

NATO STANDARD

AJP-3

**ALLIED JOINT DOCTRINE
FOR THE CONDUCT OF OPERATIONS**

Edition C Version 1

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NORTH ATLANTIC TREATY ORGANIZATION

ALLIED JOINT PUBLICATION

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NATO LETTER OF PROMULGATION

11 February 2019

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RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATION BY NATIONS

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SUMMARY OF CHANGES

REVISION OF ALLIED JOINT PUBLICATION

AJP 3 Edition C, Version 1

- Restructures complete contents to reflect phases of a mission (preparation – execution – termination).
- Reduces redundancies and improves continuity between AJP -01 Allied Joint Doctrine, and AJP-5 Allied Joint Doctrine for the Planning of Operations.
- Updates NATO Command Structure and NATO Force structure.
- Updates fundamentals to reflect latest policy and doctrine.
- Updates principles and considerations to reflect latest policy and doctrine and includes Cyber operations and StratCom.
- Changes campaign themes and types of conflict to operations themes and types of operations.
- Updates Joint Functions to reflect the use of Information as a joint function.
- Updates operations management to reflect latest practice and doctrine.
- Updates operations assessment to reflect latest practice and doctrine.
- Adds section on information management.
- Moves and updates annex for joint staff functions.
- Adds annex for related capabilities to the joint functions.
- Adds annex for battlespace management which establishes cyber as a separate domain.
- Adds annex for risk management
- Adds annex for lessons learned.
- Updates terms and definitions to reflect latest status of NATO Term and ongoing terminology changes.

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RELATED DOCUMENTS

MC 0319/3	<i>NATO Principles and Policies for Logistics</i>
MC 133/4	<i>NATO's Operations Planning</i>
MC 0324/3	<i>The NATO Military Command Structure</i>
MC 327/2	<i>NATO Military Policy for Non-Article 5 Crisis Response Operations</i>
MC 0343/1	<i>NATO Military Assistance to International Disaster Relief Operations</i>
MC 362/1	<i>NATO Rules of Engagement</i>
MC 376/3	<i>Naval Cooperation and Guidance for Shipping (NCAGS)</i>
MC 0400/3	<i>Military Committee Guidance for the Military Implementation of NATO's Strategic Concept</i>
MC 0402/2	<i>NATO Military Policy on Psychological Operations</i>
MC 411/2	<i>NATO Military Policy on Civil-Military Cooperation (CIMIC) and Civil-Military Interaction (CMI)</i>
MC 422/5	<i>NATO Military Policy for Information Operations</i>
MC 0437/2	<i>Special Operations Policy</i>
MC 0472/1	<i>Military Committee Concept for Counterterrorism</i>
MC 560/2	<i>Policy for Military Engineering</i>
MC 586/1	<i>Allied Forces and their Use for Operations</i>
MC 0613	<i>Military Committee Concept for the NATO Integrated Air and Missile Defence System</i>
MC 0628	<i>NATO Military Policy on Strategic Communications</i>

Since Allied Joint Publication-3, Allied Joint Doctrine for the Conduct of Operations is one of the keystone NATO doctrine publications from which level-2 and -3 doctrine is derived, only the capstone and keystone doctrine publications are listed here. References to other doctrine publications are made in the text, where appropriate.

AJP-01	<i>Allied Joint Doctrine</i>
AJP-2	<i>Allied Joint Doctrine for Intelligence, Counter-Intelligence and Security</i>
AJP-4	<i>Allied Joint Doctrine for Logistics</i>
AJP-5	<i>Allied Joint Doctrine for the Planning of Operations</i>
AJP-6	<i>Allied Joint Doctrine for Communication and Information Systems</i>
NATO BI-SC CFAO	<i>Conceptual Framework for Alliance Operations, 11 June 2013, as amended on 18 July 2013</i>

AJP-3

NATO BI-SC Dir 40-1	<i>Integrating UNSCR 1325 and Gender Perspectives in the NATO Command Structure</i>
NATO BI-SC Dir 080-006	<i>Lessons Learned</i>
ACO Directive 80-1	<i>Lessons Learned</i>
ACO Directive 80-70	<i>Campaign Synchronization and Joint Targeting in NATO</i>
ACO Directive 080-104	<i>NATO Force Integration Units dated 09 August 2016</i>
AC35-D1040 REV 6	<i>Supporting Document on Information and Intelligence Sharing with non-NATO Entities</i>
ACP 190 NATO Supp-1	<i>Guide to Spectrum Management in Military Operations</i>
EAPC(C)D(2014)0019	<i>NATO/EAPC Action Plan for the Implementation of UNSCR 1325 and Related Resolutions</i>
3000 TC-530/Ser: NR 0034//2100/SHPPX/10/05-102978	<i>NATO Response Force Minimum Military Requirements</i>
AFS Vol. IX	<i>Allied Command Operations Forces Standards, vol. IX</i>

Commercial publications

International Organization for Standardization *Risk management – Principles and guidelines (ISO 31000-2009(E), 2009)*

PREFACE

Scope

1. Allied joint publication (AJP)-3(C) *Allied Joint Doctrine for the Conduct of Operations* is the keystone North Atlantic Treaty Organization (NATO) doctrine for the conduct of joint operations from preparation to termination. AJP-3(C) builds on the principles described by AJP-01(E) *Allied Joint Doctrine*, is adjacent and closely related to AJP-5 *Allied Joint Doctrine for the Planning of Operations*, and it is the foundational doctrine for the AJP-3 series.

Purpose

2. Though every operation is unique their conduct can be approached in the same manner. AJP-3(C) provides joint commanders and staffs with a common framework to command, coordinate and synchronize Alliance operations.

Application

3. AJP-3(C) is intended primarily as guidance for joint NATO commanders and staffs. However, the doctrine is instructive to, and provides a useful framework for operations conducted by a coalition of NATO members, partners and non-NATO nations. It also provides a reference for NATO civilian and non-NATO civilian actors.

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Chapter 1 – Fundamentals

Section 1 – Introduction

- 1.1 The operational level is defined as *the level at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theatres or areas of operations*. The operational level links strategic objectives to tactical level operations. At the operational level and within a designated joint operations area (JOA), armed forces are deployed and employed in accordance with a strategy to achieve military-strategic objectives. Without this link, it is unlikely that tactical actions will lead to attaining the desired end state. Therefore, the commander decides on how tactical activity is generated to achieve those strategic objectives. This is described as 'operational art' and is defined as *the employment of forces to achieve strategic and/or operational objectives through the design, organization, integration and conduct of strategies, campaigns, major operations and battles*.
- 1.2 At the operational level, emphasis should be placed on integrating the contributing nations' forces and the synergy that can be attained; the success of the process will determine the ability of a joint force to achieve its objectives. Planning for complex operations¹ also requires cooperation with other non-military actors. The North Atlantic Treaty Organization (NATO) agreed to form an appropriate but modest civilian capability to interact more efficiently with other actors and conduct appropriate planning in crisis management. The majority of such activities, based on communication, planning and coordination, are to be conducted by all NATO military disciplines and functions.
- 1.3 NATO's 2010 strategic concept underlines that lessons learned from NATO operations show that effective crisis management calls for a comprehensive approach involving military, political, economic and civil instruments of power harmonized with efforts of international organizations (IOs) and non-governmental organizations (NGOs). Military means, although essential, are not enough on their own to meet the many complex challenges to Euro-Atlantic and international security. The effective implementation of a comprehensive approach requires all actors to contribute from a position of shared purpose, responsibility, openness and determination. This will take into account their respective strengths, mandates and roles, as well as their decision-making autonomy. NATO's contribution to a comprehensive approach to crisis management is facilitated through civil-military interaction (CMI). At the political and strategic level, NATO

¹ See AJP-5 *Allied Joint Doctrine for the Planning of Operations* for detail.

concentrates on building confidence and mutual understanding between international actors. A comprehensive approach actively builds closer links and liaison with relevant organizations and actors, on a regular basis, while respecting the autonomy of decision-making of each organization. The implementation of NATO's contribution to a comprehensive approach is a permanent feature of the Alliance's work.

