specific to a command mission or objective. Additionally the RFI must state the highest classification required and a workable time limit.

SECTION 4 – MEDICAL FORCE PROTECTION

General

1101. Force protection may be defined as the protection of personnel, facilities, and equipment in all locations and situations. Three primary focus areas for force protection programmes established by NATO commanders, and incumbent upon all CNs for proactive collaboration, include the following:

- a. Physical and Operational Security: guarding personnel and material against hostile intent.
- b. Safety: protecting individuals against injuries from inappropriate procedures and inattention.
- c. Health: protecting individuals against the physical environment and disease.

1102. In a medical context, force protection is the conservation of the fighting potential of a force so that it is healthy, fully combat capable, and can be applied at the decisive time and place. It consists of actions taken to counter the debilitating effects of environment, occupational health risks, Environmental Industrial Hazards (EIH), disease, and selected special weapon systems through preventive measures for personnel, systems, and operational formations.

Medical Force Protection Cell (MFPC)

1103. In order to best provide oversight of medical aspects of force protection, a Medical Force Protection Cell (MFPC) is normally established and located within the CJ Med, or within the Medical Director's (Med Dir) staff. This ensures that medical aspects of force protection are properly incorporated into the commander's decision making, whilst allowing force protection aspects to inform medical planning processes.

Medical Force Protection Assessment

1104. Medical force protection assessment focuses on the adequacy of the medical support structure to prevent and respond to all possible factors influencing the health of the force and on all measures that have to be taken to protect personnel against health risks.

1105. Medical support capabilities, which may serve as qualitative items for assessment, include:

- a. Air, maritime and ground medical evacuation capabilities.

- b. Epidemiological surveillance, monitoring, enquiries and medical reporting functions.
- c. Medical information collection and intelligence functions.
- d. Preventive and veterinary services functions.
- e. Preventive and health education for deployed troops.
- f. Health risk management.

Pre-Deployment Medical Readiness Preparation and Baseline Assessment

1106. National and NATO command emphasis must be placed on personnel readiness before deployment so that medical (including dental and mental health) fitness and preparedness for duty upon arrival in a JOA are maximally achieved. This requires that each CN establish medical pre-deployment criteria and a system for administration, which includes, at a minimum, screening personnel for the following:

- a. Physical and Dental Fitness. Compliance with CN and, when defined, with NATO fitness requirements (contained in the relevant medical Standardisation Agreements (STANAGs 2235 and 2466), for personnel prior to deployment.
- b. Mental Fitness. Compliance with CN and, when defined, with NATO medical requirements.
- c. Immunisation Coverage. Compliance with CN and STANAG 2037 "Vaccination of NATO Forces" requirements, and in response to medical intelligence summaries for specific operations (e.g. as contained in the relevant Operational Plan (OPLAN)). Appropriate immunisations must be given to deployed personnel, as guided by medical intelligence estimates of the infectious health risk.
- d. Preventive Medicine Training. Training should at a minimum include emphasis on preventive medicine measures for key infectious disease and environmental health risks, and on core preventive medicine principles, including following good personal hygiene and sanitation.
- e. Baseline Health Surveillance Documentation. Increasing national and international emphasis is being placed on establishing strong baseline health surveillance for deployed military forces due to illnesses and disabilities liability for multinational troops upon return from field deployments.

1107. Each nation has its own responsibility for the pre-deployment phase of operations to consider a pre-deployment health assessment baseline.

1108. Although establishing objectives and executing baseline health surveillance are fundamental national responsibilities, the NATO commander shares the responsibility for assuring that nations participating in NATO operations deploy healthy, fit-to-fight and sustainable forces as part of the team. NATO standardisation objectives involve harmonisation and integration of fitness requirements from member and participating nations.

Deployment Phase Medical Readiness Support Functions

1109. During the deployment phase of NATO operations, several key monitoring and surveillance functions provide important measures of medical support readiness. These measures are defined below:

- a. Assessment of the overall health readiness status of the troops through medical situational reports.
- b. Establishment of an epidemiological surveillance data-collection and reporting system.
- c. Verification of a system for the management of stress and prevention of Post Traumatic Stress Disorders (PTSD).
- d. Certification of the readiness and preparedness of NATO and non-NATO deployed medical capabilities.
- e. Assessment of the medical force protection function that will:
 - (1) Provide commanders with an assessment of the readiness and adequacy of the medical support structure at all levels.
 - (2) Identify positive lessons learned to assist and thereby promote exploiting operational success across the entire JOA.
 - (3) Advise commanders on medical support issues requiring national or collective action.
- f. Provision of selected force protection preventive medical initial and reinforcement training.
- g. Provision for monitoring, inspection, assessment and advice regarding occupational and environmental health risks.

Post-Deployment Phase Medical Status Monitoring Functions

1110. A third major phase of medical status monitoring applies to the post-deployment, or troop return phase of an operation. This is an important primary function of national deployment responsibility, but also bears important implications for shaping follow-on

phases of the same NATO operation, and for future operations. Information pertaining to changes in the health readiness status of re-deploying forces is important in both the short and longer-terms at national and NATO levels of management.

1111. In the short term for both participating nations and NATO commanders, important insight may be gained on the adequacy of MEDINT and health support services, thereby providing input for changes in current or follow-on multinational operations. At the national level critical fitness for duty determinations for returning troops is also gained.

1112. Longer-term national relevance regarding liability determination for follow-up medical support requirements (disability liability and continuing medical support liability) may be ascertained. Longer-term benefit may also be achieved for the continuation and enhancement of NATO operations where economy and efficiency will continue to be important principles governing the multinational medical support.

Preventive Medicine and Medical Force Protection

1113. Disease and Non Battle Injuries (DNBI) will be an ever-present risk to personnel. Medical support plans must include provision for preventive medical measures and the means to implement them effectively. OPLAN execution requires a close collaboration of preventive medicine and medical force protection programmes.

1114. Preventive medicine measures must be capable of:

- a. Identifying the risks and threats to the health of all personnel deployed in a specific JOA, from terrain, climate, endemic disease, special EIH and occupational hazards.
- b. Identifying necessary preventive and controlling measures and advising commanders on their implementation, to include the development of a theatre policy on immunization and prophylaxis measures and on the appropriate training of all personnel, especially on measures to prevent food/waterborne and insect-borne diseases.
- c. Advising on and auditing the quality of air, water and food.
- d. Auditing and supervising implemented measures.
- e. Gathering of epidemiological and other technical statistics and information.
- f. Advising commanders on the overall health risks and threats and the limitations they may place on the campaign.

1115. Preventive medicine measures are an essential element of the planning process. Their implementation begins during the pre-deployment stage and continues throughout the deployment, irrespective of overall changes in the conduct of the operation and must extend well into the post-deployment period. They involve every individual in the

operational theatre, who must be aware of necessary personal protective measures and be trained accordingly.

1116. The organisation to undertake preventive medicine measures must therefore be in place from the outset and must extend from theatre HQ down to units and below. Its shape and size will be mission-dependant but will include, at least, individual preventive medicine advice at every level of operational command. Depending on the circumstances, this advice may come from a single medical staff officer with multiple medical responsibilities, supported by Environmental Health Officers, or from a full preventive medicine and environmental health staff under the responsibility of a medical officer.

Preventive Medicine Requirements

1117. MEDINT/Information. The single most essential requirement of preventive medicine is a source of prompt, usable medical information and/or intelligence, available at the planning stage before the outset of an operation. This information must be accurate and its source sufficiently dynamic to inform the user quickly of threat changes.

1118. Immunisations, Education & Training Materials. Other preventive medical resources will include provision for immunisations against specified diseases and chemoprophylaxis, advice on hygiene, training and information for the prevention of DNBI, prophylactic medical materiel and a spectrum of mission dependent field support measures.

1119. Laboratory Capabilities. Surveillance and assessment of environmental health risks require laboratory capabilities. Field laboratory capabilities are part of the environmental health team support functions focused on identification, surveillance and monitoring of health risks in field operating environments. These capabilities should include technology for sampling and analysis for CBRN contaminants in air, soil, water, and food supplies. Ruggedised equipment and transport capabilities are needed both in the form of a field mobile laboratory to support immediate sampling and initial screening of hazards; and a fixed laboratory capability to support both confirmatory evaluations and more extensive assessment of collected field samples pertaining to naturally occurring and manmade health risks. There is also a need to source reference laboratories capable of dealing with advanced and medico-legal analysis.

Morbidity Surveillance and Casualty Reporting

1120. Both morbidity surveillance and casualty reporting systems are important functions performed by medical staff elements to support the NATO commander in the ongoing objectives of protecting the force and conserving the fighting strength and manpower of the force.

1121. The morbidity surveillance function serves as a key indication of troop health status, and as a key warning system or sentinel to trigger further investigation, preventive countermeasures, or other command action to reduce the adverse impacts

of health threats. It also provides an estimate of the impact (manpower and working day losses) of disease occurrence.

1122. A NATO-sponsored morbidity surveillance system called EpiNATO was introduced during the IFOR/SFOR Operation as a keystone tool to be managed by the medical staffs of deployed forces at all levels. It involves the monitoring, collection, and evaluation of illness/injury data on all deployed personnel who report for medical treatment support, both on an outpatient and inpatient basis. It is also set to run in conjunction with other national reporting systems. EpiNATO is utilised in all NATO operations and exercises.

1123. In EpiNATO, epidemiological data on all treatment visits in the JOA, including both first and subsequent attendances, are collated and analysed at theatre level. Relevant findings are reported as feedback to the reporting units. Medical staff and commanders thus have reliable, quantitative planning and resource allocation data regarding medical support and useful trend analyses by illness and injury category.

1124. Through the quantitative identification of causes of morbidity and qualitative measuring of their effect, an evaluation of both occurrences and consequences is the prime objective of this survey. Findings may then support appropriate response actions, both in the short and long term.

Civil Labour

1125. During operations local civil labour is often utilised in large numbers and this can pose a number of health hazards:

- a. They may be reservoirs of infectious disease.
- b. Compounds of civilian/local staffs might pose a risk to the force if not operated under the same regulations and conditions with regard to preventive measures as military compounds.
- c. Infection of own troops from infected food handlers, from contamination of water sources and from sexually transmitted diseases are historical problems associated with civil labour.

1126. The Host Nation (HN) should be responsible for the health of civil labour and any camps they occupy. However, where the HN's medical infrastructure or the medical standards are inadequate, the CNs employing civil labour need to make sufficient arrangements in order to protect the health of their own troops and civilians.

1127. At a minimum these arrangements must include a strategy to prevent and/or eradicate infectious diseases that are a threat to one's own forces, and a first aid service during work. Depending on the supporting civilian infrastructure, consideration will also have to be given to providing a primary health care service, if only to ensure the continued provision of the required labour.

Mass Casualty (MASCAL) and Incident Response Planning

1128. A Mass Casualty (MASCAL) situation is one in which an excessive disparity exists between the casualty load and the medical capacities locally available for its management. In CROs a MASCAL situation will most likely be the result of accidents (road accident, plane crash, explosions, fire, etc.), hostile actions (guerrilla warfare, bombs, terrorist attack) or natural phenomena (flood, earthquake, etc.). Incidents will most likely be smaller in scale compared to an Article 5 MASCAL (perhaps with use of CBRN weapons) situation.

1129. In a MASCAL situation the principle of treatment may, mainly at the onset of the medical response, change from one based on the individual needs of each patient to one based on the greatest good for the greatest number. This means that time-consuming individual treatment and evacuation might temporarily have to be withheld from those who would place a high demand on medical resources, this allows the same resources to be concentrated on a larger number of other casualties instead.

1130. In such a situation, the following triage priorities are to be used for treatment:

- a. Immediate Treatment (Group T1). To consist of those requiring emergency care and life-saving surgery. These procedures should not be time-consuming and should concern only those patients with high chances of survival. Examples: respiratory obstruction, accessible haemorrhage, emergency amputation, etc.
- b. Delayed Treatment (Group T2). To consist of those in need of surgery, but whose general condition permits delay in surgical treatment without unduly endangering life. To mitigate the effects of delay in surgery, sustaining treatment (for example: stabilising intra-venous fluids, splinting, administration of antibiotics, catheterisation, gastric decompression and relief of pain), will be required. Examples: after large muscle wounds, fractures of major bones, intra-abdominal and/or thoracic, head or spinal injuries, uncomplicated major burns.
- c. Minimal Treatment (Group T3). To consist of those with relatively minor injuries who can effectively care for themselves or who can be helped by untrained personnel. Examples: minor lacerations, abrasions, fractures of small bones and minor burns.
- d. Expectant Treatment (Group T4). This group comprises of patients who have received serious and often multiple injuries, and whose treatment would be time-consuming and complicated, with a low chance of survival. If fully treated they make heavy demands on medical manpower and supplies. Until the MASCAL situation is under control, they will receive appropriate supportive treatment. The extent of treatment will depend on available supplies and manpower and may involve the use of large doses of narcotic analgesics. For these patients every effort should be devoted to their comfort, and the possibility of survival with even alarming injuries

always kept in mind. Examples: severe multiple injuries, severe head or spinal injuries, large doses of radiation, widespread severe burns.

1131. A series of suitable plans must be developed for different scenarios at tactical level and integrated into a theatre-wide MASCAL Plan. Force protection measures require a rapid and efficient response to MASCAL situations and incidents. Their effective management shows the theatre ability to respond as a whole to a medical crisis by cross-borders mobilisation of resources and minimisation of obstacles to interoperability.

1132. MASCAL exercises at theatre and local level will help in developing and testing the overall MASCAL Plan. Training objectives may include amongst others:

- a. Evaluate the ability to conduct theatre level medical regulating and AE.
- b. Identify interoperability issues affecting multinational support.
- c. Practice cross levelling of medical supply and critical products, such as blood and medical gases.
- d. Determine the adequacy of emergency care resources.
- e. Test communications connectivity.

Consequence Management (CM)

1133. During past two decades, the world has witnessed a number of complex disasters, both accidental and intentional, that have necessitated innovative and varied event responses. Most agree that an international response is optimal, using both civil and military assets to meet such events. Currently, NATO policy on military response and coordination with civil organizations exists. In the case of CBRN events though, spreading agents or contaminants may require immediate action and could quickly overwhelm even the most prepared nation(s). Reaction, preparedness, and ability to respond to such an event is a necessary capability; "Consequence Management" encompasses this military capability.

1134. MC 472 (NATO Military Concept for Defence Against Terrorism) defines Consequence Management (CM) as 'the reactive measures used to mitigate the destructive effects of attacks, incidents, or natural disasters'. CM describes the events and not the procedures on how to deal with the event. CM procedures are similar to those used in international disaster or humanitarian operations; what differs is the capabilities need and speed of response.

1135. CM is a critical element of any post attack response, and any military involvement must be closely coordinated with civil authorities; the operation remains the responsibility of the national civil authorities. NATO and Partner Nations request CM assistance through the Euro-Atlantic Disaster Response Coordination Centre (EADRCC). Bi-SC CONOPS ABLE GUARDIAN 95425 (19 Feb 03) sets the general

guidelines for NATO military support to national authorities, should such a need be identified by the EADRCC. ACO, upon request, coordinates the military component of CM assistance.