Operations themes

- 1.4 Operations are a sequence of coordinated actions with a defined purpose which are military and contribute to a broader approach including non-military actions. Operations are conducted through the art of directing, coordinating, controlling and adjusting the actions of forces to achieve specific objectives. These operations normally involve capabilities provided by maritime, land, air, space, cyber, special operations forces (SOF) and other functional forces.
- 1.5 At the operational level and within a designated joint operations area (JOA), armed forces are deployed and employed in accordance with a strategy to achieve military strategic objectives. Normally this requires sustained operations with often simultaneous and sequential actions by committed forces. It is at the operational level that tactical success in operations are combined to create desired effects to achieve objectives and attain the end state. This is achieved by understanding the strategic context and the outcomes sought and by applying forces effectively (where necessary, in coordination with other actors). To that end, the commander executes the operation plan (OPLAN) approved by the establishing authority, issues operation orders and directs operations. The commander will carry out the following:
- allocate forces and resources (as necessary) to enable subordinate commanders to accomplish their missions;
 - direct the activities of those formations or units not delegated to subordinate commanders, especially those earmarked as operational-level reserves;
 - engage with other relevant actors in theatre; and
 - determine the acceptable level of risk to the force and mission.
- 1.6 The construct of operations themes, using the level of force as the primary discriminator, assists commanders to visualize their task and develop their approach. Operations themes² are:

² See AJP-01 *Allied Joint Doctrine* for further explanation.

- warfighting;
 - security;
 - peace support; and
 - peacetime military engagement.
- 1.7 In general, their respective position on the spectrum of conflict reflects the prevailing levels of force and, therefore, guides the operations design and force structures. These positions are not fixed on the spectrum of conflict, but are indicators of the overall level and intensity of force.
- 1.8 The character of the predominant operation themes may demand different intellectual approaches and require different force packages. Conducting operations however consists of handling essentially the same set of fundamental military activities: offensive, defensive, stability and enabling. Therefore operations cannot be described purely as offensive or defensive because NATO forces must expect to perform a wide range of potentially simultaneous activities across the spectrum of conflict, from combat to humanitarian aid, within short timeframes and in close proximity.

Requirements

- 1.9 To meet its requirements, including the ability to provide a rapid military response to an emerging crisis, NATO has established a military structure.
- a. A NATO Command Structure (NCS) comprising static and deployable elements.
 - b. A NATO force structure (NFS) comprising deployable allied national and multinational forces. These include joint headquarters and component commands.

The NCS and NFS may receive support from other headquarters (HQ) and force elements, including national entities or specialists in an augmenting role, to meet specific requirements. All NCS force elements will be trained according to common NATO standards. Command and control (C2) will be structured to provide capability throughout the force from the strategic level, through the operational level to the tactical level.

- 1.10 The execution of operations should be guided by the supported/supporting relationship to allow the strengths and capabilities of the HQ and forces to complement each other to best effect. (see paragraph 1.80 for more detail). This relationship provides means of balancing the phases of Alliance operations between NATO commanders receiving support from, and providing support to, other commanders. The supported/supporting

relationships should be established and defined by Supreme Allied Commander Europe (SACEUR), or an appointed operational commander when appropriate. Supported/supporting relationships should be contingency/mission specific and may be limited in scope, time or by other parameters. It is not a command relationship, but is a directed relationship through which the mission requirements of supported commanders are met.

NATO Command Structure

- 1.11 The NCS³ is composed of permanently established HQ and supporting organizational elements at the strategic, operational and tactical levels. At the strategic level, SACEUR as the commander of the Allied Command Operations (ACO), assumes the overall command of operations and is responsible for planning, preparing, conducting, executing and sustaining all NATO operations. SACEUR determines the C2 arrangements and designates those who will exercise operational and tactical authority. These arrangements are endorsed by the Military Committee (MC) and approved by the North Atlantic Council (NAC).
- 1.12 Allied Command Transformation (ACT) provides strategic support to NATO operations. The Supreme Allied Commander Transformation is responsible for developing NATO's capabilities through education, training and exercises, experimentation, assessing concepts and promoting interoperability. Examples of activities and programmes that are led by ACT include joint operations pre-deployment training, doctrine development, and identifying and promulgating lessons learned⁴.
- 1.13 The operational level of command is normally exercised by a commander joint force command, supported by the battle staff from the HQ deployed as the joint task force headquarters (JTF HQ), or, when the operational conditions permit, from their static location. Those elements of the joint force command (JFC) which do not deploy provide a mechanism for sustaining the manpower in the JTF HQ and act in a supporting role while fulfilling any other key functions required of the JFC. The following military principles are essential for C2 arrangements for operations.
 - a. The commander will only command one operation at a time. However, this does not preclude the non-deployed element of the JFC from providing support to other operations and missions. When not deployed, the JFC can deal with other HQ

³ As outlined in MC 0324/3 *The NATO Military Command Structure*.

⁴ See Annex E for further explanation.

which are deployed in theatre for day-to-day administrative matters and assist with the training, preparation and movement activities for future rotations.

- b. The deployed JTF HQ should report directly to Supreme Headquarters Allied Powers Europe (SHAPE) without intermediate levels of command. The command and control arrangements for a specific operation are proposed by SACEUR, endorsed by the MC and approved by the Council.

The JFCs in the NCS will be able to provide the JTF HQ for the initial phase of an operation.

1.14 **Single service commands.** The NCS includes a maritime command, land command and air command. The commands contribute to development and transformation, engagement and liaison within their area of expertise.

- a. **Headquarters Allied Maritime Command.** Headquarters Allied Maritime Command (HQ MARCOM) provides maritime competency for the Alliance and acts as NATO's principal maritime advisor. HQ MARCOM from a static location plans, conducts, and provides C2 for the full spectrum of maritime operations. This HQ is ready to command a maritime operation or act as the maritime component command HQ (MCC HQ) to support up a joint operation larger than a major joint operation (MJO+)
- b. **Headquarters Allied Land Command.** Headquarters Allied Land Command (HQ LANDCOM) provides land competency for the Alliance and acts as NATO's principal land advisor. HQ LANDCOM is responsible for the planning, conduct and direction of land operations in support of a Joint Force Command Headquarters. HQ LANDCOM provides a deployable capability of which the principal responsibility is to provide a core land component command HQ (LCC HQ) to support up to a MJO+.
- c. **Headquarters Allied Air Command.** Headquarters Allied Air Command (HQ AIRCOM) provides air competency and acts as the principal air advisor for the Alliance for planning and directing the Alliance air component. It executes Alliance air and missile defence operations, including the permanent NATO Integrated Air and Missile Defence Mission⁵, as well as enabling supporting functions, including back-up capability for the combined air operations centres. HQ AIRCOM includes the core of a Joint Force Air Component HQ (JFAC HQ) that, with adequate reinforcement from within NCS and augmentation from outside the NCS, can

⁵ See AJP-3.3 *Allied Joint Doctrine for Air and Space Operations* and MC 0613 *Military Committee Concept for the NATO Integrated Air and Missile Defence System* for detail.

provide C2 for air operations from its static location to support joint operations up to a MJO+.

- 1.15 **NATO Special Operations Headquarters.** The NATO Special Operations Headquarters (NSHQ) is a unique allied special operations organization that serves as the primary point of direction, coordination, and development for all NATO special operations-related activities to optimize the employment of special operations forces (SOF) and provides special operations expertise and advice to SACEUR, ACO, and other NATO commanders and staffs. NSHQ can also provide a SOF operational command capability when directed by SACEUR.
- 1.16 **NATO communication and information systems group.** NATO communications and information systems group comprises a headquarters element and three NATO signal battalions, with deployable communication and information system modules. The NATO communications and information systems group is responsible for the provision of all NATO deployable communication and information systems (CIS) capabilities to operations and exercises, including CIS planning and control. NATO communications and information systems group is the designated coordination authority for the delivery of NATO deployed CIS that will be managed in theatre by the Signal Support Group (SSG)⁶.

NATO force structure

- 1.17 The NFS provides additional and follow-on joint HQ capabilities, most of the tactical C2 capabilities and the forces to meet the full level of ambition. The NFS is composed of allied national and multinational deployable forces and HQ, placed at the Alliance's disposal on a permanent or temporary basis under specific readiness criteria to allow for a high degree of flexibility to meet the requirements of operations. National contributions are made available to the Alliance for operations by agreed mechanisms for transfer of authority (TOA), in accordance with the MC 0133/5, and by coordination and co-operation agreement, supplemented by common assets for specific capabilities and scenarios.
- 1.18 The NFS will include packages of capabilities consisting of graduated readiness force (GRF) HQ (joint, maritime, land, and air), SOF and other combat forces and appropriate supporting assets (including transportation, force protection and CIS) for

⁶ The provision of the static and central NATO CIS capabilities is the responsibility of the NCI Agency which is not part of the NCS. The NCI Agency acts as NATO's principal C3 capability deliverer and CIS service provider for the full range of its entitled requirements holders and customers.

both the HQ themselves and the assigned forces. Clear and transparent arrangements are required between SACEUR, the framework nation, GRF HQ participating nations and nations providing forces. These are maintained through memoranda of understanding and technical arrangements that cover C2 responsibilities and procedures, TOA, training, preparation, evaluation and operations planning in peacetime, crisis and operations. These arrangements provide increased readiness through establishing responsibility for training, operations planning, and evaluation. The NFS HQ and forces are able to deploy, operate and re-deploy without host-nation support (HNS)⁷.

- a. GRF joint HQ capable of commanding joint operations at different scales. They also provide the capability to replace and sustain JTF HQ, including their joint logistic support group (JLSG)⁸.
- b. GRF maritime HQ and forces structured in accordance with the maritime process of task organization using capability-based force packages as building blocks to create multinational formations. They are commanded by a maritime HQ afloat and supported by the NCS MARCOM. For NATO task force or NATO expanded task force size operations, GRF maritime HQ acts as task force HQ under the C2 authority of a NCS HQ.
- c. GRF land HQ with assigned combat forces together with appropriate combat support and combat service support (CSS) assets. To operate throughout the entire spectrum of NATO missions, which may range from high to low intensity, a GRF land HQ must be able to be employed in one of three roles: as a land component command, JTF HQ or a corps HQ.
- d. GRF air HQ and forces together with appropriate support units and force protection assets.
- e. A special operations component command (SOCC)⁹ which must in principle be generated for every operation involving SOF, is structured according to the number of special operations task groups (SOTGs) assigned and the degree of C2 required. A SOCC is a multinational or national joint component command formed by a SOF framework nation. The framework nation forms the nucleus of the SOCC by providing, as a minimum, the commander, key staff personnel, and

⁷ See *NATO BI-SC Conceptual Framework For Alliance Operations* for a more exhaustive list of other forces, structures and assets available to NATO.

⁸ See AJP-4.6 *Allied Joint Doctrine for the Joint Logistic Support Group* for detail.

⁹ The NSHQ stated Mission set to provide operational SOF command and control capability when directed by SACEUR, is under review and is likely to be restated to “enable SOF C2”, which is a lower ambition than the current mission set.

command and control information systems down to SOTG level and base life support functions. The framework nation will also be expected to coordinate the CSS functions for the component and is expected to provide at least one SOTG and a tactical airlift capability to effect SOF insertion/infiltration and extraction/exfiltration.

- f. NATO force integration units¹⁰ whose primary purpose is to facilitate the rapid deployment of forces and formations to enhance Alliance responsiveness. They also act as a point of contact for deploying forces with the host nation (HN) and assist the HN in developing reception, staging and onward movement capabilities and services during peacetime, crises and conflict. NATO force integration units are NFS standing units with responsibilities within individual countries. The NATO force integration units are not currently designed nor expected to function as C2 nodes.

Linkage between the NATO Command Structure, NATO force structure headquarters and national headquarters

- 1.19 Certain NFS tasks, formerly undertaken by NCS, require establishing a close relationship between the two structures. This relationship has the following elements¹¹.
 - a. HQ JFCs supports preparing, training and exercising NFS HQ as they prepare to become a Joint HQ to ensure that they are fully primed to meet their requirements in NATO operations.
 - b. HQ MARCOM is responsible for overseeing evaluations of NFS maritime HQ and forces. HQ MARCOM supports NFS exercises and preparations to ensure that they are fully primed to meet their requirements in NATO operations. In a close collaboration across the maritime community (including HQ MARCOM, Naval Striking and Support Force NATO, and the high readiness forces (maritime)), maritime forces will work to promote the exchange of maritime-related expertise and experience to maximize training and exercise opportunities.
 - c. HQ LANDCOM is responsible for overseeing evaluations of NFS land HQ and forces. HQ LANDCOM supports NFS exercises and preparations to ensure that they are fully primed to meet their requirements. HQ LANDCOM coordinates doctrine development and lessons learned activities of the NFS land HQ.

¹⁰ See ACO Directive 080-104 *NATO Force Integration Units* dated 09 August 2016 for detail.

¹¹ The Allied Command Operations Forces Standards (AFS) Volume IX is the SACEUR's evaluation tool to ensure Joint HQ are ready to accomplish their missions as standardized in AFS Volumes I and V.

- d. HQ AIRCOM will develop specific relationships with national JFACs to ensure the necessary standardization, interoperability and connectivity. Furthermore HQ AIRCOM will initiate mutual agreements on augmentation to ensure timely availability of trained and skilled personnel.
- 1.20 Linkages between NATO and national headquarters are to be established where mutually beneficial and affordable within MC/NAC established guidance¹². This will better facilitate closer cooperation regarding planning, exercises and situational awareness. National HQ can also play a facilitating role when a coalition force transitions into a NATO force. The details of the relationship between NATO and national headquarters are to be delineated in the NATO Bi-SC Conceptual Framework for Alliance Operations.

Section 2 – Principles and operational considerations of joint and multinational operations

Principles

- 1.21 An understanding of the principles for joint and multinational operations which have proved successful in past conflicts is key. Applying these principles enables a common and coherent approach to complex and dynamic problems. These principles are not absolute, but attract broad agreement as to their importance and relevance. The situation or context may demand greater emphasis on some more than others. The principles of allied operations are as follows.
- a. **Unity of effort.** Unity of effort emphasizes the requirement to ensure all means are directed to a common goal. Achieving unity of effort is often complicated by the variety of international military and non-military actors involved, the lack of C2 arrangements between them, and varying views of the objectives or end state. It might only be possible to achieve harmonization of effort which is characterized by goodwill, common planning, clear and agreed division of responsibilities, an understanding of the capabilities and limitations of others, and respect for others' autonomy. In the absence of a formal multi-agency unifying mechanism, the commander supported by the staff may be in a coordinating role, attempting to align divergent perspectives and priorities. To achieve unity of effort, it is essential to plan, communicate and coordinate at all levels and with all actors involved in a comprehensive approach to crisis. In some cases, NATO forces may operate in support of other IOs with which terms of reference or memoranda of understanding

¹² Relevant MOU/TA are to be made available to all nations through the MC before agreement.

should be signed stating the kind of support to be provided by NATO. Some IOs and NGOs may refuse to cooperate directly with military forces. This will require a flexible approach towards establishing processes or bodies to share information between the involved IOs and NGOs and the NATO military force based on the principles of CMI.¹³

- b. **Concentration of force.** Combat power should be concentrated at a time and place designed to generate superiority and achieve decisive results. Superior force is not just a matter of numbers but also of fighting skills, cohesion, morale, timing, selecting objectives and exploiting technological advantage.
- c. **Economy of effort.** Because of limited resources, it may be necessary to assume risks in some areas or to reduce ambition. The principle of economy of effort recognizes that, if concentrated strength is to be applied in the areas where it must create decisive effects, compromise may be necessary in areas of lower priority. Thus economy of effort implies balancing available resources, given evaluated risk, against a commander's priorities.
- d. **Freedom of action.** Freedom of action empowers commanders to pursue their designated missions and should minimize the restrictions placed upon them. The operational level commander will attempt to orchestrate operations, battles and engagements. To be successful, and to anticipate situations or exploit emerging opportunities, they must be empowered with the freedom of action to deploy reserves, set priorities and allocate maritime, land, air, space, special operations and support assets. However, the degree of freedom at the operational level will depend upon the character of the conflict, the interaction of military and non-military lines of operation within the overall collective strategy and the decisions of NATO's, and contributing nations' strategic leadership. While recognizing these constraints, the commander must convey a clear statement of intent, outlining their concept of operations and establishing the objectives to be achieved by subordinate commanders to enable freedom of action at subordinate levels.
- e. **Definition of objectives.** Joint multinational operations must be focused towards well defined and commonly understood objectives. A clear and concise end state allows planners to better identify objectives that must be achieved to attain the end state. Joint planning integrates military actions and capabilities with those of other instruments of national power in time, space, and purpose. Objectives and their supporting effects then provide the basis for identifying actions to conduct.