1136. Three potential CM CONOPS scenarios arise in which NATO would conduct CM operations post-CBRN event: CM of a CBRN event in an ART V operation, CM of a CBRN event in a CRO operation, or reacting to a national request for CM assistance (not necessarily NATO) following a CBRN event or terrorist attack. Each event requires a different response and requirements from NATO; regardless, timeliness of reaction to an event with the correct resources is the key to successful CM operations.

1137. Overarching principles guiding CM measures include responsiveness, deployability, specialisation, coordination, legal legitimacy, interoperability. Reachback, C3, scope of operations, and policy decisions remain key areas of CM consideration. Medical considerations include, but are not limited to, medical assessment/detection of the event, decontamination, recommendations on force protection (vaccines and antidotes), medical countermeasures, psychological support, epidemiological surveillance, victim identification, and health education.

1138. Regardless of the level of effort to defend against terrorist attacks, the threat from terrorism will continue, and with it the possibility of an attack using WMD. Should such an event occur, the Alliance could collectively provide a host of crucial capabilities to reduce the effects of an attack, to include the use of existing command, control and communication, logistics, engineer, medical, de-contamination, explosive ordnance disposal, and security capabilities. While CM remains the responsibility of national civil authorities, the Alliance can provide a wide range of support. The medical response to a CM event may be similar to disaster relief operations, but modified according to the weapon used. Comprehensive and flexible medical plans are essential for a quick response to a CM event. To properly fulfil the mission, the deployed NATO medical staff must contain trained, experienced and qualified personnel with reliable communications. Plans must be flexible enough to be adapted to any situation. The following items must be considered when dealing with CM response:

- a. Specific "incident point" casualty rates will be higher than with conventional planning. Often the goal of the terrorist is to inflict as many casualties as possible in the shortest period of time.
- b. If biological agents are used, the attack may not be known until well after the attack. This is due to variation of incubation periods, and a variety of the symptoms may mask the actual agent.
- c. Indirect casualties will occur as people respond to the attack. These will include road traffic casualties, heat injuries, and in the event of a WMD attack psychological illnesses.
- d. NATO military medical treatment facilities will work directly with civilian authorities and are there to support these organizations, coordinated by the Medical Director and his staff.

- e. The units must be prepared to manage medical support items being provided by well meaning individuals and organizations that may not be appropriate for the CM event.

SECTION 5 – CASUALTY ESTIMATES

General

1139. Casualty estimates are one of the core tools of medical plans, they are major resource drivers and, although an inexact science, accuracy is important. In any scenario the analysis of likely casualty rates and numbers has a great political and operational significance and is fundamental in establishing the medical support requirements. Evidence based models, such as operational analysis, should be used if possible but military expertise and judgement will also be required due to the inability to model operations exactly. Casualty estimates are normally divided into two groups, Battle Casualties (BC) and Disease and Non-Battle Injuries (DNBI). The main steps in estimating both are the same:

- a. Determine the Population at Risk (PAR). The troops at risk are determined. The PAR may be taken as a whole or as force elements.
- b. Estimate the Rate. The rate may be estimated on a *pro rata* basis across the PAR expressed as a rate over time, or as the total numbers of casualties expected for particular engagements. If a *pro rata* rate is used, this is then applied to the PAR to give overall numbers of expected casualties.
- c. Estimate the Profile. The casualty profile is the relative proportions of different casualty types expected.
- d. Estimate the Casualty Flow. When casualties are expected and the gaps between these periods will influence whether casualties can be cleared before the next influx and inform the capability and holding capacity required.

Battle Casualties

1140. Battle casualties are those caused as a result of combat. Estimation is the responsibility of the J3/5 staff, supported by medical expertise. Only they have the expertise to estimate the risks involved in the commander's plan, with full access to the information and intelligence upon which it is based. Battle casualty rates may be highly classified. Casualty estimates have force structure, J1 and medical support implications and should be produced early in the planning process. This may not be possible and it may be appropriate for the medical staff, in concert with the J1 staff, to suggest an initial planning figure or to use generic battle casualty rates to allow medical planning to begin. Such figures should be sanctioned by the J3 staff, may be amended

later and should be replaced by operationally specific rates as the planning process proceeds. BC comprise four elements:

- a. Killed in Action (KIA).
- b. Captured and Missing in Action (CMIA).
- c. Wounded in Action (WIA).
- d. Psychological casualties.

1141. Casualty Rate. Casualty rates may be calculated on a *pro rata* basis across the total number of troops in theatre and expressed as a daily rate (number of casualties/100/day). This may be more appropriate for warfighting. Different rates may be used according to the mission. For operations with low casualty estimates, such as Crisis Response Operations, rates may be expressed as total numbers of casualties that might occur from individual incidents rather than from the campaign as a whole. BC rates for generic planning are provided in AJP-4.10.1.

1142. Casualty Profile. Different types of military operations produce different casualty profiles. The trench warfare of WWI produced a high proportion of head injuries whilst armoured warfare tends to produce higher proportions of burn injuries. Force protection measures such as body armour should also be taken into account. Estimation of an operationally specific casualty profile requires military judgement, operational analysis and examination of historical medical databases.

1143. Casualty Flow. The casualty flow may be determined generically during the Defence Planning process in terms of days fighting. Operationally specific estimation of the casualty flow requires consideration of the commander's plan, assessment of the threat's intent, OA and military judgement by the operational staff.

Disease and Non-Battle Injury

1144. Both the incidence and the impact of DNBI are of operational importance and are important to resource planning. The impact may be expressed as working days lost. During the Cold War, generic DNBI rates were utilised. Generic rates are derived from the average of historical rates. For the threat-based operational planning of the Cold War, generic rates had more utility than they do for capability-based expeditionary operations. The number of areas of the world and the types of operation for which no DNBI data exist is decreasing. Marked differences may occur between destinations and further differences are evident when the data is analysed by type of operation.

1145. DNBI is the background rate of disease and injury due to accidents. Although this occurs in peace and on operations, operational rates are unlikely to mirror peacetime rates exactly due to the different environments and appropriate pre-deployment preparation and selection of personnel fit for employment whilst deployed on the operation. Estimation is the responsibility of the medical staff based on historical evidence, environmental assessment and knowledge of the occupational risks of

soldiering. In order to establish a sound DNBI estimate, the medical planner has to take into consideration the level and nature of activity, acclimatisation, training and living conditions of the deployed personnel.

1146. Accurate DNBI estimation requires close cooperation with the operational planning staffs. A detailed analysis of expected sources of DNBI based on historical and current data enables medical planning staffs, with input from operational planning staffs, to produce a provisional DNBI rate for the operation. This is a technical estimation of the probable rate of diseases and injuries not resulting from combat, which can be expected in the force, once deployment begins. DNBI rates for generic planning are provided in AJP 4.10.1.

1147. The implementation of a morbidity surveillance system in NATO deployments (EpiNATO) allows NATO to establish a database of health surveillance information that assists medical support planning for future operations. A comprehensive DNBI analysis can produce more effective preventive medicine measures, including recommended policy on immunisation, prophylaxis and troop education. It can also be a driving factor in the size and capability of medical resources required in different scenarios.

NBC Casualty Estimates

1148. Like BC estimation, NBC Casualty estimation is the preserve of the operational planning staffs, guided by their NBC experts. Suitable guidance for the estimation of casualties from nuclear attack can be found in STANAG 2475 NBC/Medical (MED). Studies into casualty estimates with regard to biological and chemical attack are published as STANAG 2476 NBC/MED (Biological) and STANAG 2477 NBC/MED (Chemical). These documents form AMedP-8 (A), which then comprises three volumes, covered by STANAG 2475.

SECTION 6 – MEDICAL LOGISTICS

General

1149. Medical logistics is a common medical and logistics responsibility. It is the process of procurement, storage, movement, distribution, maintenance and disposition of medical materiel and pharmaceuticals, including blood, blood components and medical gases, in order to provide effective medical support and the application of this process in planning and implementation. Medical personnel are responsible for identification of the requirement, the specification and quantity of medical materiel and pharmaceuticals and will advise on prioritisation of delivery. Logistic personnel are responsible for coordinating the management of medical materiel and pharmaceuticals within the overall logistic plan. Medical and logistic personnel will have shared responsibility for tracking of medical materiel and pharmaceuticals from sourcing through to final disposal.

1150. The unique characteristics of medical materiel and pharmaceuticals have set it apart from other commodities, this has resulted in a separate military medical supply and

logistics management structure that many nations have in place. Prominent distinguishing characteristics of medical stores are as follows:

- a. They are afforded protected status under the terms of the Geneva Conventions if stored and distributed separately.
- b. They play a key role in patient care management and must be able to respond rapidly to clinical demands because of the complex inter-dependence between treatment capability and the availability of medical materiel and pharmaceuticals.
- c. They require tight controls and specialised management due to the technical nature of medical materiel and pharmaceuticals, their often-limited shelf life, and their high sensitivity to storage and transport conditions.
- d. They are governed by extensive national and international (civilian) regulations.

1151. The scale and scope of a medical logistics system will be mission dependant. It must enable national contingents to be self-sufficient from deployment throughout the duration of the mission, in keeping with the sustainment statement specified by planning staffs. It must also be straightforward and reliable, capable of delivering medical supplies rapidly, theatre-wide. An audit system must be established, which is cost-effective, simple, and does not constrain demand or supply.

1152. Allied Command Transformation (ACT) is responsible for stockpile planning guidance in conjunction with nations. Medical stockpile planning, as regards the establishment and maintenance of minimum medical material and pharmaceutical levels, as well as surge production capabilities, is aimed to ensure resources and stocks of adequate medical supplies and equipment to support forces assigned and earmarked to NATO. Guidance for medical stocks can be found in the biennial Bi-SC Stockpile Planning Guidance.

Blood and Blood Products

1153. The supply of blood and blood products is considered as a critical function within medical logistics. Their provision at all levels at which surgery is offered is mandatory. The requirement will be for an in-theatre system with the minimum capability of:

- a. Receiving blood and blood components of a standard acceptable to all participating national contingents as established in STANAG 2939.
- b. Moving, storing and distributing blood and blood components and disposal of clinical items used in blood administration.
- c. Maintaining continuity of records from donor to recipient.

- d. Collecting, processing and testing blood on an emergency basis.

1154. Whilst national contingents are responsible for the supply of blood to their own patients, this is not always practical and feasible. Multinational support arrangements could be set up in the JOA for blood and blood products provision, provided that national and internationally agreed standards are met.

SECTION 7 – MEDICAL COMMUNICATION AND INFORMATION SYSTEM (MEDCIS)

General

1155. Reliable, secure and effective communications and information systems are critical to operational success and the effective employment and control of CIS resources are command responsibilities. CIS embodies the principal domains of computer automation systems, auditory communications systems and visual communications systems. Despite the apparent abundance of such modern communications technology as satellites, computers and fibre-optic transmission, adequate communication capacity is a limited resource.

Medical Communication and Information System (CIS) Requirements

1156. Medical support connectivity is an operational requirement. There is a need to allocate the most effective CIS means to capture the appropriate medical data from theatre MTFs. This facilitates regulation and tracking of casualties within a JOA and gives the ability to respond quickly to medical contingencies. There is also a need for medical professionals to communicate with each other so that medical cases can be discussed and clinical advice be provided. A well-structured medical CIS is the essential foundation of an efficient medical support structure. Medical staff must have the full range of office space, transport, communication equipment and information technology to carry out their mission responsibilities. CIS medical requirements for operations will include a span of dedicated and non-dedicated assets encompassing medical verbal and visual communication, automation technology, data and information management. The medical CIS and in particular the Medical Information and Coordination System (MEDICS) must have the capability to inter-face with the corresponding logistics and operational data management systems included in the Logistics Functional Area Service (LOGFAS) and TOPFAS.

1157. Medical verbal communications include all forms of auditory linkages of staffs within the medical support structure, and between medical support elements and other NATO and national organisational elements and staff. This is a critical component of the communications infrastructure and must have sufficient connections and capacity to support all essential medical CIS needs. This infrastructure will be used as the backbone to support in theatre tactical military connectivity down to the lowest force level. Critical connectivity among evacuation and treatment assets in theatre, and with the out-of-theatre evacuation and treatment assets must be supported. Direct signal communications support, in the form of terrestrial and satellite networks, commercial

and military systems is required to provide a reliable and timely verbal communications architecture comprising radio, fax and telephone based capabilities.

1158. Visual communications includes those both real-time and store-and-forward technologies for transmitting visual imagery from one geographic location to another. Uses may range from tele-consulting, tele-mentoring and tele-conferencing functions, among medical personnel, to the provision of distance-based medical diagnostic support.

1159. Automation technology embodies computer automation hardware and software capabilities, fundamental to medical support across the progressive spectrum of evacuation, treatment, record-keeping, surveillance, and the full range of staff functions, including information and data exchange through electronic mail linkages. This domain is critical for medical linkage into information management systems and medical interactions at theatre and subordinate command levels.

Medical Records

1160. Medical records are represented by the recording and processing of medical information on a patient to include personal medical details, clinical history, as well as medical care and evacuation requirements and support provided.

1161. Careful and standardised medical documentation in an operation is essential for:

- a. Medical treatment.
- b. Quality control.
- c. Evaluation process.
- d. Budget and legal aspects.
- e. Statistics and medical surveillance system functions.
- f. Programming medical supplies and other logistics support.
- g. Breaching language barriers and achieving effective translation documentation on patient treatment records.
- h. MEDINT documentation, reporting, and follow-up.
- i. Monitoring the progress of a patient through the various Roles of medical care.

1162. Patient documentation procedures should be clear and comprehensive. Medical documentation should be interoperable throughout the area of operations. Standardised NATO documents/forms should be utilised in all cases for which such templates exist, such as prescribed through medical STANAGs. Copies of patient documents and

digitised medical records, when available, should move with the patient throughout the evacuation system to definitive care, and then be retained in the individual service member's medical records.

1163. When care is provided to patients in MTFs other than their respective national MTFs, medical personnel should ensure that documentation of medical treatment is noted on official medical records (in the English language) and medical confidentiality is respected. Medical records will accompany the patients during evacuation and suitable medical documentation will also be released to the respective National Medical Liaison Teams (NMLTs).

1164. The following STANAGs cover this subject, STANAG 2132 Documentation relative to medical evacuation, treatment and cause of death of patients (Field Medical Card), STANAG 2347 Medical Warning Tag, STANAG 2348 Basic Military Hospital (Clinical) Records and STANAG 2050 Statistical Classification of Diseases, Injuries and Causes of Death.

Medical Reporting

1165. In common with all other functional areas, the deployed medical C2 must be capable of exchanging information with medical facilities. The aim is to make best use of deployed medical support assets available for the benefit of the deployed force. Reporting comes in two generic forms; reports and requests. The frequency of reporting varies and should be focussed on the requirement; it can be regular and routine, ad-hoc or episodic. The medical reporting requirements are operationally dependent, for example factors such as size of force, composition of force (multinationality), tempo and mission type determine the reporting requirement and frequency. The reporting chain can be cascade or limited, again this is operationally determined. To ensure that reporting is most effective, feedback to the reporters is required, in the form of a DOWNREP. Similarly, Post Operational Reports (PORs) and After-Action Reviews (AARs) are essential, for example after a MASCAL incident or exercise.