¹³ See AJP-01 *Allied Joint Doctrine* and MC 411/2 *NATO Military Policy on Civil-Military Cooperation and Civil-Military Interaction* for detail.

Achieving operational objectives also ties execution of tactical tasks to attain the end state. There are four primary considerations for an objective:

- an objective establishes a single desired result or goal;
 - an objective should link directly to higher level objectives or to the end state;
 - an objective is precise and unambiguous; and
 - an objective does not suggest ways or means and is not written as a task.
- f. **Flexibility.** Plans should be sufficiently flexible to respond to the unexpected and to empower commanders with maximum freedom of action. This requires: an understanding of the superior commanders' intent, flexibility of mind, rapid decision-making, effective organization and sufficient communications.
- g. **Initiative.** Initiative must be fostered through trust and mutual understanding and be developed through training. Initiative is about recognizing and seizing opportunities and solving problems in an original manner. For a climate of initiative to flourish, a commander should be given the freedom to use initiative, and should in turn encourage subordinates to do likewise. This requires a training and operations culture that promotes an attitude of calculated risk-taking to win rather than simply to prevent defeat. Command authorities delegated to the lowest practical level should encourage individuals under their command to use their initiative.
- h. **Offensive spirit.** The core of this principle is the notion of a proactive mindset. This fosters confidence, encourages enterprise and a determination not to cede the initiative, and promotes a culture of success and achievement. As a state of mind and in practical terms, offensive action is often decisive, but its broader application should not preclude defensive action when circumstances and prudence demand. An offensive spirit implies a vigorous, incisive approach to defeat opponents, to exploit opportunities and to apply constant pressure against other forms of resistance and sources of instability. Offensive action is the practical way in which a commander seeks to gain advantage, sustain momentum and seize the initiative. An offensive spirit delivers the benefits inferred by action rather than reaction, and the freedom to force a decision.
- i. **Surprise.** Surprise is to strike an adversary at a time, place, or in a manner for which they are unprepared. Surprise is the consequence of confusion induced by deliberately or incidentally introducing the unexpected. Surprise is temporary and successful surprise will require exploiting to prevent an adversary's recovery. Surprise is built on speed, secrecy and deception. If successful, surprise may achieve results disproportionate to the effort expended.

- j. **Security.** Security enhances freedom of action by limiting vulnerability to hostile activities and threats. Active and passive security measures help to deny critical information to an adversary. They assist deception and help counter offensive actions.
- k. **Simplicity.** Simple plans and clear, concise orders minimize misunderstanding and confusion. Simple plans are less vulnerable to friction than complex plans and are more easily remembered under pressure. The more complex the plan, the more there is to go wrong, but simplicity is not an excuse for plans that lack the co-ordinating detail necessary to make them work. Clear direction and a thorough understanding of the commander's intent simplify planning and conduct of operations.
- l. **Maintenance of morale.** Commanders should give their command an identity, promote self-esteem, inspire it with a sense of common purpose and unity of effort, and give it achievable aims. High morale depends on good leadership, which instills courage, energy, determination, respect and unity amongst those under command.

Operational considerations

- 1.22 The principles outlined above are, in turn, supported by the following operational considerations. The operational considerations are always relevant; however, their relative importance will depend on the operations theme.
- a. **Credibility.** A NATO-led force must be credible. A key factor in establishing credibility is to ensure that at all levels words match deeds and that any force deployed is perceived as professional and capable of accomplishing its mission. Establishing credibility is essential for building confidence and is accomplished through the coordination of information activities through information operations (Info Ops) in accordance with extant strategic communications (StratCom) direction and guidance (usually in the form of a StatCom Framework). This may be assisted by deploying forces with sufficient capability to deter hostile actions or by judiciously applying force. When force (or the perceived threat of force) is used, it will be necessary to have an estimate of the impact that those actions may have, not just on credibility, but also on the operation as a whole through the associated political, economic, social and environmental implications.
 - b. **Consent.** Promoting consent and cooperation from the HN is a prerequisite for many operations. Before execution, any military force activity that may result in a loss of consent should be carefully balanced and assessed against the end state

of the mission. Consent and cooperation can promote perceived legitimacy¹⁴ if it can be shown to the parties that their status and ultimate authority will increase if they successfully resolve their own disputes. When the people and parties are made stakeholders in the process, then their motivation to cooperate is greatly increased. At the tactical level, this possibility can be pursued by creating incentive-based opportunities to cooperate in jointly carrying out certain tasks.

- c. **Mutual respect and understanding.** The respect in which the NATO-led force is held will be a direct consequence of its professional conduct and how it treats the local population and recognized authorities. Through a United Nations (UN) mandate, Status of Forces Agreement (SOFA), or other special agreements, the NATO-led force may enjoy certain immunities related to its duties. Notwithstanding this, its members must respect the laws and customs of the HN and must be seen to be doing so. The commander should also ensure the same principles are recognized and implemented among the different national, cultural and ethnic elements within the formations which make up the force. All personnel must consistently demonstrate the highest standards of discipline exercised through controlled and professional behaviour on and off duty¹⁵. This also contributes to maintaining perceived legitimacy.
- d. **Transparency.** The mission and concept of operations, as well as the end state, must be readily understood by all actors and obvious to all parties and agencies. Achieving a common understanding will help to reduce suspicion and mistrust and enhance operational effectiveness. Information should be gathered and shared wherever possible. While transparency of operations, including media access, should be the general rule, it must be balanced against the need to ensure the security of the mission and of the operation.
- e. **Freedom of movement.** Freedom of movement is essential for any operation. The mandate, SOFA and rules of engagement (ROE) must allow NATO forces to remain free at all times to perform their duties without interference from local groups and organizations. Experience indicates that various factions will often try to impose local restrictions on freedom of movement. These restrictions must be firmly and swiftly resolved – initially through negotiation but, if necessary, through more vigorous and resolute action up to and including the use of force in accordance with the legal frame applying and subsequent ROE.

¹⁴ See AJP-01 *Allied Joint Doctrine* for details.

¹⁵ See Euro-Atlantic Partnership Council document EAPC(C)D(2014)0019 for detail.

- f. **Strategic communications**¹⁶. All aspects of NATO activities have information and communications components and implications. Therefore, it is important NATO's communication-related effects and its narrative are integral to the OPLAN. They are to be considered in the planning process, reflected in the operations design, expressed in the commander's intent and applied during execution and the targeting process. StratCom is the integration of communication capabilities and information staff functions with other military activities in order to shape the Information Environment, in support of NATO aims and objectives. StratCom principles have particular importance to the communication capabilities of Military Public Affair (Mil PA) and psychological operations (PsyOp) and the staff function of information operations (Info Ops) and requires a network-centric collaborative approach to support rapid decision making, efficiency and unity of effort. As such, operational communication capabilities and staff functions should be synchronized. Though synchronized, each communication staff function still retains their functional responsibilities and Mil PA will retain a direct advisory role and direct access to the commander.
- g. **Cyberspace Operations**. Many aspects of joint operations rely on cyberspace, which reaches across geographic and geopolitical boundaries, much of which reside outside of NATO control. Cyberspace is also integrated with the operation of critical infrastructures, as well as the conduct of commerce, governance, and national security. Therefore, commanders must consider their critical dependencies on information and cyberspace, as well as factors such as degradations to confidentiality, availability, and integrity of information and information systems, when they plan and organize for operations. Commanders conduct cyber operations to retain freedom of maneuver in cyberspace, deny freedom of action to adversaries, and enable other operational activities. Cyber operations rely on links and nodes that reside in the physical domains, and perform functions in cyberspace and the physical domains. Similarly, activities in the physical domains can create effects in and through cyberspace by affecting the electro-magnetic spectrum or the physical infrastructure. Cyberspace operations will be conducted by individual Nations in response to formal requirements and in accordance with their respective national laws, and cyber capabilities and information will be provided to NATO by these Nations in accordance with their respective national policies and guidelines.
- h. **Environmental protection**. Effective environmental protection enhances force health protection, supports operations by building positive relationships with the

¹⁶ See MC 0628 *NATO Military Policy on Strategic Communications* for detail.

HN. In order to achieve the environmental protection objective, optimization of the use of energy should be applied to all phases of NATO-led military activities while meeting operational requirements. The use of alternative energy sources supports energy efficiency. Energy efficiency saves money and lives by reducing the logistic burden. Effective environmental protection enhances force health protection, supports operations by building positive relationships with the HN and saves money and lives by reducing the logistic burden. Factors to be considered include pollution prevention, waste management, chemical, biological, radiological and nuclear (CBRN) risk management (prevention, protection and recovery of deliberate, accidental or natural CBRN incidents), cultural property protection and protection of flora and fauna.

- i. **Protection of civilians.** Protection of civilians (PoC) is relevant to all three core tasks¹⁷ of NATO. All NATO and NATO-led operations, missions and other Council-mandated activities are conducted in accordance with international law conforming to international human rights. A sound approach to PoC in operations based on legal, moral and political imperatives is important for NATO's credibility and legitimacy. PoC (persons, objects and services) includes all efforts taken to avoid, minimize and mitigate the negative effects that might arise from NATO and NATO-led military operations on the civilian population and, when applicable, to protect civilians from conflict-related physical violence or threats of physical violence by other actors, including through the establishment of a safe and secure environment. During the conduct of operations and missions, training, education, exercises, when implementing lessons learned and whilst conducting defence and security-related capacity building activities, Commanders should include a PoC perspective covering cross-cutting topics - women, peace and security; children and armed conflict; conflict related sexual and gender-based violence; civilian casualty mitigation; stability policing¹⁸ and cultural heritage. Commanders should strive to share best practices and experiences on PoC, particularly civilian harm mitigation.

Section 3 – Contributions to Allied joint and multinational operations

¹⁷ NATO's three core tasks are collective defence; crisis management and cooperative security. See AJP-01 *Allied Joint Doctrine* for detail.

¹⁸ See AJP-3.22 *Allied Joint Doctrine for Stability Policing* for detail.

NATO's contribution to a comprehensive approach

- 1.23 While a commander may wish to influence the activities of non-military actors to meet particular shared outcomes, this can only be achieved through dialogue and cooperation. In doing so, commanders need to acknowledge the distinctive cultures of different agencies and be aware of variations on such issues as priorities of effort, tempo, the acceptability of risk and ROE. Irreconcilable differences are to be referred up the chain of command for resolution at the strategic level. Where, ultimately, the situation precludes active cooperation, a commander should put in place mechanisms for deconfliction as a minimum. An understanding of the capabilities and limitations of each component is crucial to an effective JFC or JTF HQ. The commander JFC or commander joint task force (JTF) applies joint capabilities in time and space, with considerations of allocated forces, the civil environment, and information aspects to accomplish the mission. A joint operation endeavours to synchronize the employment and integration of the capabilities provided by maritime, land, air, space, cyberspace, special operations and other functional commands or components.
- 1.24 NATO's engagement in operations has shown that often there is a mutual dependence and synergy between military and non-military contributions to operations and their output, which is at the heart of a comprehensive approach. From a military perspective, a comprehensive approach is founded on a shared situational understanding and recognition that in cases where a mutual dependency exists non-military actors may support the military and vice versa. A comprehensive approach is key to understanding the engagement space through: effective implementation of knowledge development and management in all systems (political, military, economic, social, infrastructure and information). In short, a comprehensive approach must be based on a shared understanding of the problem and the commitment to solve it.
- 1.25 Commanders can improve the ability to work effectively internally through civil-military interaction with planning staffs and externally with partner countries and other national and international non-military actors; IOs, governmental organizations, NGOs, HN and local authorities, thus enhancing synergy at all levels.

Multinational approach

- 1.26 The majority of operations takes place in a multinational environment since it reflects the political necessity of seeking international consensus and legitimacy for military action. NATO should always be prepared to operate with traditional members and

partners, but should also be capable of operating with less familiar forces in a coalition¹⁹.

Component contributions to joint operations

- 1.27 Military success relies on a joint and multinational effort, usually with components and other force elements brought together under a unified command structure. Successful joint operations require an inclusive approach to maximize the overall effect of the JTF. This will ensure making the best use of the complete range of capabilities.
- 1.28 **Maritime component contribution to joint operations**²⁰. Maritime operations include any actions performed by surface, subsurface and/or maritime air forces to gain or exploit command of the sea, sea control or sea denial and/or to project power from the sea. Sea control may also include naval cooperation and guidance of shipping, protection of the sea lines of communication, blockades or embargoes against economic or military shipping and maritime interdiction operations. This includes operations to locate, classify and track surface vessels, submarines and aircraft and, if required, applying force against them. Amphibious operations with their inherent flexibility increase the commander's options for manoeuvre.
- 1.29 Maritime forces directly participate in operations ashore through the projection of power, by executing strike warfare, amphibious operations and riverine operations. They can enable or support missions ashore by influencing land operations through deterrence, naval fire support, sea basing of land, air and SOF assets, moving land forces via sealift and/or providing access. They also can be employed in littoral waters for the conduct of sea control or denial, and function as joint force or component command and control platforms.
- 1.30 **Land component contribution to joint operations**²¹. The nature of land operations reflects the diversities and complexities of the environment. The number and variety of participants, combatants, non-combatants, IOs, NGOs, observers (e.g. the media) and other interested parties, factions and agencies, with the potential for error, confusion and friction, may be greater in land operations than in other operations. This complexity requires an approach that emphasizes decentralized command, freedom

¹⁹ The intangibles, advantages and challenges of multinational cooperation are described in AJP-01 *Allied Joint Doctrine*.

²⁰ See AJP-3.1 *Allied Joint Doctrine for Maritime Operations* for detail.

²¹ See AJP-3.2 *Allied Joint Doctrine for Land Operations* for detail.

of action, tempo and initiative, to contend with the multitude of activities and rapidly changing situations.

- 1.31 Land forces' roles normally entail seizing and holding terrain, neutralizing enemy forces and regaining lost territory. They are able to conduct simultaneously various types of operations, utilizing fires and manoeuvre to apply overwhelming combat power, achieve decisive results, protect the force, and facilitate future operations. A wide variety of missions may be executed, ranging from security tasks in support of stabilization activities and reconstruction efforts to combat operations often in close proximity to each other and the population. Land forces require substantial materiel, which normally requires sealift, airlift and ground transportation. The multiplicity of actors and the large number of functional land specialties that must be coordinated make land operations complex. Often land forces will be supported by other components.
- 1.32 **Air component contribution to joint operations**²². The four broad, fundamental and enduring operational roles of air power are counter-air, attack, air mobility, and contribution to intelligence, surveillance, and reconnaissance. Control of the air shapes the joint operations area wherein friendly operations can proceed at the optimum place and time without prohibitive air interference. Gaining control of the air is not an end in itself, but is often a prerequisite for conducting land and maritime operations. Once sufficient control of the air has been achieved, air power provides the possibilities to project military power, less limited by terrain. Air power's reach and concentration of force allow it to be employed at all levels of operations. The speed, reach, ubiquity and flexibility of air power offers opportunities for wresting the initiative and supporting other forces.
- 1.33 Persistent air operations normally require the availability of secure airbases sufficiently close to the JOA, over-flight rights, flexible use of airspace and the necessary support. Naval aviation may reduce some or all of the requirements for secure airbases ashore and over-flight rights. For operations in regions with no or very limited HNS, extensive military engineering measures may be required to provide the necessary facilities. Air assets are often scarce; moreover, they are vulnerable from air attack when on the ground. Prosecuting effective air operations of all types depends on a wide range of supporting functions.
- 1.34 **Space support in operations.** NATO only owns and operates a limited number of space assets, but space assets owned and operated by NATO nations and

²² See AJP-3.3 *Allied Joint Doctrine for Air and Space Operations* for detail.

commercial entities can provide a range of capabilities that integrate into mission planning and execution at all levels of operations. Space-based products and services include global, strategic and intra-theatre satellite communications; positioning, navigation, and timing services; terrestrial and space environmental monitoring, to include space situational awareness, geological, meteorological and oceanographic; intelligence, surveillance, and reconnaissance; early warning; and transponder tracking such as friendly force tracking, maritime tracking, etc. The commanders will either manage space resources within the command through their staff or will designate a component to perform the function.