1166. As stated above, medical reporting can be placed into two basic groups: reports dealing with assessment such as MEDASSESSREP, SITREP, EpiNATO, A&DREP, MEDINCIDENTREP and requests for medical support such as MEDEVAC, MEDSTOR, STRATEVAC. It should be recognised that there are linkages between reports, for example the MEDSITREP and MEDASSESS reports. There are specific issues to be acknowledged regarding medical reporting, primarily that of medical confidentiality. Ownership of information is key and national medical legal requirements must be adhered to; these may differ between nations. All reports from medical units should be copied to the respective Medical Director.

1167. Medical reporting must not be done in isolation, nor should medical support assets ignore their responsibility to ensure they comply with operational reporting requirements set by the operational commander. Units will have to provide the chain of command with reports such as: unit SITREP to J3, LOGASSESSREP and LOGREP to J4, PERSREP to J1 and for MASCAL for example the INSPOTREP to J3.

1168. Lessons identified and lessons learnt from exercises and operations are of the utmost importance for the future development of medical structures, capabilities, organisations and procedures. Therefore medical units and medical staffs must contribute by providing identified lessons within their reporting, and higher staffs must ensure these potential lessons are correctly staffed and contribute to the analysis process.

CHAPTER 2

MULTINATIONALITY AND MEDICAL SUPPORT STRUCTURES

SECTION 1 - INTRODUCTION

Aspects of Multinationality

2001. Multinationality poses a number of key challenges whose resolution is crucial to military effectiveness and hence success in combined operations. These include the formation of an effective command system, an intelligence system that can draw and share data from a number of multinational and national sources, and a logistic system that acknowledges the need for national support but also caters for multinational needs.

2002. Multinational command arrangements may lead to slower response times than purely national command, and the speed and quality of decision-making may become adversely affected. Such detrimental effects can be ameliorated through the adoption of common doctrine and procedures plus realistic training and exercises. Multinational command requires an attitude of mind that is international in perspective and simultaneously respecting the different national requirements and expectations.

Multinational Cooperation

2003. Nations participating in multinational operations do so for reasons that are viewed as nationally advantageous in political and military terms. Therefore contributions must be judged not only on the capability of the forces provided but also by the full range of political and military benefits they bring to the multinational alliance or coalition operation.

2004. The political advantages of multinational cooperation include sharing political risks, demonstrating economic, diplomatic, military or political support to other regions, achieving international legitimacy through contributing to regional stability, and influencing national and international opinion.

2005. Cooperation adds military advantages in both depth (strength in numbers) and breadth (additional or higher quality capabilities) to a force as well as providing access to national or regional infrastructures and in certain circumstances, access to high value information and intelligence products.

Challenges to Optimal Multinational Cooperation

2006. Differences in force capabilities and operating procedures impose limitations on a multinational force's ability to operate effectively. Among the risks that may need to be addressed are deficiencies in interoperability, such as differences in operating procedures, technical incompatibilities and lack of standardisation. In fact:

- a. Procedural and tactical differences present the force with situations where different units from different services or nations may not be able to work effectively together.
- b. Language barriers present communications difficulties that may result in differences in interpretation of the mission or assigned tasks; and may be intensified by limitations in the range of communications technologies available. In addition, the ability to communicate between patient and medical staff is a key element in medical care.
- c. Lack of standardisation and interoperability can cause technical difficulties.
- d. Inability to exchange information, intelligence, technical data, or communications can result from incompatibilities and national security concerns.
- e. Medical cooperation can be degraded because of concerns about other Nations' capability and the lack of common medical standards of care.
- f. Professional relationships vary between nations, for example nurses in some nations have greater independence, autonomy and status than in others.
- g. National laws may prevent some health professionals (eg Nurse Anaesthetists) working in another nation's MTF.
- h. Significant differences between medical command structures of participating nations.
- i. Legal barriers to drug, medical materiel (eg defibrillators) and blood use, for example drugs may not be licensed for use by some participating nations.

Multinational Medical Support

2007. Multinational medical support is the overarching term for methods of medical support other than purely national to military operations. The multinational medical and logistic concepts are aimed to meet the demands of the joint commander's operational concept, assist in exploiting operational success, and achieve efficiencies and economies of scale resulting from the effective coordination and in some cases integration of assets.

2008. In the area of multinational medical support there is risk for overlap and confusion in the delineation of responsibilities between NATO commands and nations operating under NATO command. Guidelines (generic and operationally specific) must be established to outline the responsibilities of each element involved and the way they relate to planning and conducting multinational operations.

2009. The following are general responsibilities by organisation. It must be remembered that responsibilities may be tailored to the specific circumstances of each operation, as agreed by the CNs and commands involved.

SECTION 2 – AUTHORITY AND RESPONSIBILITY

NATO Commander's Medical Responsibility

2010. Medical support in NATO is in principle a national responsibility. Nevertheless, NATO commanders share, together with CNs, the responsibility for medical support of multinational forces. NATO commanders' medical responsibilities are related to their level of command, the force composition and the type of mission, e.g. time/event (conflict, peacetime planning, PSO, exercises, etc.).

2011. The NATO commander will, with the advice from his Medical Advisor (MEDAD) and the CNs' medical representatives:

- a. Establish the NATO medical support requirements.
- b. Coordinate medical planning and support within his AOR.

2012. The medical support requirement will consist, as appropriate, of procedural, capacity and capability related determinations and will specify those resources necessary to collect, evacuate, treat and hospitalise casualties occurring at agreed daily rates. It will also include the resources to provide preventive medicine services and medical force protection support, including readiness assessment of medical capabilities.

2013. Medical planning will include the implementation of the different methods for medical support such as purely national or multinational as outlined below. Nations retain control over their own resources, until such time as they are released to the NATO commander. But the specific rules concerning authorities, responsibilities and funding, in the case of multinational medical support arrangements, are to be established at an early stage during the planning process and well before Transfer of Authority (TOA).

2014. NATO commanders have the responsibility to assess whether the medical support for the troops they are assigned is in keeping with the medical principles, policies and directives established and agreed by the Alliance as directed in MC 326/2.

2015. The prerequisite for the delegation of medical responsibilities to a NATO commander is the presence in his staff of appropriate medical representation, sufficient in rank, number, training and experience.

NATO Commander's Medical Authority

2016. Responsibility must be aligned with authority. Thus, if a NATO commander has been assigned responsibility for a specific operation, he must also be given the authority to establish and assess the medical requirements so as to ensure he has and maintains the ability to accomplish his mission. On operations the NATO commander has a vested interest in those aspects of health, which affect operational effectiveness. Nevertheless, the authority to decide on the standards that have to be realized remains with the CN.

2017. In NATO operations, units and formations should deploy and re-deploy with a coherent medical structure tailored to their anticipated employment. Under normal circumstances, nations must have first call on their own medical support. However, the force commander must be authorised to take appropriate action in order to cope with casualty peaks within his force.

Coordinating Authority

2018. The NATO commander is granted coordinating authority over medical assets to best support his plans. In coordinating medical functions and activities involving two or more countries, commands and services, he can require consultations but does not have the authority to compel agreement. In the event he is unable to obtain essential agreement he shall refer the matter to the appropriate authority. Coordinating authority is exercised both during the force generation process and during the execution of a given operation.

2019. In exercising his medical coordinating authority the NATO commander may, amongst others:

- a. Evaluate medical intelligence/information about possible deployment areas and incorporate this data into contingency plans.
- b. State additional operationally tailored requirements for and if necessary make assessment of the minimum standards of individual first aid, health and hygiene training of the troops allocated to his force and the collective training of medical units and their fitness to operate and survive.
- c. Require reports on existing bilateral and multilateral Medical Host Nation Support (MedHNS) medical support agreements, establish HN medical support requirements, initiate, participate, coordinate and conduct negotiations for HN medical support.
- d. Establish epidemiological health surveillance of the force deployed.
- e. Direct appropriate education and propose immunisation policy and programmes for disease prevention and control of the troops deployed.
- f. Direct environmental monitoring/occupational hygiene measures.

- g. Establish and run a specific medical command and control system in order to ensure continuity of medical care during patient evacuation.
- h. Make arrangements to ensure safe shelter, food, water and sanitation within the deployment area.
- i. Determine the theatre holding policy.
- j. Propose the use of CBRN medical counter-measures including the administration of prophylactics.

Evaluation and Assessment Authority

2020. The NATO commander has the authority to evaluate and certificate medical units of NATO and non-NATO CNs prior to their deployment. The Medical Operational Support Evaluation System (MOSES)² provides such a system to deliver an Evaluation and Assessment Programme of operational military medical support systems for both NATO and non-NATO countries. The principle aims of MOSES are:

- a. Evaluate, assess and, where appropriate and required, grade the operational capability of medical support systems allocated to NATO (Command, Assigned or Earmarked) or made available to NATO in consultation with nations.
- b. Where appropriate, conduct evaluations and/or assessments of non-NATO nations' medical support systems.
- c. Verify medical support systems resources and/or capabilities.
- d. Where necessary, make recommendations for the improvement of health service support systems in order to achieve standards of care as near as possible to prevailing peacetime medical standards.

2021. During the mission, collective responsibility allows the NATO commander's oversight of all medical issues within his purview. Therefore, once in the theatre and for the duration of operation, all assigned medical units will report in a timely manner their capabilities one level up in the chain of command. This requires a reporting mechanism that is both complete and easily interpreted.

2022 These reports may be developed as a collaborative tool among theatre and lower command level medical staffs. They support a range of objectives including:

- a. Assess the readiness status of the medical support structure to support troop health needs.

² Full details on MOSES are to be found in AJP-4.10.1.

- b. Evaluate and promote the possibility of medical cooperation and cross medical support between neighbouring units or CNs.
- c. Identify key lessons learned for nations and for NATO, using the Joint Analysis and Lessons Learnt Centre (JALLC) lessons learnt processes, and promote a sharing of good ideas across all levels of operation.
- d. Identify key deficiency areas and issues for command awareness and follow-up action.
- e. Ensure Quality Assurance, particularly if medical support is multinational.
- f. Ensure clinical governance which provides a framework in which the medical services, and individual medical staff, are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish.

2023. Additionally, as a means to ensure force protection and gain necessary visibility of critical assets, the Medical Director (Med Dir) is authorised to inspect CNs' medical assets in the area of operations for the NATO commander. In such a way he is able to assess their level of readiness, sustainability and ability to fulfil their tasks. The Medical Director's responsibilities are detailed in Paras 2087-2090.

2024. This evaluation should be based on the NATO Assessment of Medical Indicators³ (NAOMI) checklist, focused on both core medical capabilities applicable to all NATO operations; and on capabilities tailored to specific operations, deployments, and exercises involving combined joint forces.

2025. The NAOMI checklist may also serve as an important component of the ongoing Force Protection Assessment Programme conducted for the commander, involving physical security, safety, and medical components, and managed as a collaborative effort among the medical, J3 and other staff elements of the commander.

Redistribution Authority

2026. Nations have first call on the medical resources integral to their forces, however under exceptional circumstances the NATO commander may be authorised by the CN to use redistribution authority, to prevent local overload or to overcome unexpected deficiencies, as defined in MC 319/2. Such authority will be exercised only temporarily and in extraordinary situations.

Medical Responsibilities of Strategic Commands

2027. The NATO Command Structure reflects changing strategic circumstances; eg accession of new members, the evolving relationship with the European Union (EU),

³ Full details on NAOMI are to be found in AJP 4.10.1.

Partners and non-NATO countries, relationships with Eastern states, new security challenges including the evolving threat of terrorism and the proliferation of WMD. At the strategic level, ACO is focussed on planning and executing NATO operations with ACT being focussed on transformation of NATO military capabilities over the full range of Alliance military missions. Therefore the Strategic Commanders (SCs'), (ACT and ACO) medical responsibilities are as follows:

- a. Defence Planning. ACT has the lead in the military part of the Defence Planning Process, including the Defence Requirements Review, and more specifically in the field of Force Planning, Logistics and Multinational Medical Command and Control (C2) Planning and for the Partnership for Peace (PfP) Planning and Review Process (PARP). ACO leads on the military aspects of Civil Emergency Planning and Nuclear Planning. Guidance at the SC level remains a Bi-SC responsibility.
- b. Command and Control of Forces. Command and control of forces, including operational planning, is the preserve of ACO. For Force Generation, ACO allocates resources to include funding, to support the NATO commander's operational plan through the force generation process in concert with the nations. ACO may assist in the coordination of medical support to CNs for specific national requirements identified either before or during the execution of a NATO operation.
- c. Joint and Combined Medical Concepts and Doctrine. ACT is responsible for NATO Joint and Combined medical concepts and doctrine as well as PfP military medical concepts in cooperation with ACO. ACT uses medical lessons learnt from operations and exercises, supported by JALLC, as a basis for medical concept, doctrine and capability changes. Based upon these, ACO develops strategic medical directives and procedures for operations, including PfP-related operations.
- d. Resources. ACO and ACT have individual management structures, budgets and responsibilities. In managing Capability Packages (CPs) of medical relevance, ACT focuses on development of capabilities to improve joint and combined effectiveness for the full range of Alliance missions, whilst ACO is responsible for the development of capabilities required for the conduct of operations. The SCs' remit for the management of CPs remains a Bi-SC responsibility.
- e. Medical Intelligence Support. ACO provides medical intelligence support for operational planning and operations, while ACT concentrates on long-term analysis of trends and development of medical intelligence concepts and capabilities.
- f. Medical Communications and Information Systems. ACT concentrates on future medical CIS strategy, concepts, capabilities and architecture whilst ACO focuses on operational planning and is responsible for stating shortfalls against current medical CIS capabilities.

- g. Training, Exercises, Evaluation and Experimentation
- (1) ACT has lead responsibility for NATO and PfP joint individual education and training and associated policy. ACT also designs, conducts and assesses experiments to assist in the development and testing of emerging concepts, doctrine and technology. ACT schedules these experiments in close cooperation with ACO; ACT coordinates with ACO and Nations to access forces necessary to conduct training, exercises and experiments in support of transformation objectives. ACT is supported primarily by the NATO School (Oberammergau).
 - (2) ACO has lead responsibility for NATO and PfP collective training including exercises and the evaluation of designated subordinate entities and assigned forces. ACO is supported by ACT with exercise design, planning and evaluation support, especially for joint training of HQs at the operational and component level, assisted by the Joint Warfare Centre (Stavanger).
- h. Scientific Research and Development. ACT has the lead responsibility in this field. ACO conducts their own operational analysis and technical support for the command structure and for operations.

Medical Responsibilities of Joint Commands and Combined Joint Task Forces (CJTF)

2028. Joint commanders are responsible for the operational level of command. At this level, based on strategic military guidance, military campaigns are planned, conducted, sequenced, directed and sustained in order to achieve the required military strategic end-state. During an operation the designated operational level commander exercises his responsibility through a joint HQ that, depending on the characteristics of the operation (eg type, size, duration, level of jointness, location of the Joint Operations Area (JOA) etc) is either static or deployed as a CJTF HQ.

2029. A CJTF HQ is deployable and its minimum framework staff (CJTF HQ Nucleus) is contained in each Joint Forces Command (JFC) or Joint Command (JC) HQ (Parent HQ). The CJTF HQ Nucleus is expanded to meet the operational requirement through augmentation modules (additional staff elements from other NATO HQs and/or from nations) and support modules (specialised support organisations, e.g. HQ medical support unit).

2030. JFC/JC/CJTF commanders assume the following responsibilities:

- a. Contingency Medical Planning. JFC/JC/CJTF medical planning is conducted concurrently with ACO medical strategic plans. There is a constant dialogue between the two levels in order to provide transparency of medical planning efforts.

- b. Identification of Medical Support Requirements. The conduct of mission analysis and the identification of medical support requirements are essential. These requirements include the provision of medical resources, medical intelligence, medical communications, CPs, MedHNS or local resources and Status of Force Agreements (SOFAs). Funding and reimbursement policies should also be established.
- c. Medical Command and Control. Based on the medical planning process and associated planning conferences, the JFC/JC/CJTF details the medical C2 organisation and, on TOA, coordinates all aspects of medical support to a specific operation.
- d. Assessment of Medical Support Capabilities. The JFC/JC/CJTF commander is responsible for the evaluation of medical support capabilities and certification of non-NATO CNS' medical assets prior to deployment as well as the assessment of all nations' medical support capabilities during deployment.
- e. Medical Surveillance. The evaluation of troops' health status during deployment is a key responsibility of the operational commander. He will share with the SCs the responsibility of developing mission specific assessment criteria and, in conjunction with the nations, will execute epidemiological surveillance programmes and other evaluation programmes of the health status of deployed troops.

Medical Responsibilities of Component Commands (CC)

2031. Component Commands (CC) develop specific component orientated medical planning for contingency operations as directed by the Joint Commander.

2032. Certain staffs of the CCs may provide medical augmentation to a Medical Coordination Cell (MEDCC), which is included in each Joint HQ. Medical staff of CCs may take part in operations as directed.

NATO Commander's Medical Staff

2033. In order to ensure proper medical planning and support for the forces under his command, the NATO commander needs an adequate command structure and medical staff to allow him to make assessments, and to plan and deal with the nations' medical support.

2034. Particular importance is to be given to those areas and in those circumstances for which collective responsibility must be exercised. The NATO commander's accountability in the medical field dictates a strong emphasis be given to force protection and related issues.

2035. The development and implementation of a robust medical force protection policy requires at all levels the medical advisor to have direct access to his respective NATO commander and other key command staff elements. Therefore, the medical staff function must be visible within the NATO command HQ staff organisation and, on operation, a medical advisor and his staff will be located at the advisory level in each concerned NATO command.

2036. The broad range of medical advice needed by a NATO commander for Article 5 and CRO situations requires that his medical advisor is a medical officer with wide medical, military and staff experience.

2037. During operations, the Med Dir is responsible for the implementation of medical policy and plans and coordination of medical support within his commander's AOR. The relations between the different medical staffs in theatre will be aligned to the authority and responsibility delineated in the C2 architecture by relevant OPLANs and Support Plans (SUPLANs).

2038. The medical advisor's staff must be capable of technically overseeing all required medical functions and successfully integrate into the HQ staff structure.

Responsibilities of Contributing Nations

2039. Medical Support to Contributed Forces. While there may be a variety of options to provide medical support to forces that nations have contributed to a NATO operation, the CNs remain accountable for the health of their own personnel. If nations elect to support forces through a purely national medical support system, it remains vital that they establish a national medical element including a national senior medical officer that interfaces with the NATO medical organisation and establishes permanent contact with the NATO Med Dir. The national senior medical officer's location can be mission and nation dependent and may be double hatted as a command's medical director.

2040. Contribution of Resources. With few exceptions all personnel and equipment required to conduct an operation are provided by CNs. Under NATO procedures, nations transfer authority over their national force contributions to NATO at an agreed time. This transfer may include medical assets that nations nominate as centralised or theatre assets. Type and amount of medical assets and TOA limitations can significantly affect the actual medical support concept for a NATO operation.

2041. Planning. Nations are involved in the medical planning process from the strategic down to the tactical level. In developing the initial medical support concept it is vital that nations be involved from the outset. This includes the development of the medical C2 architecture, establishment of mutual support arrangements, and the conclusion of Host Nation Support (HNS) agreements. Inclusion of national influence in the concept and plan development is essential to avoid shortfalls and misunderstandings during the force generation process.

2042. Lead Nation (LN) or Role Specialisation (RS) Mission. Nations may be called upon to coordinate and plan, as well as to provide actual support in specific functional

areas, including medical support, to other national forces. In all cases the assumption of these missions is voluntary and coordinated in the planning process.

2043. HNS. Nations may provide HNS, including MedHNS, to Article 5 and CRO operations.

2044. National Support Element (NSE) Establishment. CNs may wish to establish a NSE to coordinate national logistic and medical support functions with other CNs and with NATO commanders' medical staffs. In such cases, coordination with the multinational medical C2 structure is required, along with a reporting framework, to promote good communications between and among levels of command and their respective medical support elements.

SECTION 3 – MULTINATIONAL MEDICAL SUPPORT OPTIONS

General

2045. The ultimate goal of the multinational medical support concept is optimisation of the use of medical resources through coordination and when possible increasing effectiveness by integration of medical assets and capabilities. This goal can only be achieved through a proper balance of authorities and responsibilities between the NATO commanders and nations. Early and continued interactive dialogue and collaboration among all parties is fundamental.

2046. The NATO commander must be given sufficient authority over the medical resources to enable him to employ and sustain his forces in the most effective manner. If nations wish to achieve economies, especially in management of scarce assets, one way to attain this result is to allow the commander full visibility of the status and disposition of medical resources in theatre.

2047. In order to benefit from the potential opportunities and rewards of burden sharing, nations are invited to give broad or even full visibility of their theatre medical resources. These rewards may include achieving synergy in provision of medical support services, while also attaining economy, efficiency, and effectiveness. The lack of information and coordination may result in a shortage and, at the same time, a redundancy of precious assets.

2048. From the beginning of the planning process the NATO commander and his medical staff have a key role in tailoring the medical support to meet the mission requirements. They also have a key role in coordinating medical functions and activities during the various phases of operations, and in some cases achieving redistribution or integration of medical assets to fulfil collective needs.

2049. The overall medical support for an operation can be optimised if it is coordinated to:

- a. Avoid competition for scarce assets.

- b. Improve asset distribution and availability.
- c. Reduce national unused capacities while maintaining overall capacity to cope with emergencies.
- d. Reduce costs.
- e. Reduce medical support requirement footprint.
- f. Share access to in-theatre medical capability.
 - g. Coordinate and integrate medical assets.
 - h. Achieve interoperability of medical support assets and capabilities.
 - i. Explore all means to achieve collective synergy in the provision of medical services.
 - j. Promote exchange of relevant medical information between CNs' medical assets.

2050. Medical support options range from purely national support on one hand, to Multinational Integrated Medical Units (MIMUs) on the other. NATO forces can be supported by a combination of the options available.

National Medical Support

2051. National medical support will flow from national sources, usually based in the respective nation, to their most forward deployed national units in the AOR. Each nation maintains absolute control over its own assets. Role 1 MTFs are generally provided under this option. In the maritime environment Role 2 afloat is also generally similarly provided.

2052. While there may be significant advantages to using multinational medical support options, nations may, for a variety of reasons, choose to medically support their forces with a purely national effort. In this way a nation assumes the total mission of providing medical assets and evacuation means to their units.

2053. But, even when CNs rely solely on national medical resources, the NATO commander retains the responsibility and authority described in Paras 2010-2026 above.

Mutual Support Agreements (MSA) – Bi-lateral or Multi-lateral

2054. CNs have the option to develop mutual support arrangements, bi-laterally or multi-laterally to ensure medical support to their forces. This is especially useful when CNs have low density force contingents collocated with the forces of another nation that has the capacity to support them, or during specific operations or phases of an

operation (e.g. during a relief in place or when one formation is passing through another).

2055. Most Mutual Support Agreements (MSAs) will be made at the national level and co-ordinated by ACO. NATO coordination is essential to ensure the support arrangements fit into the overall NATO concept of support.

Role Specialist Nation (RSN)

2056. In a particular operation common supplies and services may most efficiently be provided to all or a portion of the force from a single designated nation that has unique and qualified capabilities. A single nation may provide specified support to the entire, or a portion of, the force with customer nations compensating the Role Specialist Nation (RSN) for the support provided. Examples of candidates for role specialisation include certain medical services such as strategic AE or speciality care.

2057. In all cases where a RSN is designated, the support is coordinated and centrally managed by the NATO commander in the way that he determines will best support the operational concept. As a final point, before designating a RSN, national laws concerning the transfer of military goods and services must be considered.

Lead Nation (LN)

2058. LN support involves a nation assuming responsibility for coordinating and/or providing specified support and other functions within a defined geographical area to other CNs. Normally administrative, legal and financial issues between CNs and the LN, for example in the form of a Memorandum of Understanding (MOU), will be a part of this arrangement. In a NATO operation more than one LN could be designated to provide a specified range of support.

2059. A LN mission is similar to a RSN mission with the main difference being that the LN mission is wider in scope and geographically orientated. Medical support to a HQ and AE covering a specific sector in the area of operation can be included under this option.

Multinational Medical Unit (MMU)

2060. To take advantage of economies of scale, medical support may be provided by medical units composed of more than one nation. This is an attractive support option when a single nation is capable of providing the nucleus and the command structure of a MTF, which is supplemented/augmented with capabilities, assets, and services by other nations. Common funding, cost sharing, reimbursement or provision "free of charge arrangements" should be agreed to as a part of MMU participation.

Multinational Integrated Medical Unit (MIMU)

2061. A MIMU is a multi-national medical unit that is integrated into the NATO chain of command, for example being under Operational Control (OPCON) to the NATO commander.

Common-funded MTF

2062. To overcome shortfalls in the sustainment of enduring operations, NATO may have the ability to provide certain common-funded operational capabilities, one such example is the provision of common-funded MTFs. These can be deployed to provide integral medical support to a deployed HQ or provide a regional or theatre MTF where no nation is currently able to commit its assets. Whilst the common-funded MTF would provide the infrastructure and the equipment, nations would still be required to provide the clinical and support staff to run it.

2063. Issues to be considered include:

- a. Requirement for storage of equipment.
- b. Choice and maintenance of equipment.
- c. Pre-trained personnel.
- d. Personnel sustainment.
- e. Accreditation of quality standards.
- f. Lead nation/authority to manage.

Medical Host Nation Support (MedHNS)

2064. HNS is a result of an agreement between NATO and/or CNs and the government of the HN, receiving NATO or other foreign forces operating in, or transiting through its territory, so that provisions are established to facilitate the accomplishment of the military mission. It is the government of the HN that provides what is needed out of national assets, or which makes other arrangements for its provision. HN's departments or agencies are involved in writing the HNS plans, controlling their implementation, and monitoring the support provided, whilst recognising important local laws, regulations and cultural aspects.

2065. The quality and quantity of medical resources available in the JOA is important in determining the size and capability of the medical organisation the force must establish. The more HNS available for force use, the less has to be found from CNs. Resources, which may be obtained through HNS, include:

- a. Patient evacuation assets (air, land and maritime) for both intra-theatre and inter-theatre medical evacuation.
- b. Treatment capability at every level of care but particularly at Role 3.

- c. Medical logistics support, including the provision of drugs, consumables, disposables, and medical gases.
- d. Essential non-medical support, including buildings, water, power, disposal of waste, laundry, labour, etc.

2066. The appropriate NATO commander must be involved in the development of HNS arrangements and is responsible for HNS planning and the development of MOU. This will not affect the rights of CNs to negotiate and conclude bi-lateral HNS arrangements. However, as far as possible the number of MOUs should be limited to a single MOU supporting a broad range of potential operations. The NATO commander should be invited to participate in bi-lateral HNS negotiations, where he may promote cooperation between CNs and the HN. Furthermore, NATO commanders are authorised to negotiate and conclude HNS arrangements for NATO Multinational HQs, designated multinational units and selected theatre-level support.

2067. The support provided by the HN provides a crucial supplement to organic logistic support. From the medical standpoint, resource availability, compatibility of equipment, interoperability of medical support structures (both military and civilian), acceptability of procedures and quality and standards of medical care available should be carefully considered.

2068. During NATO operations forces can be deployed in areas in which local medical structures do not meet the same standards enjoyed by NATO nations. These areas may not be subject to the same regulations regarding the environmental impact of medical waste, or may utilise medications and supplies from sources not approved by NATO nations, or may not meet minimum standards for manufacture, storage or transportation. As an additional complication, local medical resources may have been damaged by conflict or may be overwhelmed providing care for the local populace and/or displaced persons.

2069. Overall HNS capability will be assessed by a mixture of medical intelligence analysis and reconnaissance, and the political decision by the HN to make resources available to the incoming force. A key issue will be the standards of medical care available when compared to NATO force and national contingent criteria. It is vital that the NATO commander's medical staff are directly involved in the assessment of MedHNS capabilities and in any attempts to develop HNS agreements in the medical field. MedHNS tend to get many visits from a wide range of civilian and military organisations such as IOs, NGOs, military medical, logistic or Civil-Military Co-operation (CIMIC). These military visits require rationalisation and a possible solution is to give the responsibility for MedHNS assessment to the theatre Medical Director or a medical reconnaissance team. Furthermore at all times the use of local resources must be authorised and/or coordinated with national medical staffs on the ground.

2070. MedHNS potentially has many advantages, if medical care is available and of acceptable quality and reliability (particularly for handling MASCAL, incident response, and other medical treatment surge needs which may occur on an infrequent and

unplanned basis). MedHNS is particularly useful during deployment and RSOI phases, when deploying NATO medical facilities may not yet be fully operational and when the expected workload will not unduly stretch available and suitable HNS facilities. However, there are many issues that must be resolved before a decision to use MedHNS can be made, and many of these can only be resolved by medical personnel along with those experienced directly in medical logistics. Therefore, planning for MedHNS must not be initiated without input by senior NATO and/or national medical personnel.

Multinational Provision of Medical Supplies and Services

2071. Whilst planning to provide medical support to the standards acceptable to CNs, it is essential that every effort be made to achieve economies of scale and effort, because:

- a. Medical assets are expensive to procure and difficult to obtain.
- b. Medical assets under-employed in one JOA are not available for another.
- c. All medical assets, particularly Role 3 and evacuation organisations, require much logistic and engineer effort to sustain them even when they are not in active use.

2072. Maximum effort must be made to tailor medical support to the predicted requirement. Some contingents may have an abundance of assets whilst others may lack all but the fundamentals. NATO commander's medical staffs must aim to find a balance of capabilities and strive for the most cost-effective means, exploring all possible multinational modalities for the provision of medical supplies and service.

2073. The medical services and supplies provided by multinational provision will be determined in concert with nations before and during an operation. Type and level of multinational medical support will depend on the degree of medical interoperability achieved by the CNs and national desires.