- 1.35 **Special operations forces component contribution to joint operations**²³. Special operations are military activities conducted by specially designated, organized, selected, trained and equipped forces using specialized techniques and modes of employment. Special Operations may deliver strategic or operational-level results and might be executed where significant political risk exists. Special operations missions may include a suitable combination or all of the principal tasks of Military Assistance, Special Reconnaissance, or Direct Action depending on the circumstances of each operation. These activities may be conducted across the full range of military operations, independently, or in conjunction with operations by non-SOF and may include combined and interagency operations by, with, or through indigenous or surrogate forces.
- 1.36 While a crisis is developing, SOF may be deployed to establish an early forward presence, initiate military and civilian liaison, conduct area assessments, provide an early C2 capability, advise friendly forces, or prepare for follow-on forces. With their unique skills SOF enable or enhance joint non-SOF operations with a variety of options to help attain the desired end state. SOFs unique capabilities are also well-suited to supporting and countering unconventional and hybrid warfare campaigns beneath the violence threshold of warfighting.

Stages of a joint operation

- 1.37 All operations normally consist of a logical order of events. Successive steps may overlap and can occur in parallel and on different levels of operation depending on the situation and mission. Knowledge development is common to all stages of an operation, but particularly during planning, by beginning well in advance of a NATO response to a crisis and continuing in support of all subsequent stages. A typical joint operation will include:

²³ See AJP-3.5 *Allied Joint Doctrine for Special Operations* for detail.

- analysis (framing the problem and environment);
- developing an OPLAN;
- force generation and preparation, including build-up, assembly and pre-mission training;
- build-up of enabling capabilities like logistic and medical support;
- deploying to the area where operations are to be conducted or to reinforce in-place forces;
- execute operations;
- assess and review; and adjust the conduct of operations as required;
- operation (mission) termination and transition;
- re-deploy forces; and
- identify lessons.

1.38 The order should help commanders visualising the course of the operation. The commander should have, within the constraints imposed by the initiating authority, the greatest possible freedom of action in the planning and execution of operations in a designated JOA. All stages of an operation require continuous coordination and review.

Operations framework

1.39 Operations framework provides a way of understanding and communicating the activities that the commander will need to plan, direct and coordinate. It allows commanders to visualize effects and to articulate their intent. Particularly in stabilization, such a framework allows the commander and other actors conducting the operation to share a common language and understanding of what is required to be done. It helps to 'operationalize' analysis and planning, and assists with decision support. Understanding the framework and their contribution to it allows actors to achieve unity of effort. For commanders and their staff, it also highlights the links between the effects sought and the tactical activity needed to create them. It has utility across all levels of command.

1.40 The precise type of framework selected is less important than the shared understanding of what it means. The preferred operations framework in NATO is shape – engage – exploit – protect – sustain. These joint core activities describe how

activities relate to each other in purpose, time and space. The activities are not necessarily sequential.²⁴

Joint functions

- 1.41 Joint functions provide a sound framework of related capabilities and activities grouped together to assist commanders to integrate, synchronize, and direct various capabilities and activities in joint operations. Using joint functions, commanders can determine force requirements. Common to joint operations at all levels are the functions; manoeuvre, fires, command and control, intelligence, information, sustainment, force protection and civil-military cooperation (CIMIC).
- 1.42 A number of subordinate tasks and related capabilities help define each function and some of them could apply to more than one function. These capabilities are applied across the joint functions and independently. For more detail see Annex B *Related capabilities to the joint functions*. In any joint operation, the commander may choose from a wide variety of joint and service capabilities and combine them in various ways to perform joint functions and accomplish the mission. The operation plan/order describes the way forces and assets are used together to perform joint functions and activities. However, forces and assets are not characterized by the functions for which the commander is employing them. A single force or asset can perform multiple functions simultaneously or sequentially while executing a single task.
- 1.43 **Manoeuvre.** The principal purpose of manoeuvre is to gain positional advantage in respect to the adversary from which force can be threatened or applied. Manoeuvre seeks to render adversaries incapable of resisting effectively throughout all dimensions of the JOA effectively by shattering their cohesion rather than destroying each of his components through incremental attrition. Manoeuvre involves the assets of more than one component and may even involve strategic assets, temporarily made available for the operation. At the operational level manoeuvre is the means by which a commander sets the terms in time and space, declines or joins combat or exploits emerging developments. It is the process by which combat power is focused where it can have decisive effect, to pre-empt, dislocate, or disrupt adversary operations. It involves trade-offs (e.g., speed versus time, width versus depth, concentration versus dispersion), and thus requires an acceptance of risk.

²⁴ See AJP-01 *Allied Joint Doctrine* for detail.

- 1.44 **Fires.** Fires creates effects on a target²⁵. They may be applied directly or indirectly to create a wide range of physical and psychological effects by degrading capability and shattering cohesion. Fires are often delivered by joint assets and may include naval fire, land direct fire, land indirect fire and aerial fire. Using fires is central to the commander's plan; fires provide the commander with the ability to affect the physical component of adversary fighting power, impacting their understanding and moral component and, consequently, influencing their will to fight. Fires may be used in isolation, but it is preferable to integrate them with manoeuvre to achieve optimal results. At the operational level target selection and engagement is subject to the joint targeting process in order to maximize the effectiveness and efficiency of fires.
- 1.45 Joint targeting provides a methodology that aids decision-making linking strategic and operational objectives with effects through the appropriate prosecution of prioritized targets and the assessment of any effect generated. The joint targeting process determines the effects necessary to achieve the commander's objectives, identifies the actions necessary to create the desired effects based on means available, selects and prioritizes targets, and liaises with fires and other military capabilities. At the strategic level, targeting will focus on the coordination oversight of the operational and tactical targeting function. At the operational level, targeting focuses on determining specific actions to create the desired physical and psychological effects to realize the commander's operational objectives. While carrying out an action remains a tactical event, the effect must be relevant to the commander's operational objectives. The targeting process is crucial to the application of joint fires.
- 1.46 **Command and control.** C2 encompasses the exercise of authority and direction by a commander over assigned and attached forces to accomplish the mission.
- 1.47 The joint C2 should include all forces contributing to the operation and take into account coordination and cooperation with IOs, NGOs and other actors. Operations are normally characterized by centralized planning and direction to achieve unity of effort, whereas authority for execution should be decentralized, i.e., delegated to the lowest level appropriate for the most effective use of forces. To enable the execution of such direction a joint C2 structure is required, that must be fully understood at all levels, and thus facilitate the clear, timely and secure passage of guidance and orders, situation reports and coordinating information.

²⁵ Various not NATO agreed definitions are in use in different NATO doctrine publications. The description used in AJP-3 reflects their overall content.

- 1.48 The joint C2 system must enable the staff to manage their time and information flow and must also afford commanders the environment in which to make their decisions. Furthermore, the joint C2 structure and all command relationships must have built-in redundancy, be robust, be flexible and be capable of development and adaptation throughout the course of the operation. The joint C2 system should have a robust communication and information architecture.²⁶
- 1.49 Effective CIS support is fundamental to the success of any operation. Timely deployment and appropriate establishment of robust CIS capability is a decisive factor for successful deployed operations. It is imperative that secure and interoperable deployable CIS assets are available at all levels of command in the JOA and to capabilities and commands outside the JOA.
- 1.50 **Intelligence**²⁷. The role of intelligence is to contribute to a continuous and coordinated understanding of the operating environment, to support commanders by identifying conditions required to achieve objectives; avoiding undesired effects; and assessing the impact of adversary, friendly and neutral actors on the commanders' concept of operations. Intelligence is therefore an aid to provide situational awareness, develop understanding and is a critical tool for decision-making. Intelligence should drive operations by providing the user with timely and accurate products that supports their particular needs and is tailor-made to those requirements. These roles are supported by a series of specific responsibilities of the intelligence staff, including: inform the commander; describe the operating environment; identify and define adversary objectives; and support planning, execution and assessment of operations.
- 1.51 Commanders have key roles and responsibilities in intelligence. Their intelligence responsibilities include: provide planning guidance; define the area of interest; and specify Commander's critical information requirement (CCIR). To answer these requirements, the intelligence staff fuses all available data within the geographical and political, military, economy, social, infrastructure and information systems. This is managed by the information requirement management and information collection management processes embedded into the intelligence cycle (consisting of four stages: direction, collection, processing and dissemination).