Multinational Medical Support Enablers

2074. Nations play the most important role in the implementation of multinational medical support concepts, through enablers that are powerful leverages in facilitating medical coordination and integration. The key enablers, who must be proactively emphasised by all nations, are:

- a. Commonality of medical principles, policy and doctrine.
- b. Commonality of medical standards of care.
- c. Standardisation of treatment regimes.
- d. Standardisation and qualification of medical personnel.

- e. Interoperability of main equipment and interchangeability of supplies.
- f. Standardisation of medical records, record keeping, and medical surveillance data.
- g. Multinational and joint exercises in which medical equipment, procedures, personnel, and other components of medical support are practised in real-world operational settings.
- h. Reduction of the language barriers.
- i. Mutual trust and the ability for medical personnel to exercise and operate together.
- j. Harmonisation of laws and regulations concerning the transfer of military medical goods and services.
- k. Effective and transparent common system of pricing, accounting and reimbursement for medical services and supplies.
- l. Interoperability and enhancement of medical CIS, including any deployed telemedicine systems.

2075. As fundamental documents that provide agreed policy and standards among NATO nations, STANAGs and Allied Publications contribute an essential framework for specific support concepts, doctrines, procedures and technical designs. Standardisation allows synergy of forces and capabilities and promises considerable savings. Therefore it should be pursued vigorously.

SECTION 4 - MULTINATIONAL MEDICAL COMMAND & CONTROL ARCHITECTURE

Multinational Medical Command and Control (C2)

2076. A flexible medical C2 structure must be established to coordinate national and multinational medical support in order to follow the NATO commander's concept of operations. Medical C2 activities must be organised based on the operational mission requirements and closely coordinated with nations to obtain full support and manning for the structure. For the sake of simplicity the layers of command should be kept as few as possible and the responsibilities clearly delineated, fully understood and agreed upon. The lines of medical accountability and C2 must be clearly established in relevant OPLANs and agreed upon by CNs.

2077. The medical C2 organisation in theatre must be capable of planning, executing, controlling, sustaining and assessing the full range of medical support functions. It must also be capable of passing prompt and accurate operational medical advice to respective commanders and pertinent general medical information to the NATO commander's

medical staff. In fact the medical C2 structure must be able to provide the NATO commander with visibility over all medical implications of his decisions.

2078. The medical C2 structure should be granted visibility and autonomy, as medical personnel face unique problems affecting the health of armed forces reflecting the special and non-transferable medical responsibility for the health of the force. Some medical decisions have a logistic impact (eg the number and siting of medical facilities regarding accommodation and supply, the holding policy and movement of facilities), while other medical support activities would have an operational impact or are purely medical related, such as:

- a. Collection of medical information.
- b. Advice to commanders on health risks and appropriate medical responses to reduce such risks.
- c. Establishment and management of a multinational epidemiological surveillance system.
- d. Establishment and conduct of a preventive medicine information exchange and education system.
- e. Conduct of medical force protection.
- f. Assessment of medical support readiness etc.
- g. Medical emergency response organisation.

2079. Other medical activities are bound to a level of professional confidentiality (patient medical data exchange) or timeliness (provision of care) that demand specific qualifications, requirements and procedures.

2080. These requirements dictate that medical personnel be responsible for in all relevant medical issues. That demands a specific medical C2 organisation and structure in theatre, distinct from the logistics one, whilst fully coordinated with it. "Medical support" as a specific task oriented concept is indeed integrated with "logistics" as part of a functional system of support, but is not necessarily subordinated to the logistic organisational structure.

2081. Medical C2 should be so organised that each level of the operational command structure designed for a specific operation must have a senior medical staff officer, designated the Medical Advisor (MEDAD), directly accountable for guidance in medical matters and with direct access to the operational commander. The Medical Advisor must be part of the operational command group and maintain a detailed understanding of both current and future plans. To achieve this task he must: be collocated with the commander; either attend or be represented at planning meetings and operational briefings; and establish effective interactions with other principal commanders' staffs and advisors without intermediaries.

2082. If there are medical staff at HQ level embedded in other J staff cells, they are to follow technical directions given by the Medical Advisor.

2083. Whilst overall policy, direction and control of medical activity are vested in the various key medical offices, implementation is effected through a comprehensive staff structure. To achieve a full operational and coordinating capability, it is crucial that the medical personnel are identified by the parent NATO HQ and CNs and fully trained in the medical management of operations according to their job descriptions.

2084. To accomplish their specific mission and tasks across the whole medical C2 structure, the multinational Medical Directors and their staffs work under the authority granted to the commander they are assigned to and exercise, as directed, coordinating, assessment, inspection or visit and redistribution authorities in the area of medical support. It should be noted that the delegation of authority in terms of Operational Command (OPCOM) and Operational Control (OPCON) does not include a delegation or change of administrative or logistic responsibilities. Any such delegation or change must be specifically ordered, either separately or together with the delegation of command authority. On occasion, changes to the degree of command authority may require changes to administrative or logistic responsibilities, and circumstances will arise in which administrative or logistic considerations place constraints on operations. Therefore, a delegating authority must always consider the possible administrative and logistic implications of any intended operational arrangement.

2085. The medical C2 architecture includes the SC Medical Advisors and extends through the Theatre level Med Dir and other multinational Med Dirs (e.g. Divisional Med Dir, Multinational Maritime Force (MNMF) Med Dir, etc.) to all medical assets in theatre.

Allied Command Operations (ACO) Medical Advisor

2086. At SC level, ACO medical representation may be activated in the Joint Operations Centre (JOC), Strategic Direction Centre (SDC) and other coordination centres, such as the ACO Logistics Coordination Centre (ALCC), which may be established to deal at the strategic level with crisis management. Depending on circumstances, the medical representation in these elements should in principle be permanent. The relationship between the ACO Medical Advisor and those in subordinate formations is one of functional direction and coordination, executive authority remains with the operational commander's J3 command chain.

Medical Director (Med Dir)

2087. The Medical Director is the functional head of the medical services in a formation or theatre of operations. The Medical Director may also have the additional responsibilities of being the Medical Advisor to a senior commander.

2088. He is responsible for:

- a. Developing, setting and dissemination of medical policies, plans and directives for the theatre.
- b. Monitoring and assessing of the medical situation of deployed troops and the health situation in theatre.
- c. Collection and assessment of the medical situation of deployed troops and the overall health situation in theatre.
- d. Collection and collation of medical reports from CC HQs and related organisations, including IOs and NGOs.
- e. Tracking of medical assets and capabilities, including AE.
- f. Production of the Theatre MEDASSESSREP.
- g. Collection of medical intelligence.
- h. Contribution to short and longer term operational planning.
- i. Establishing and maintaining medical interface/liaison with relevant local authorities, IOs and NGOs.
- j. Coordinating and deconflicting multinational medical support to the forces in theatre.
- k. Provision of joint medical guidance through liaison with multinational component command medical directors.

2089. The Med Dir will:

- a. Coordinate all medical force-protection related actions (preventive medicine, medical intelligence, epidemiological and environmental survey, hygiene and sanitation, veterinary services).
- b. Establish an overall MASCAL Plan, in coordination with other HQ staffs.
- c. Provide medical CBRN advice.
- d. Direct the preparation and maintenance of a summary of the medical support capabilities in the theatre and other relevant medical information (Theatre Medical Handbook) for theatre-wide dissemination.
- e. Coordinate with and support CIMIC staffs in the area of public health and humanitarian assistance throughout the theatre.

2090. The staff of the Med Dir expands through national augmentees from a nucleus to a full establishment, able to address the whole spectrum of medical issues that the operation demands.

Medical Coordination Cell (MEDCC)

2091. The Medical Coordination Cell (MEDCC) may be the executing body of the medical organisation for all CJTF operations. The MEDCC co-ordinates multinational, joint and multifunctional medical issues, including AE. The MEDCC will be part of the respective HQ medical staff element.

2092. The MEDCC is designed as a modular structure that encompasses two cells, Medical Ops/Plans Cell and the Patient Evacuation Coordination Cell (PECC). The Med Dir may advise, according to the specific needs of the mission, on the number and position of personnel employed within the MEDCC.

2093. The MEDCC expands from a nucleus through national augmentees to its required establishment. Due to the lack of medical specialists in the NATO Peacetime Establishment (PE) structure national augmentation will be required from the early stage of an operation. The size of the MEDCC will be tailored during the planning process and either expanded or reduced according to the specific mission phases.

2094. The main function of the MEDCC is the execution of medical plans and the implementation of medical policies set by the MEDAD. It coordinates implementation and execution of the full spectrum of medical and health plans between all components of the CJTF.

2095. The function of the Ops/Plans Cell is to coordinate current medical operations and develop medical support planning for future medical operations as directed by the MEDCC. It develops and updates the theatre-level MASCAL Plan and cooperates with the PECC in case of its execution. It provides the expertise required to implement the preventive medicine and environmental policies directed by the MEDAD. The Ops/Plans Cell co-ordinates the activities of the "Environmental Health Team". During a CJTF mission there will generally be the need for qualified personnel to assess the health risk and to provide preventive and environmental medicine support. As a theatre asset these personnel with the relevant equipment will be found through the force generation process and employed under the control of the MEDCC environmental health officer.

2096. The PECC provides the theatre level medical evacuation and regulating functions for all patients, moving beyond formation boundaries, in conjunction with force components and theatre logistic and movement control agencies. It is responsible for patient tracking and the maintenance of the MTF capability database. The PECC must have its own dedicated communication links to the key nodes of the evacuation system. Should a MASCAL situation arise the PECC will implement the Med Dir's decisions and act as the interface between the Med Dir and the units involved in the MASCAL.

Liaison with the HN and Civil Agencies and Organisations

2097. Coordination and cooperation between NATO and HN military and civilian authorities must be carried out at all appropriate levels to optimise medical support. Cooperation requires a clear division of responsibility and, in turn, a clear understanding of the various national capabilities and limitations, and of the NATO medical support structure. Cooperation also extends to Governmental and NGOs, which may operate alongside NATO in the theatre.

2098. Specified points of contact and liaison with HN and Civil (International, Governmental and Non-Governmental) Agencies and Organisations must be identified at every level of the command structure.

2099. Civil Agencies and Organisations may be involved in assisting the local population, including medical services. Links are to be established by the C2 medical architecture in theatre, at appropriate level in order to coordinate efforts, share important medical information, and to optimise resources in the achievement of adequate medical support.

CHAPTER 3

MEDICAL EVACUATION CONCEPT

SECTION 1 – MEDICAL EVACUATION

General

3001. The main aim of this chapter is to describe a concept of medical evacuation for combined joint operations, which is consistent with the principles and policies dictating the organisation and capabilities of the medical evacuation system whilst taking into account the development of multinational operational integration, as regards AE. The details are in AJP 4.10.2, Medical Evacuation.

3002. The medical evacuation concept described in this chapter does not impose a unique mandatory evacuation system on nations. It should enable nations to maintain their national evacuation procedures as far as possible. At the same time it encourages nations to plan for reliable, cost-effective AE to medical facilities where they can subsequently collect their patients under non-threatening conditions. The concept may facilitate bilateral or multilateral agreements and promote common planning, programming, and training.

3003. Evacuation of casualties is a crucial part of the medical treatment provided by the medical support organisation to patients wounded or ill on operations. It requires specific medical personnel and assets. Qualified movement of casualties in accordance with modern medical standards is not their simple transportation to a suitable MTF but is part of the continuum of their treatment and care, and is therefore, a medical responsibility.

3004. To achieve its mission, a medical evacuation system should have the following capabilities:

- a. The ability to evacuate casualties to a medical care facility 24 hours a day, in all weather, over all terrain and in any operational circumstances. The evacuation organisation must determine the alternative solution to ensure the continuum of treatment of casualties when evacuation itself is not possible due to operational, environmental or technical reasons.
- b. The provision of the necessary clinical care of the casualty throughout the journey, using appropriately trained clinical staff.
- c. The ability to regulate the flow and types of patients when circumstances require and accurately track patients throughout evacuation.

Medical Evacuation Assets

3005. To meet the evacuation demands a spectrum of evacuation assets will be required as follows:

- a. Intra-Theatre assets appropriate to the mission and designed on the same technological level as the units they have to support, which may include:
 - ground assets (armoured and non-armoured, wheeled or tracked depending upon the units they are assigned to)
 - air assets (fixed and rotary wing)
 - maritime, littoral and non-tidal water assets (depending on the geographical constraints of the operation)
- b. Inter-Theatre assets will also be mission dependant. The most likely option will be to use fixed wing aircraft, but helicopters, ships might also be available, depending on the nature of the JOA and movement distances involved.

3006. All medical evacuation assets must have communications on board to allow:

- a. Appropriate assets to be directed to incidents and subsequently directed to the most suitable MTF.
- b. Reduced response times by increasing flexibility.
- c. The targeting of assets, thus reducing the numbers of medical evacuation assets required.
- d. Direct communication at the scene of an incident.
- e. Direct communications between in-transit medical staff and the receiving clinicians. This allows advice to be given and permits the receiving facility to plan the availability of appropriate staff and equipment.

Interdependence of Evacuation and Treatment

3007. The availability and type of evacuation assets to be utilised, the length of evacuation route and the operational environment will determine the distribution/localisation, size, capacities and capabilities of in-theatre MTFs. Evacuation limitations have a direct impact on the requirements for holding patients at all levels.

3008. The theatre holding policy is a command decision indicating the maximum length of time (days) that a patient will be allowed in the theatre for treatment, recovery and return to duty. If the prognosis is that recovery will take longer than the holding policy, then the patient should be evacuated as soon as he/she is considered suitable for evacuation. Theatre holding policy is the key to balancing the treatment capability available at each Role against the medical evacuation assets with regard to capabilities and capacities

required to provide casualties with the best possible medical care. Nevertheless, the CN will retain the ultimate responsibility.

3009. The theatre holding policy has:

- a. To balance the medical capability and limit the need for unnecessarily sophisticated in-theatre resources.
- b. To ensure that, whilst the less serious sick and injured are managed and returned to duty at the correct level of care, the seriously ill are evacuated to appropriate MTF as rapidly as possible.
- c. To ensure that in-theatre MTFs remain capable of reacting rapidly to operational imperatives, including the provision of surge capacities.

3010. The theatre holding policy must:

- a. Be established by the operational commander on the advice of the MEDAD, in concert with the operational staffs.
- b. Be mission dependent. It will also be influenced by assets available, constraints on movement, particular operational imperatives, distances, weather and topography and by the national evacuation policies.
- c. Be dynamic, i.e. able to respond to rapidly changing situations. For example, the outset of an operation requires a short evacuation policy dictated by the medical assets in theatre. As medical assets build-up, the evacuation policy increases as operations develop. Finally, as the force scales down, the evacuation policy shortens to a minimum.
- d. In the absence of tactical imperatives, be influenced by other factors such as welfare considerations, public expectations, national policy and cost of strategic evacuation.

Evacuation Priorities

3011. Those casualties who require to be evacuated must be sorted into priorities, based on their clinical need. However, a large number of factors must be balanced for casualty evacuation to be successful. For optimum results, the decision to evacuate casualties should be based primarily on clinical decisions.

3012. AE priorities are described in AJP 4.10.2, STANAG 3204, "Aeromedical Evacuation" and STANAG 2087, "Medical Employment of Air Transport in the Forward Area".

Medical Regulating

3013. Medical regulating is the process of directing, controlling and coordinating the transfer of patients within and outside a JOA. This means from point of wounding or onset of disease through successive MTFs, in order to facilitate the most effective use of medical treatment and evacuation resources and to ensure that the patient receives appropriate care in a timely manner.

3014. To achieve this requires dedicated regulating staff, with appropriate CIS, providing the requisite visibility of the status of medical facilities, evacuation assets and casualty flow.

3015. The management of patients in any JOA is a dynamic process, taking into consideration a large number of important planning and operational factors:

- a. The availability of evacuation assets at the tactical and strategic level.
- b. The existing patient mix and type of medical facilities, the specialist capabilities available, medical equipment status, and staffing levels.
- c. The current bed occupancy status at medical facilities and any surgical backlog.
- d. Location of Air Point of Embarkation (APOEs) / Sea Point of Embarkation (SPOEs).
- e. The condition of each patient.
- f. The current tactical situation and any risk in moving patients or using valuable evacuation assets.
- g. Communication status in the regulating chain.
- h. The theatre evacuation policy.

Patient Tracking

3016. Patient tracking is the precise and continuous monitoring of the location and the intended destination of the patient in the medical treatment and evacuation chain. Keeping track of all personnel once they have been introduced into any medical evacuation chain (both national and multinational) is of crucial importance in terms of the individual's medical status, readiness implications to the unit of origin, and media and family sensitivities regarding all casualties.

3017. A patient tracking system should be near-real time, accurate and dynamic, using standardised procedures and involving the personnel staff at the various HQs. Failure to establish a competent system for patient tracking, to include across national

boundaries, will produce national political disquiet, unnecessary administrative efforts and distress for both patient and relatives.

3018. Continuous monitoring and notification of patient location status is a great challenge and of significant importance in a multinational environment, involving transfer of information between and among nations. Practical issues of language differences, communication system compatibility, and record keeping practices combine to complicate multinational patient tracking functions. These challenges make interoperability evaluation and training tasks of paramount importance as well as the provision of trained and experienced Liaison Officers.

SECTION 2 – GROUND EVACUATION

3019. Ground evacuation assets comprise ambulances, buses and trains. Ground evacuation assets are used to convey casualties from point of wounding or injury to a MTF, or between MTFs within the JOA, and finally from MTFs to the point of embarkation, be it sea or air.

3020. Ambulances are the most common type of ground evacuation transportation; these vehicles must have commensurate mobility and protection as the force they are supporting. However there is variation in terms of capabilities and patient capacity:

- a. At the top of the scale are advanced support units, staffed with emergency care medical specialists and/or trained specialist paramedic personnel who can provide extended resuscitative care, administer drugs, and begin administration of intravenous fluids in addition to providing basic first aid. These are often required in areas of high risk or areas distanced from MTFs, such as a blue light paramedic ambulance and graduated incident response matrix covering a LOC or rear area. These tend to be able to carry only one or two patients.
- b. Others, usually a greater number, are equipped for basic life support only. These tend to be used for transfer of low dependency ill and injured and local support provision close to MTFs. These may be capable of transferring more than one or two patients.
- c. In forward areas armour protected ambulances are used to afford some degree of protection for casualties and medical personnel. These vehicles must have commensurate mobility and protection as the force they are supporting.
- d. Specialist patient transfer assets to allow the movement of stabilised pre- and post-operative patients under close clinical supervision. Clinical staff and specialist equipment should commonly be provided by the losing or gaining MTF dependent on the circumstances rather than held just in case.

3021. Ambulance buses can also be used for sitting and lying casualties but buses tend not to have a cross-country capability and are usually only used on roads between MTFs

and from MTFs to the point of embarkation. In a MASCAL situation ambulance buses may, in extremis, be used to convey large numbers of slightly or moderately injured casualties.

SECTION 3 –MARITIME EVACUATION

3022. Maritime Evacuation assets can range from small boats with limited capabilities, used to evacuate casualties from shore to an afloat MTF, such as a Primary Casualty Receiving Ships (PCRS), to full scale Role 3 Hospital Ships which both treat and ferry casualties to more advanced Role 4 shore facilities or evacuation points.

3023. Strategic AE will normally be provided by Air Component assets. Therefore the use of sea based MTFs requires additional AE assets (normally rotary wing) to ensure the transportation of patients afloat and ashore.

3024. The provision of ground and maritime evacuation assets can be via national contributions or under one of the forms of multinational medical support (Bi-lateral Agreements, LN, RSN, HNS/Contracting). Pooling assets will allow small national contributions to build a larger multinational organisation that may be difficult to achieve from one single nation. Centralisation of these assets, under the Force Commander, allows economies of scale, effective operational management and timely and unhindered intervention all over the JOA. In this case the PECC, in the MEDCC, is expected to provide the regulating functions for all patients through its own dedicated communication links. Details on the overall concept for medical evacuation in the specific theatre, national or multinational lines of control and accountability, co-ordination of medical evacuation assets must be given in the OPLAN.

SECTION 4 – AEROMEDICAL EVACUATION (AE)

3025. AE is the movement of patients under medical supervision to and between MTFs by air transportation. It may include up to three phases that are complementary:

- a. Forward AE provides airlift for patients to the initial medical treatment facility. This is usually conducted by rotary assets in forward areas.
- b. Tactical AE is the phase of evacuation that provides intra-theatre airlift for patients between MTFs, typically transferring patients between Role 2 (LM or E) or Role 3 MTFs to Role 3 or CSU. This is conducted by rotary assets or Tactical Air Transport along LOC in the JOA.
- c. Strategic AE is that phase of evacuation that provides out-of-theatre airlift for patients from overseas areas or from theatre of active operations, to the home nation, to other NATO countries or to a temporary out of theatre safe area. Strategic AE is ultimately a national responsibility, nevertheless bilateral or multilateral agreements between nations are an efficient way to share scarce resources of MEDEVAC aircraft, equipments and AE teams. Consideration should be made for the use of civilian charter aircraft for

strategic AE with the caveat over their ability to fly into the operational theatre.

3026. The specialist personnel and equipment required to provide the medical support for AE must be given access to the air assets to be used in a timely manner to ensure preparation of the airframe for the specific AE task. This requires a responsive medical C2 structure and direct access to the air tasking authorities, supported by a robust communications system.

3027. AE Casualty Staging Units (CSU) and Aeromedical Staging Units (ASUs) may be required to enable strategic AE. These should be based at the APOD and/or Staging Airfield; the latter is where ASUs may be required to cover long LOCs. These units collect the already stabilised patients, prepare them for air transportation and hold them prior to handover to the AE crew to coordinate loading onto the airframe and provide their in-transit care, as well as acting as checkpoints within the patient tracking and regulation processes.

3028. Different levels of dependency for all stages of AE lead to the requirement for critical care aeromedical evacuation teams to be able to operate throughout the evacuation chain.

CHAPTER 4

INTERFACE BETWEEN MEDICAL AND OTHER STAFF FUNCTIONS

INTRODUCTION

4001. The purpose of this Chapter is to identify and provide guidance on staff interfaces among medical and other commanders' staff elements in NATO-based operations and describe the principal medical subject matters that are most closely related to those staff elements. The interface between medical and J staffs with relevant products is explained below.

4002. Medical staff must operate with a close interface with the personnel, intelligence, plans and operations, logistics, CIMIC, Legal, Engineers and CIS staffs to execute a wide range of medical support planning, surveillance, coordination, and direct support functions. Coordination and collaboration spans both the vertical and horizontal levels of command. The list is neither exhaustive nor definitive, but demonstrates the areas and subjects where medical staffs need to work in unison with other commanders' staffs and have access to and interact with them without intermediaries.

J1 – PERSONNEL AND ADMINISTRATION

4003. There is a considerable interface between the functions of medical support and personnel support. They emerge during the initial planning stages and continue long after an operation has finished. Consequently, the working relationship between medical and personnel staffs must be well developed and relevant personnel concerns should be detailed in medical plans. The areas of interaction between J1 and medical are listed below. This list is neither exhaustive nor definitive.

- a. HQ Medical Staff Manning and Qualifications.
- b. Manpower Health and Fitness Standards and Assessment.
- c. Patient Tracking.
- d. Casualty Reporting.
- e. Handling of Deceased.
- f. Patient and Personnel Welfare.
- g. Develop medical requirements for NATO civilians prior to deployment.

J2 – INTELLIGENCE

4004. Intelligence is defined by NATO as the product resulting from the processing (collection and analysis) of information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity that results in the intelligence product and to the organisations engaged in such activity. J2 is responsible for all intelligence activities. Medical is not only a 'customer' of MEDINT as defined in Para 1093, but medical expertise could be, depending on the requirement, a significant part in the intelligence process loop. This approach of MEDINT is reflected in the NATO structure, doctrine and training.

J3 – OPERATIONS

4005. The operations staff act as a focal point through which the commander directs and maintains continuous oversight of all operations. The operational commander establishes a JOC, which becomes the hub and central clearinghouse for the whole operation.

4006. Force protection oversight is a lead function of the J3 staff, and they coordinate with other relevant staff, including medical, in their conduct of the force protection programme objectives and initiatives.

4007. The J3 operations staff and medical staff often bring complementary but differing programme approaches and competencies to achieve health protection, treatment and promotion objectives. Provision and design of medical services to support the health of the troops is a medical staff responsibility, while the operational commanders enable force protection through establishing and maintaining an adequate medical support system, and implementing/enforcing recommended preventive medicine policies. A mission tailored medical support must reflect the operational requirements and is, with regard to both medical capabilities and capacities, based on numerous operational and medical aspects, among which casualty estimation is relevant.

4008. In short, the medical staff mission is directly focused on the health of the force, while the operations force protection staff mission is focused on the readiness status of the medical support structure (i.e. focus on the "health" of the medical support organisation). Both staffs must work co-operatively as a team in the development and execution of force protection programmes.

4009. At any time during operational planning and execution the J3 Staffs are responsible for determining any change in the point of main effort, which may be accompanied by changes in the medical support arrangements. They will determine the response to any situation which compromises medical support to the force, and they will also make decisions over allocation of scarce resources. Medical staffs are responsible for ascertaining the medical implications of the Courses of Action (COAs) selected by J3 staff and ensuring that they are made fully aware of these implications.

4010. MASCAL and disaster response planning is not just the preserve of the medical staff. Any MASCAL and disaster would have the total focus of the commander,

especially in a non-warfighting situation. Therefore, medical staff must coordinate MASCAL and disaster response planning with J3, who will lead on all aspects of the plan and its execution, as the resources required will come from across the theatre and many will be non-medical. Specifically during the execution phase, the medical staff will take responsibility for coordination of all medical activities, whilst J3 will coordinate non-medical activities, such as PRO, Engr etc.

J4 – LOGISTICS

4011. The J4 staff are responsible for assessing the logistic support required for achievement of the commander's campaign objectives, and for ensuring that these support requirements are met throughout the campaign. In addition to this assessment, J4 will also coordinate the overall logistic effort.

4012. As medical support is part of the functional area of combat service support, coordination between medical and logistics staffs are required to ensure consistency and integration of logistics and medical missions. Amongst others, activities that require close linkage between medical and logistics staffs are:

- a. The development of the support concept and plan for the operation.
- b. The creation of the Statement of Requirement (SOR) and the sustainability statement.
- c. The resourcing process.
- d. The definition of logistics and medical C2 architecture.
- e. The MTFs' deployment, employment and redeployment.
- f. The coordination of the logistic aspects of AE, planning and execution being coordinated with J3 Air.
- g. Deconfliction of transport assets which might, mounted with medical equipment and personnel, be used for medical evacuation.

4013. Timely exchange of information, flexibility in decision making, teamwork spirit and mutual trust are essential in these relationships.

J5 – PLANS & POLICY

4014. J5 staff have the primary function of coordinating and consolidating planning input from all key staff elements, including medical. They also promulgate the commander's decisions on the COAs for the campaign through planning directives, operation plans and contingency plans. The medical staff will provide medical input to the commander's OPLAN to the J5 staff.

4015. One of the most important interactions between J5 and the medical staffs is the determination of casualty estimates for a given operation. The BC rates provided in AJP 4.10.1 or in former battle casualty estimate documents are generic in nature and can only be used for generic planning within conventional warfare, casualty rates for WMD can be found in AMedP8. A large number of factors must be taken into account for the estimation of BC in contingency and operational planning. Therefore, the selection of BC planning rates should involve consultation between operations, medical, intelligence and policy staffs, even though the determination of this estimate is primarily the responsibility of the operational staff.

J6 – COMMUNICATIONS

4016. The primary mission of the J6 communications staff is to provide reliable and secure CIS necessary to support an operation. The principles of flexibility, reliability, security, network resilience and interoperability are crucial to the NATO framework at all levels, as is the continued emphasis on commonality of CIS procedures.

4017. In the medical functional area, where there exists the potential for large amounts of detailed information and data on casualties to be transmitted, it is essential that early operational planning include the requirement to establish the commensurate priority for medical CIS.

4018. The most important aspect of this process is to engage the CIS staffs in recognising the need for CIS assets to provide adequate connectivity within the medical functional area, both vertically and horizontally in the C2 architecture.

4019. Medical support CIS needs must be assessed at all levels. In conjunction, medical and CIS staff will establish the medical CIS requirements for the operation and include them in the SOR. The CIS staff may also allocate the means to effect the capture of appropriate medical data.

4020. Medical CIS should include all MTFs in theatre, in order to facilitate the ability to rescue, evacuate, regulate and track casualties, permit commander's analysis and assessment of theatre medical capabilities, achieve direct interaction and information exchange on a continuous basis and should facilitate tele-consultation, tele-medicine, patient tracking, medical data collection, storage and transmission and in-transit patient monitoring. Connectivity with the JOC and commander's staff elements must also be established and maintained for coordination purposes.

J7 – EXERCISE PLANNING

4021. J7 are the branch responsible for exercise planning. J7 has linkages to medical support in that they have to ensure appropriate real-time medical support is available for all exercising troops, throughout the exercise and including deployment and redeployment. Additionally, medical support planning and play must be included in all relevant phases of any exercise, this will only be enabled by medical support staff being actively engaged with J7 staff from the outset.

J8 – RESOURCES & FINANCE

4022. At the theatre level, J8 are the principal financial management advisers, and are responsible for the correct and efficient application of all international funds approved for use in the theatre in support of the operation.

4023. J8 linkages to medical support are indirect and thus transparent, relating to the planning, programming, budgeting, and execution oversight of the theatre-based operation. The financial staff are responsible for the correct and efficient utilisation of funds approved for in-theatre support of the mission. Direct theatre interaction between finance and medical staffs, however, may be necessary during the course of an operation. Some specific examples where this may be required are: MOUs, contracting support and new projects or initiatives.