²⁶ Planning the communication and information architecture is an essential and integral part of the planning process for any operation. To do this, it is essential that clearly defined information exchange requirements are produced. This is not only an information management function, but each functional area staff must be able to define its own information requirements to ensure appropriate CIS capabilities are provided in order to meet the commander's C2 requirements.

²⁷ See AJP-2 *Allied Joint Doctrine for Intelligence, Counter-Intelligence and Security* for detail.

- 1.52 Through information requirement management and information collection management the intelligence staff in coordination with the operations staff optimizes through the Joint Intelligence, Surveillance and Reconnaissance (JISR) process the efforts of their available JISR capabilities (including collection and exploitation). JISR is a set of integrated intelligence and operations capabilities, which synchronizes and integrates the planning and operations of all collection capabilities with processing, exploitation, and dissemination of the resulting information in direct support of planning and execution of operations.
- 1.53 All contributing nations providing forces in an operation must be centrally involved in providing intelligence capabilities and information to the commander and staff. Partner nations should be proactive in providing intelligence to the JFC or JTF HQ. Collection of data and information should be fully integrated and harmonized between intelligence and operations staff.
- 1.54 **Information.** The use of information is critical to decision making processes. Actors' perception within the operating environment is dependent on information available to them. Agility and proactive action in the information environment is critical to operational success.
- 1.55 The information function helps commanders and staff applying (or using) information, while integrating with other functions, to influence relevant-actor perceptions, behavior, action or inaction and decision making. Key enablers are strategic communications, information operations, psychological operations and public affairs. These key enablers should be integrated at the start of the planning process, support on-going military operations and be consistent with the overall information strategy and desired end-state. Coordination is also required to ensure that other activities by the joint force do not undermine activities in the information environment and vice versa.
- 1.56 Commanders must assure an efficient information flow through all levels of command which may require prioritizing resources. Additionally, commanders should engender a culture of information sharing throughout the joint force and with partners and non-military actors, finding a balance between security – the need to protect information - and effective civil-military interaction.
- 1.57 **Sustainment.** Forces and their fighting power need to be sustained through all phases of operations. Sustainment provides for the comprehensive provision of: personnel; logistics; medical; and general MILENG support required to maintain combat power throughout all phases of the operation.

- 1.58 **Force protection.** Force protection²⁸ is a function aimed at minimizing the vulnerability of personnel, facilities, equipment, materiel, operations and activities from threats and hazards to preserve freedom of action and operational effectiveness thereby contributing to mission success. The fundamental elements of force protection are security, military engineering support to force protection, air defence, medical force protection and force health protection, consequence management, resilience, tactical area of responsibility control, and CBRN defence. All of these elements contribute to overall Force Protection which is both a commander's responsibility at every level of command and a fundamental responsibility of all personnel at all times. By providing security intelligence the vulnerability of own forces may be mitigated and the protection of information achieved. Security intelligence needs to rely on a sound counter-intelligence system.
- 1.59 **Civil-military cooperation.** CIMIC²⁹ is a joint function comprising a set of capabilities integral to supporting the achievement objectives and enabling NATO commands to participate effectively in a broad spectrum of CMI with diverse non-military actors.³⁰
- 1.60 CIMIC enables the commander to create, influence and sustain conditions that will promote the achievement of objectives, and thereby maximize the effectiveness of the military contribution to the overall mission. The JTF may be partially dependent on the civilian population for resources and information, and rely on the civil authorities to provide security in certain areas. It may even be impossible to gain full freedom of action and movement without their cooperation. Attaining the desired end state demands close relationships with all actors that are not NATO's opponents within a JOA. This can only be achieved by close cooperation, harmonization and de-confliction, aiming for the full cooperation of the civilian population and institutions to create conditions that offer the Alliance forces the greatest possible moral, material, environmental and tactical advantages. Implicit in this aim is the denial of such advantages to an adversary. CIMIC requires the comprehensive integrated application of all means of Alliance power, both military and non-military, to create effects that contribute to the desired end state. Commanders have a moral and legal responsibility towards the civilian populations in their area that can only be met by cooperating with non-military actors.

²⁸ See AJP 3.14 *Allied Joint Doctrine for Force Protection* for detail.

²⁹ See AJP 3.4.9 *Allied Joint Doctrine for Civil-Military Cooperation* for detail. AJP-3.4.9 will be renumbered to AJP-3.19.

³⁰ See AJP-01 *Allied Joint Doctrine*, MC 376/3 *Naval Cooperation and Guidance for Shipping (NACGS)* and MC 411/2 *NATO Military Policy on Civil-Military Cooperation and Civil-Military Interaction* for detail.

Section 4 – Joint action framework

- 1.61 A successful military strategy hinges on the balanced application of ends (objectives), ways (broad approaches) and means (resources). Having decided on the strategic ends and the role of the military force in achieving them, the means are allocated and the ways that are to be used are decided. Consequently, when designing a joint operation for the military force, commanders and their staff assign resources, i.e. plan and decide in general terms which resources do what. The commander does this by assigning missions and objectives to the subordinate components, and then allocating means, in terms of capabilities, to achieve them. These capabilities conduct joint action to create effects and achieve objectives. Joint action focuses on affecting adversaries through the combined application of the following joint functions: manoeuvre; fires; information; and CIMIC. These activities are underpinned by the joint functions C2 and intelligence (including surveillance and reconnaissance). Freedom of action to execute joint action is further supported by the joint functions sustainment and force protection.
- 1.62 The commander directs and orchestrates the tactical activities of the components; refocusing effort when necessary to achieve synergy between them. While tactical commanders possess the means to conduct military activities at their level, their capabilities are most effective when integrated and synchronized across the joint force. Once execution is underway, the commander needs to maintain a clear perspective of the underlying purpose of activities and the desired effects to create. This, in turn, will allow them to respond rapidly and effectively to events.
- 1.63 **Joint action.** The conceptual framework that permits this force integration and synchronization is called joint action. Joint action is described as the deliberate use and orchestration of military capabilities and activities to affect an actor's understanding, capability and will, and the cohesion between them.
- a. **Understanding.** An adversary's understanding underpins their decision-making; however, it is not absolute and does not endure. Their understanding of the situation – the competing narratives, relative strengths, effectiveness and vulnerabilities – affects perception and, therefore, their will to act.
 - b. **Capability.** Capability depends on a physical capacity for action and applying it effectively and in context. While there is often an advantage conferred by quantity and quality, other factors, such as prioritizing resources are at the commander's discretion and therefore subject to influence.
 - c. **Will.** The will to act or resist at the operational and tactical level is based on the unity of communities of interest or armed groups, fighting spirit, morale and

cohesion. Will can be affected physically (through activities like fires) and psychologically (through perception or surprise). Once the will to act is lost, an adversary relinquishes the ability to affect events.

- d. **Cohesion.** Cohesion is fundamental to any group's ability to fight and resist effectively. It combines understanding, capability and will to generate the strength to act in unison through motivation, allegiance and resolve.

Section 5 – Types of operations

- 1.64 NATO operations are categorized with reference to essential characteristics that differentiate from one another. Within the spectrum of conflict, all types of operations may be undertaken according to Alliance purposes. The same type of operation may be related to different operation themes.
- 1.65 **Combat.** Combat operations may be required in the direct defence of NATO against an aggressor. This may involve conventional force-on-force combat of varying scale, frequency and intensity between opposing armed forces where the armed forces of a state act principally to implement that state's national policy and dominate the other instruments of power. Combat operations tend to be characterized by a series of battles and major engagements, and therefore involve intense activity and high logistic consumption. Particular emphasis is placed upon maintaining freedom of action and denying that freedom to an adversary, either directly or indirectly. The tempo of activities is usually high, with a need to prioritize resources and generate additional fighting power. Combat operations often involve large-scale manoeuvre by complex and multi-faceted JTFs, organized and commanded as functional components.
- 1.66 **Crisis response.** Crisis response operations contribute to conflict prevention and resolution, humanitarian purposes, or crisis management in the pursuit of declared Alliance strategic-political objectives. In crisis response operations, the military contribution represents an effort, balanced with the other instruments of power, to support the long term solution of a crisis through achieving interconnected objectives.
 - a. **Military contribution to counter-irregular activities.** Irregular activity (threats) is a broad category of non-conventional methods of violence employed to counter traditional capabilities of an opponent that can include acts of a military, political, social, informational or economic nature, be they physical or psychological. There could be a convergence of insurgent, terrorist, and transnational criminal organizations. The networks that develop because of this convergence are difficult to identify and even more difficult to disrupt. Countering irregular activities requires that NATO forces have an understanding of the particular character of the conflict,

its context, and its participants. Typically this is more difficult in a conflict involving irregular threats as opposed to conventional forces.