J9 – CIVIL-MILITARY CO-OPERATION (CIMIC)

4024. NATO commanders need to establish relationship with a variety of civilian authorities and organisations in their JOA. Allied commanders have a moral and legal responsibility toward the civilians in their area, which can only be met by cooperating with the civilian authorities and organisations. Therefore, the primary mission of J9 staff is the establishment of a specialist interface between an allied force and the civilian authorities and organisations, in order to establish and maintain good civil-military relations and gain the greatest advantage for the commander.

4025. With the approval of the commander and in accordance with the tasks assigned in the OPLAN, J9 staff may request medical staff to provide non-emergency medical assistance to the local population in accordance to the established humanitarian support concept in theatre and national regulations of the CN. In assessing whether a military response should be provided medical staffs must establish that the task is one that, if undertaken, will facilitate a return to normality for the local community. This assistance must be for a limited duration, with the final outcome being the re-establishment of the local civil medical infrastructure.

4026. Another area of interaction between medical staffs and J9 staff is the advice that can be given on the coordination and implementation of different medical projects promoted by the J9 staff, or IOs/NGOs, in the area of health care to the civil community. This advice will take into consideration the duplication of effort and the priority requirements of the projects. Additionally, the close relationship between the medical staff and NGOs, IOs and governmental medical and health agencies may become useful in order to support CIMIC operations.

LEGAL

4027. The legal staff provides legal advice and services to commanders during all phases of an operation. For each operation, the medical staff, in conjunction with legal staff, will address issues concerning both national and international law.

4028. Many of the areas over which legal maintains technical supervision or key advisory input involve subjects which include either medical functions or topics for which the medical advice to the commander is required. Key among these linkages, which will bring the medical and legal staffs together in a direct working relationship, include:

- a. SOFAs and HNS arrangements.
- b. Issues and actions pertaining to NATO support to International Organisations, NGOs, or the local population.
- c. Claims activity within the Area of Operations (AOO) related to incidents involving damage to property, or injury or loss of life.
- d. NATO liability regarding individual or public health, such as related to environmental contamination or other NATO operation based exposures.
- e. ICRC inspections.
- f. Compliance with Humanitarian Conventions.
- g. Treatment of Enemy Prisoners of War (EPW) and other protected persons.
- h. Medical Confidentiality.

PUBLIC INFORMATION OPERATIONS

4029. Public information and affairs staffs have the key mission of enhancing public understanding on the NATO operation's mission, goals, capabilities, and status. The public information office must be coordinated with all key NATO team elements, including medical staff, to ensure all target audiences are fully and accurately informed about the progress of the operation. The need for journalists to gather and to publish information as early as possible and the increased speed of information exchange due to modern means of communication has rendered the mass media an relevant factor to be considered in planning and conducting an operation. Information on alleged or existing risks and incidents affecting the health of military personnel or others is particularly sensitive and may cause rumours and inappropriate reactions.

ANNEX A

ABBREVIATIONS

This Glossary contains abbreviations and acronyms used in this document as well as others commonly used in joint and combined operations. A comprehensive list of NATO abbreviations is contained in AAP-15.

A

AAR	After Action Review
ACC	Air Component Command
ACO	Allied Command Operations
ACT	Allied Command Transformation
AE	Aeromedical Evacuation
AECC	Aeromedical Evacuation Control Cell
AJF	Allied Joint Force
AJP	Allied Joint Publication
ALCC	ACO Logistics Coordination Centre
ALSS	Advanced Logistic Support Site
AOO	Area of Operations
AOR	Area of Responsibility
APOD	Air Point of Disembarkation
APOE	Air Point of Embarkation
ASU	Aeromedical Staging Unit

B

BC	Battle Casualty
BI	Battle Injuries
Bi-SC	Bi-Strategic Commands
BS	Battle Stress
BW	Biological Warfare

C

C2	Command and Control
CBRN	Chemical, Biological, Radiological and Nuclear
CC	Component Commands
CIMIC	Civil-Military Cooperation
CIS	Communications and Information System
CJF	Combined Joint Forces
CJTF	Combined Joint Task Force
CM	Consequence Management
CN	Contributing Nations
COA	Courses of Action
COMEDS	Committee of the Chiefs of Military Medical Services in NATO
COP	Contingency Plan
CP	Capability Package
CRO	Crisis Response Operations

CSU	Casualty Staging Unit
CW	Chemical Warfare
D	
DCS	Damage Control Surgery
DNBI	Disease and Non-Battle Injury(ies)
DOB	Deployed Operating Base
E	
EAPC	Euro-Atlantic Partnership Council
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
EIH	Environmental and Industrial Hazards
EPW	Enemy Prisoners of War
EU	European Union
F	
FLS	Forward Logistic Site
FSA	Forward Support Area
H	
HN	Host Nation
HNS	Host Nation Support
I	
ICRC	International Committee of the Red Cross
IDRO	International Disaster Relief Operation
IO	International Organisation
J	
JALLC	Joint Analysis and Lessons Learnt Centre
JC	Joint Command
JFC	Joint Forces Command
JOA	Joint Operations Area
JOC	Joint Operations Centre
K	
KCMIA	Killed, Captured and Missing in Action
L	
LCC	Land Component Command
LN	Lead Nation
LOC	Line of Communication
LOGFAS	Logistic Functional Area Services
M	
MASCAL	Mass Casualty
MC	Military Committee
MCC	Maritime Component Command

Med Dir	Medical Director
MED	Medical
MEDAD	Medical Advisor
MEDCC	Medical Coordination Cell
MEDICS	Medical Information and Coordination System
MEDHNS	Medical Host Nation Support
MEDINT	Medical Intelligence
MFPC	Medical Force Protection Cell
MIMU	Multinational Integrated Medical Unit
MMU	Multinational Medical Unit
MJLC	Multinational Joint Logistic Centre
MMPG	Maritime Medical Planning Guide
MOSES	Medical Operational Support Evaluation System
MOU	Memorandum of Understanding
MSA	Mutual Support Agreement
MTF	Medical Treatment Facility

N

NAC	North Atlantic Council
NAMSA	NATO Maintenance and Supply Agency
NAOMI	NATO Assessment of Medical Indicators
NATO	North Atlantic Treaty Organisation
NBC	Nuclear, Biological and Chemical
NGO	Non-Governmental Organisation
NMLT	National Medical Liaison Team
NRF	NATO Response Force
NSE	National Support Element

O

OPCOM	Operational Command
OPCON	Operational Control
OPLAN	Operational Plan

P

PAR	Population at Risk
PARP	Partnership for Peace Planning and Review Process
PCRS	Primary Casualty Receiving Ship
PE	Peace Establishment
PECC	Patient Evacuation Coordination Cell
PfP	Partnership for Peace
PHC	Primary Health Care
PIO	Public Information Operations
PIR	Priority Intelligence Requirement(s)
POR	Post operational Report
PSO	Peace Support Operations
PTSD	Post Traumatic Stress Disorder

R	
RFI	Requests for Information
ROE	Rules of Engagement
RS	Role Specialised Nation
RSA	Rear Support Area
RSN	Role Specialisation Nation
RSOI	Reception, Staging, Onward Movement and Integration
S	
SACEUR	Supreme Allied Commander Europe
SACT	Supreme Allied Commander Transformation
SC	Strategic Command(er)
SCEPC	Senior Civil Emergency Planning Committee
SDC	Strategic Direction Centre
SHC	Secondary Health Care
SMO	Senior Medical Officer
SOFA	Status of Forces Agreement
SOP	Standing Operating Procedure
SOR	Statement of Requirement
SPOD	Sea Point of Debarkation
SPOE	Sea Point of Embarkation
STANAG	Standardisation Agreement
SUPLAN	Support Plan
T	
TACON	Tactical Control
TOA	Transfer of Authority
U	
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
W	
WHO	World Health Organisation
WIA	Wounded in Action
WMD	Weapons of Mass Destruction

ANNEX B

GLOSSARY OF TERMS AND DEFINITIONS

This Glossary is provided to help with the understanding of this AJP. However, it is not the full and definitive reference of NATO medical terminology for which the reader is referred to AMedP-13 NATO Glossary of Medical Terms and Definitions.

ADVANCED LOGISTIC SUPPORT SITE: An ashore site that provides logistic and medical support to a MNMF. It may be the primary transshipment point for material and personnel to and from units afloat. (This entry is only applicable in the context of and for use in this publication)

AEROMEDICAL EVACUATION: The movement of patients under medical supervision to and between medical treatment facilities by air transportation. (AAP-6)

AEROMEDICAL EVACUATION CONTROL CENTRE (AECC): The control facility established by the commander of an air transport division, air force, or air command. It operates in conjunction with the command movement control centre and coordinates overall medical requirements with airlift capability. It also assigns medical missions to the appropriate AE elements in the system and monitors patient movement activities. (AAP-6)

AEROMEDICAL EVACUATION, FORWARD: That phase of evacuation that provides airlift for patients to the initial medical treatment facility in theatre. This is usually conducted by rotary assets in forward areas. (This entry will be recommended for inclusion in AAP-6 upon ratification of this publication)

AEROMEDICAL EVACUATION (INTER-THEATRE, OR STRATEGIC): That phase of evacuation that provides out-of-theatre airlift for patients from overseas areas or from theatre of active operations, to the home nation, to other NATO countries or to a temporary out of theatre safe area. Strategic AE is ultimately a national responsibility; nevertheless bilateral or multilateral agreements between nations are an efficient way to share scarce resources of MEDEVAC aircraft, equipments and AE teams. . (This entry will be recommended for inclusion in AAP-6 upon ratification of this publication)

AEROMEDICAL EVACUATION (INTRA-THEATRE, OR TACTICAL): Tactical AE is the phase of evacuation that provides intra-theatre airlift for patients between MTFs, typically transferring patients between Role 3 MTFs or Role 2 (LM or E) to Role 3. This is conducted by rotary assets or Tactical Air Transport along LOC in the JOA. (This entry will be recommended for inclusion in AAP-6 upon ratification of this publication)

AEROMEDICAL STAGING UNIT: A medical unit operating transient unit beds located on or in the vicinity of an emplaning or deplaning air base or air strip that provides reception, administration, processing, ground, transportation, feeding and limited medical care for patients entering, on route via, or leaving an aeromedical evacuation system. (AMedP-13)

BLUE-LIGHT AMBULANCE MATRIX: Area coverage by properly equipped and medical specialist or paramedic crewed ambulances or response vehicles (usually ground or rotary) tasked to respond to incidents along Lines of Communication or within the AOR in order to achieve the initial response timeline of 1 hour to advanced trauma life support for a casualty. An example is the placement of paired paramedic crewed ambulances, of an Area Medical Company, one hour's drive time apart along a Main Supply Route. (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication)

CAPABILITY PACKAGE: A combination of national and NATO funded infrastructure associated running costs that, together with the assigned military forces and other essential requirements, enable a NATO Commander to achieve a specific NATO Military Required Capability. (This entry is only applicable in the context of and for use in this publication)

CASUALTY: In relation to personnel, any person who is lost to his organisation by reason of having been declared dead, wounded, injured, diseased, detained, captured or missing. (AAP-6)

CASUALTY, BATTLE: Any casualty incurred as the direct result of hostile action, sustained in combat or relating thereto or sustained going to or returning from a combat mission. (AMedP-13)

CASUALTY, DISEASE AND NON-BATTLE INJURY: A grouping of casualties which are due to disease or injury not acquired in combat or relating to combat. (AMedP-13)

CASUALTY STAGING UNIT: A medical unit caring for in-transit patients under medical personnel supervision. (AAP-6)

CLINICAL GOVERNANCE: A system through which medical organisations are accountable for continuously improving the quality of their services and safe guarding high standards of care, by creating an environment in which clinical excellence will flourish. The four basic components are a coherent approach to improving clinical effectiveness, continuing utilisation of audit, ongoing professional development and establishing effective processes for identifying and managing risk and addressing poor performance. (MC 326/2)

COMBINED JOINT OPERATIONS: An operation carried out by forces of two or more nations, in which elements of at least two services participate. (AAP-6)

CONSEQUENCE MANAGEMENT: The reactive measures used to mitigate the destructive effects of attacks, incidents, or natural disasters. (MC 326/2)

COORDINATING AUTHORITY: The authority granted a commander or individual assigned responsibility for coordinating specific functions or activities involving forces of two or more countries, or two or more forces from the same Service. He has the authority to require consultation between the agencies involved or their representatives,

but does not have the authority to compel agreement. In case of disagreement between the agencies involved, he should attempt to obtain essential agreement by discussion. In the event he is unable to obtain essential agreement, he shall refer the matter to the appointing authority. (AAP-6)

DAMAGE CONTROL SURGERY: Emergency surgical procedures and treatment to stabilise casualties, in order to save life, limb or function, always conducted by surgical team. These procedures should be followed later by primary surgery. (This entry will be recommended for inclusion in AMedP-13 and MC 326/2 upon ratification of this publication)

DOCTRINE: Fundamental principles by which the military forces guide their actions in support of objectives. It is authoritative but requires judgement in application. (AAP-6)

ENVIRONMENTAL HEALTH: The control of all those factors in man's physical environment that exercise, or may exercise, a deleterious effect on his physical development, health or survival. (This entry is only applicable in the context of and for use in this publication)

EVACUATION, MEDICAL: The medically controlled process of moving any person who is wounded, injured or ill to and/or between medical treatment facilities. (AMedP-13)

EVIDENCE-BASED MEDICINE: An approach to health care that promotes the collection, interpretation, and integration of valid, important and applicable patient-reported, clinical observed, and research-derived evidence. The best available evidence, moderated by patient circumstances and preferences, is applied to improve the quality of clinical judgements. (MC 326/2)

FORWARD LOGISTIC SITE: Normally the final land transshipment point that provides the bridge between an Advanced Logistic Support Sites (ALSS) and units at sea. (This entry is only applicable in the context of and for use in this publication)

GRADUATED INCIDENT RESPONSE: Policy for response to an incident that is appropriate to deal with that incident, based on the information available, and which can be increased or decreased in terms of capability or capacity in a coordinated manner in order to deal effectively with the consequences of that incident. (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication)

HEALTH CARE OR HEALTH SERVICE SUPPORT: All services provided directly or indirectly to contribute to the health and well-being of patients or a population. (AAP-6)

HOST NATION SUPPORT: Civil and military assistance rendered in peace, crisis or war by a host nation to NATO and/or other forces and NATO organizations which are located on, operating on/from, or in transit through the host nation's territory. (AAP-6)

HOST NATION SUPPORT, MEDICAL: Civil or military medical assistance rendered by a nation to foreign forces within its territory based upon agreements mutually concluded between nations or a NATO Command and a nation. (MC 326/2)

HUMANITARIAN OPERATIONS: An operation specifically mounted to alleviate human suffering where responsible civil actors in an area are unable or unwilling to adequately support a population. It may precede, parallel, or complement the activity of specialized civil humanitarian organizations. (*See also Peacekeeping and Peace Support Operations*). (AAP-6)

INCIDENT RESPONSE TEAM (IRT): Team held at high readiness in order to deploy in response to an incident. The medical component of an IRT should include trained, equipped and experienced specialist personnel to deal with the consequences of trauma or life-threatening illness. (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication)

INFORMATION: Unprocessed data of every description which may be used in the production of intelligence. (AAP-6)

INTELLIGENCE: The product resulting from the processing of information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and to the organisations engaged in such activity. (AAP-6)

INTELLIGENCE, MEDICAL: The product of the processing of medical, bio-scientific, epidemiological, environmental and other information related to human or animal health. This intelligence, being of a specific technical nature, requires informed medical expertise during its direction and processing within the intelligence cycle. (MC 326/2)

INTENSIVE CARE: That degree of care, which is extensive, highly technical and required because of the patient's actual or threatened inability to maintain vital function. (AMedP-13)

INTEROPERABILITY: The ability to operate in synergy in the execution of assigned tasks. (AAP-6)

JOINT FORCE COMMANDER: A general term applied to a commander (e.g. Commander of Allied Joint Force (COMAJF)) authorised to exercise command authority or operational control over a joint force. (This entry is only applicable in the context of and for use in this publication)

JOINT OPERATIONS AREA (JOA): A temporary area defined by the Supreme Allied Commander Europe, in which a designated joint commander plans and executes a specific mission at the operational level of war. A joint operations area and its defining parameters, such as time, scope of the mission and geographical area, are contingency- or mission-specific and are normally associated with combined joint task force operations. (AAP-6)

LEAD NATION: One nation assumes the responsibility for procuring and providing a broad spectrum of logistic support for all or a part of the multinational force and/or headquarters. Compensation and/or reimbursement will then be subject to agreements

between the parties involved. The lead nation may also assume the responsibility to coordinate logistics of other nations within its functional and regional area of responsibility. (AJP 4(A))

MASS CASUALTY SITUATION: A Mass Casualty Situation is one in which an excessive disparity exists between the casualty load and the medical capabilities locally available for its management. (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication) Any number of casualties produced in a relatively short period of time which overwhelms the available medical and logistic support capabilities. (AAP-6)

MEDICAL ADVISOR: The senior medical staff officer in a formation headquarters responsible for ensuring that the commander and his staff are properly aware of the health and medical implications of their actions and any issues connected to the operation. The Medical Advisor may also be the Force or Theatre Medical Director. (MC 326/2)

MEDICAL DIRECTOR: The functional head of the medical services in a formation or theatre of operations. The Medical Director may also have the additional responsibilities of being the Medical Advisor to a senior commander. (MC 326/2 – this entry will be recommended for inclusion in AMedP-13 upon ratification of this publication)

MEDICAL COORDINATION CELL (MEDCC): The Medical Coordination Cell (MEDCC) is the executing body of the medical organisation for all CJTF operations. The MEDCC works under the direction of the Medical Director and co-ordinates multinational, joint and multifunctional medical issues, including AE. (This entry is only applicable in the context of and for use in this publication)

MULTINATIONAL FORCES: Forces of more than one nation under a NATO commander or non-NATO commander within a NATO-led operation. (AJP 4(A))

NATIONAL SUPPORT ELEMENT: Any national organisation or activity that supports national forces which are part of the NATO force. NSEs are OPCON to the national authorities, they are not normally part of the NATO force. Their mission is nation-specific support to units and common support that is retained by the nations. NSEs are asked to co-ordinate and co-operate with the NATO commander and the Host Nation. If the operational situation allows for a reduction, greater co-operation and centralisation of services among NSEs could produce significant savings. (AJP 4(A))

ORGANISATIONS, GOVERNMENTAL: Organisations that are sponsored and financed by individual governments (e.g. UK Department for International Development (DfID), British Overseas Rescue Board, US Office for Foreign Disaster Assistance, etc). (This entry is only applicable in the context of and for use in this publication)

ORGANISATIONS, INTERNATIONAL: Organisations that are sponsored and financed at an international level (e.g. United Nations High Commissioner for Refugees (UNHCR), World Food Programme, Office for Coordination of Humanitarian Activities,

International Committee of the Red Cross (ICRC), World Health Organisation (WHO) etc). (This entry is only applicable in the context of and for use in this publication)

ORGANISATIONS, NON-GOVERNMENTAL: Organisations that are financed entirely by voluntary contributions and have no International or Governmental support (e.g. Medecins Sans Frontières, Danish Refugee Council, International Rescue Committee). (This entry is only applicable in the context of and for use in this publication)

OPERATIONAL COMMAND: The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational control, and/or tactical control, as the commander deems necessary. Note: it does not include responsibility for administration. (AAP-6)

OPERATIONAL CONTROL: The authority delegated to a commander to direct forces assigned so that the commander may accomplish specific missions or tasks which are usually limited by function, time or location; to deploy units concerned, and to retain or assign tactical control of those units. It does not include authority to assign separate employment of components of the units concerned. Neither does it, of itself, include administrative or logistic control. (AAP-6)

OPERATIONAL LEVEL: The level of war at which campaigns and major operations are planned, conducted and sustained to accomplish strategic objectives within theatres or areas of operations. (AAP-6)

PARAMEDIC: Paramedics provide specialist care and treatment to patients who are either acutely ill or injured. They can administer a range of drugs and carry out certain surgical techniques. (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication)

PATIENT REGULATING: A process of control and co-ordination to ensure patients are evacuated to medical treatment facilities which are best capable of providing the required treatment, and having the required number and type of beds available. Also called Medical Regulating. (MC 326/2)

PATIENT TRACKING: The precise and continuous monitoring of the location and the intended destination of the patient in the medical treatment and evacuation chain. (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication)

PEACEKEEPING: A peace support operation following an agreement or ceasefire that has established a permissive environment where the level of consent and compliance is high, and the threat of disruption is low. The use of force by a peace support force is normally limited to self-defence. (See also *Humanitarian Operations and Peace Support Operations*). (AAP-6)

PEACE SUPPORT OPERATIONS: An operation that impartially makes use of diplomatic, civil and military means, normally in pursuit of United Nations Charter purposes and principles, to restore or maintain peace. Such operations may include conflict prevention, peacemaking, peace enforcement, peacekeeping, peacebuilding and/or humanitarian operations. (*See also Humanitarian Operations and Peacekeeping*). (AAP-6)

POST OPERATIVE CARE: Care occurring soon after a surgical operation. (This entry is only applicable in the context of and for use in this publication)

PREVENTIVE MEDICINE: The services that are concerned with identifying, preventing and controlling acute and chronic communicable and non-communicable diseases and illnesses with food and environmental hygiene, and vector control. (MC 326/2)

PRIMARY HEALTH CARE: The provision of integrated, accessible health care services by clinical personnel trained for comprehensive first contact and the continuing care of individuals experiencing signs and symptoms of ill health or having health concerns. It includes health promotion, disease prevention, patient education and counselling, and the diagnosis and treatment of acute and chronic illness. (MC 326/2)

PRIMARY SURGERY: Primary surgery describes the surgery directed at repair of the local damage caused by wounding, rather than correcting the generalised effects. It is performed normally at Role 3. Delays to primary surgery allow further generalised effects to develop that may lead to an increase in mortality, morbidity and residual disability. (MC 326/2)

REDISTRIBUTION AUTHORITY: The authority given to a NATO commander to redistribute certain resources, designated in peacetime and assigned to his command, and made available by nations, in order to support operations. (AJP 4(A))

RESUSCITATION: The restoration of tissue perfusion and oxygenation. (This entry is only applicable in the context of and for use in this publication)

ROLE SPECIALISATION: One nation assumes the responsibility for procuring a particular class of supply for all or a part of the multinational force. Compensation and/or reimbursement will then be subject to agreements between the parties involved. (MC 319/2)

SECONDARY HEALTH CARE: The provision of hospitalisation and specialised clinical care, requiring training and equipment levels beyond that which could normally be provided at the level of primary care. Routine access to these services will normally be by referral from Primary Health Care. Urgent access will normally be via an Emergency Medicine department. (MC 326/2)

STABILISATION: The maintenance of tissue perfusion and oxygenation. (This entry is only applicable in the context of and for use in this publication)

STANDARDISATION AGREEMENT (STANAG): The record of an agreement among several or all member nations to adopt or similar military equipment, ammunition, supplies and stores; and operational, logistic, and administrative procedures. National acceptance of a NATO allied publication issued by the NATO Standardisation Agency may be recorded as a STANAG. (AAP-6)

STRATEGIC LEVEL: The level of war at which a nation or group of nations determines national or multinational security objectives and deploys national, including military, resources to achieve them. (AAP-6)

SUPPORT PLANS (SUPLANS): Plans that provide detailed amplification for particular planning areas and must be directly linked to a specified Contingency Plan (COP) or OPLAN. (This entry is only applicable in the context of and for use in this publication)

SUSTAINABILITY: The ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives. (AAP-6)

TACTICAL LEVEL: The level of war at which battles and engagements are planned and executed to accomplish military objectives assigned to tactical formations and units. (AAP-6)

TELE-CONSULTATION: The exchange of clinical information among medical and dental providers separated by distance, in order to improve patient care (access to specialists, prevention of unnecessary evacuation, or improvement in diagnosis or treatment). (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication)

TELE-MEDICINE: The use of information and communications technologies to access healthcare regardless of time and distance. Depending on the clinical specialty involved, this may incorporate such terms as Teleradiology, Teledermatology, Telesurgery, Telepathology and Telepsychiatry. (This entry will be recommended for inclusion in AMedP-13 upon ratification of this publication)

THEATRE: The geographical area where a military operation is being conducted. (AAP-6)

THEATRE HOLDING POLICY: A command decision which sets the maximum period a hospitalised convalescing casualty will be kept in the theatre of operations awaiting recovery and return to duty. It is a control measure to ensure that sufficient hospital capacity is retained for anticipated surges in battle casualties or illnesses. (MC 326/2)

ANNEX C

REFERENCES

The First Geneva Convention	Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field
The Second Geneva Convention	Convention for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea
C-M(2001)44	NATO Policy for Co-operation in Logistics
DPC-D(91)	NATO Concept of Reinforcement
MC 55/4	NATO Logistical Readiness and Sustainability Policy
MC 67/4	The NATO Precautionary System
MC 109/2	Missions for the NATO Supreme Commanders and the Canada United States Regional Planning Group
MC133/3	NATO's Operational Planning System
MC 299/7	MC Guidance on 2004 Force Goal Cycle
MC 317/1	The NATO Force Structure
MC 319/2	NATO Principles and Policies for Logistics
MC 324/1	The NATO Military Command Structure
MC 326/2	NATO Medical Support Principles and Policies
MC 327/2	NATO Military Policy for non-Article 5 Crisis Response Operations
MC 334/2	NATO Principles and Policies for Host Nation Support
MC 336/2	NATO Principles and Policies for Movement and Transportation
MC 343/1	NATO Military Assistance to International Disaster Relief Operations
MC 389/1	MC Policy on NATO's Combined Joint Task Force (CJTF) Capability
MC 389/2	MC Policy on NATO's Combined Joint Task Force
MC 400/2	MC Guidance for Military Implementation of the Alliance Strategy
MC 411/1	NATO Military Policy On Civil-Military Cooperation (CIMIC) Ops
MC 458	NATO Training, Exercise and Evaluation Policy
MC 469	NATO Military Principles and Policies for Environmental Protection
MC 477	Military Concept for the NATO Response Force
MCM-083-04	The Review And Adaptation Of The Defence Planning Process
AJP-01(C)	Allied Joint Doctrine (Study)
AJP-2	Allied Joint Intelligence, Counter Intelligence and Security Doctrine
AJP-3(A)	Allied Joint Operations (Study)
AJP-3.13	Reception, Staging, Onward Movement and Integration (RSOI) (Study)
AJP 3.14	Force Protection (Study)
AJP-4(A)	Allied Joint Logistic Doctrine
AJP-4.4(A)	Allied Joint Movement and Transportation Doctrine (Study)
AJP-4.5(A)	Allied Joint Host Nation Support Doctrine and Procedures

AJP-4.6	Multinational Joint Logistic Centre Doctrine
AJP-4.9	Modes of Multinational Logistic Support
AJP 4.10.1	Medical Planning (Study)
AJP 4.10.2	Medical Evacuation (Study)
AJP 4.10.3	Medical Intelligence (Study)
AJP-5	Operational Planning (Study)
AJP-9	NATO Civil-Military Cooperation (CIMIC) Doctrine
AAP-6	NATO Glossary of Terms and Definitions
AAP-15	NATO Glossary of Abbreviations
APP-9	Compendium of Allied Land Forces Messages
ALP-1(A)	Allied Joint Operations Doctrine
ALP-4.1	Multinational Maritime Force (MNMF) Logistics (formerly ALP-11)
ALP-4.2	Land Forces Logistic Doctrine (formerly ALP-9(C))
ALP-4.3	Air Forces Logistic Doctrine (formerly ALP-13)
AMedP-13	NATO Glossary of Medical Terms and Definitions
AMedP-15	Military Medical Support in Humanitarian and Disaster Relief
AMedP-16	Comparative Tables of Medical Treatment Facilities
AMedP-17	Training Requirements for Health Care Personnel in International Missions
STANAG 2034	NATO Standard Procedures for Mutual Logistic Assistance
STANAG 2037	Vaccination of NATO Forces
STANAG 2050	Statistical Classification of Diseases, Injuries and Causes of Death
STANAG 2061	Procedures for Disposition of Allied Patients by Medical Installation
STANAG 2087	Medical Employment of Air Transport in the Forward Area
STANAG 2128	Medical and Dental Supply Procedures
STANAG 2132	Documentation relative to Medical Evacuation, Treatment and Cause of Death of Patients
STANAG 2235	Pre and Post-Deployment Health Assessments.
STANAG 2242	Policy for the Chemoprophylaxis and Immunotherapy of NATO Personnel against Biological Warfare Agents (Draft)
STANAG 2347	Medical Warning Tag
STANAG 2348	Basic Military Hospital (Clinical) Records
STANAG 2466	Dental Fitness Standards for Military Personnel and a Dental Fitness Classification System
STANAG 2475	Planning Guide for the Estimation of NBC Battle Casualties (Nuclear) – AMedP-8(A), Volume 1
STANAG 2476	Planning Guide for the Estimation of NBC Battle Casualties (Biological) – AMedP-8(A), Volume 2
STANAG 2477	Planning Guide for the Estimation of NBC Battle Casualties (Chemical) – AMedP-8(A), Volume 3
STANAG 2879	Principles of Medical Policy in the Management of a Mass Casualty Situation
STANAG 2939	Medical Requirements for Blood, Blood Donors and Associated Equipment
STANAG 3204	Aeromedical Evacuation

STANAG 3345	Data Forms for Planning Air Movements
STANAG 5048	The Minimum Scale of Communications for the NATO Land Forces - Requirements, Principles and Procedures
Bi-SC 65-7	Policy and Procedures for NATO's Medical Intelligence Programme
Bi-SC 80-3	Reporting Directive, Volume V - Logistic Reports
Bi-SC 80	Guidance for Defence Planning (Jan 97)
Bi-SC 80	Guidelines for Operational Planning (Jan 01)
Bi-SC 85-8	ACE Medical Support Principles, Policies and Planning Parameters (Oct 93)
Bi-SC	Stockpile Planning Guidance
Bi-SC	Strategic Vision: The Military Challenge (Aug 04)
Maritime Medical Planning Guidance for NATO (MMPG) (Oct 94)	