- (1) **Methods to countering irregular activities.** Effective strategies against irregular activities include direct and indirect methods. They can be utilized as separate techniques, or concurrently to both disrupt insurgents/terrorists operating today and to affect or shape their operating environment to erode future capability and influence. Both methodologies are integrated from the strategic to operational levels and may be conducted within the scope of a broader operation as directed by a JFC or a JTF. The ability to manage both methods to harness their synergistic effects is vital to achieving operational and strategic objectives.
 - (a) **Direct method.** The direct method takes actions to neutralize an imminent threat and/or degrade the capability of the organization to operate. The goal is to defeat a specific threat through neutralization/dismantlement of the network (including actors, resources, and support structures) and to prevent the re-emergence of a threat once neutralized. However, the resiliency of terrorist organizations and networks to reconstitute their forces and reorganize their efforts limits the long-term effectiveness of the direct method as a sole means of countering insurgency and terrorism.
 - (b) **Indirect method.** The indirect method is a technique by which the Alliance attempts to influence the operating environment within which irregular actors operate. Specific actions are employed to enable operations against irregular threats and their organizations as well as actions taken to shape and stabilize that environment as a means to erode their capabilities and degrade their ability to acquire support and sanctuary. The indirect method combines various activities (e.g. stability, counterintelligence, and information) to produce synergies designed to erode support for the irregular threat organizations and their ideology.
- (2) **Categories of counter irregular activities.** Counter irregular activities fall into three categories:
 - (a) **Counter-insurgency**³¹. Counter-insurgency (COIN) is defined as *comprehensive civilian and military efforts made to defeat an insurgency and to address any core grievances*. All insurgencies are unique in their political, social, cultural, and historical contexts and they demand that the counterinsurgent adapt with skill and knowledge to meet specific socio-

³¹ See AJP-3.4.4 *Allied Joint Doctrine for Counter-insurgency (COIN)* for detail.

political and military conditions. COIN operations often include security assistance programs such as military education and training programs because properly trained and motivated local security and military forces provide the best COIN operators. Conducting successful COIN operations requires an adaptive and flexible mind-set and an understanding that the population is the critical dimension. A key part of understanding the population is having cultural competence and an intimate knowledge of what causes and perpetuates insurgency. Successful counterinsurgents must understand it is essential to establish an enduring presence within the population to create confidence and facilitate continuous security and development efforts. This should help to isolate the insurgents from the population, thus depriving them of recruits, resources, intelligence, and credibility. The military instrument is only one element of a comprehensive approach necessary for successful COIN, although the security situation may require the JTF to execute tasks that other organizations are unable to conduct.

- (b) **Counterterrorism.** Counterterrorism (CT) is defined as all preventive, defensive, and offensive measures taken to reduce the vulnerability of forces, individuals and property to terrorist acts and to recover after such acts. Such measures include those activities justified for defending individuals as well as containment measures implemented by military forces or civilian organizations. CT comprises those defensive measures used to protect forces, military members, high-risk personnel, civilian employees, family members, facilities, information, and equipment from terrorist acts, and includes limited response and containment by local military forces. CT also consists of personal security measures which are common-sense rules of on- and off-duty conduct for all military personnel. Offensive CT is primarily conducted by specially organized, equipped, and trained CT forces and, as such, SOF plays a significant role; however, by exception, it may also be undertaken by conventional forces. CT may be conducted against state-sponsored or transnational, autonomous armed groups who are not easily identified, and who may not fall under the categories of combatants defined in the applicable international law. NATO forces engaged in a CT operation may be required to operate in conflict areas with or without the assistance of the local government. One of the major challenges for the JTF is to produce effective protective measures to reduce the probability of a successful terrorist attack against installations, forces, individuals, and property.

- (c) **Counter-criminality.** Counter-criminality is the action focused on preventing organized criminal groups from escalating their activities to the point where they become a threat to Alliance members. In this regard military police resources can be successfully allocated to tackle this sensitive area by deploying specialized assets capable of mitigating or neutralizing irregular threats.
- b. **Military contribution to peace support**³². Operations contributing to peace support may make use of diplomatic, civil and/or military means in pursuit of UN charter principles to enable restoration or maintenance of peace. Peace support can include conflict prevention, peacemaking, peace enforcement, peacekeeping and peacebuilding.
- (1) Peace support may take place in the context of both inter-state and intra-state conflict. This places additional responsibilities on certain types of military deployments in peace support because security activity cannot be considered in isolation and military, police, and civilian actors will be required to work together to address the causes of conflict in an attempt to secure a sustainable peace.
- (2) Impartially implementing a political strategy aimed at upholding the purposes and principles set out in the UN Charter is the fundamental difference separating peace support from other types of crisis response operations.
- c. **Military contribution to humanitarian assistance**³³. Humanitarian assistance (HA) consists of activities and tasks to relieve or reduce human suffering. HA may occur in response to both natural and manmade disasters including as a consequence of conflict or the flight from political, religious, or ethnic persecution. HA is limited in scope and duration and is designed to supplement or complement the efforts of the HN civil authorities, IOs, NGOs, and other non-military actors that may have the primary responsibility for providing that assistance. The different types of military support to HA are disaster relief, support to dislocated civilians, technical assistance and support, CBRN consequence management, and security.
- (1) In many cases, the main support from the military will be to provide a secure environment to allow humanitarian actors to operate. In the framework of NATO-led operations, Alliance forces could assume tasks in support of a larger humanitarian effort, but this would be by exception upon request from

³² See AJP-3.4.1 *Allied Joint Doctrine for Military Contribution to Peace Support* for detail.

³³ See AJP-3.4.3 *Allied Joint Doctrine for the Military Contribution to Humanitarian Assistance* for detail.

the local or national authorities or appropriate IOs like the UN Office for the Coordination of Humanitarian Affairs. Such operations should be in accordance with the guidelines adopted by the Inter-agency Standing Committee in the UN³⁴.

- (2) HA may be conducted at the request of the HN or the agency leading the humanitarian efforts; it may be either in the context of an ongoing operation, or as an independent task. Tasks that military forces may be requested to perform in support of HA are categorized as: Infrastructure support, indirect assistance and direct assistance. NATO military activities may support short-term tasks such as communications restoration, relief supply management, port operations, base operating support, search and rescue, providing emergency medical care, humanitarian demining assistance, and high priority relief supply delivery, all within means and capabilities. They could also take the form of advice and selected training, assessments, and providing manpower and equipment.
- d. **Military contribution to stabilization and reconstruction**³⁵. Stabilization and reconstruction (S&R) is normally a civilian-led process that commonly takes place during or after crisis in states that have lost the capacity to govern themselves effectively. As such it is best undertaken by those actors and organizations that have the relevant expertise, mandate, and competences required. Consequently, the initial military contribution will generally be focused on providing a safe and secure environment so that reconstruction efforts can occur. While many aspects of S&R are intended to be undertaken by non-military actors and organizations, there may be situations where the military is obliged to assume temporary responsibility for areas of S&R³⁶. As part of this military effort the availability of units capable of performing stability policing tasks can contribute to the success of the mission by deploying specialized policing skills assets and specialists aimed at controlling and securing environs where reconstruction is taking place. S&R activities include support to establishing long-term stability and strengthened governance, local capacity building, re-establishment of the rule of law. S&R also contributes to establishing the basis for economic, human, health and social

³⁴ Civil-Military Guidelines and References for Complex Emergencies, United Nations Humanitarian Civil-Military Coordination. Concept paper, and Civil-Military Relationships in Complex Emergencies. IASC Reference paper.

³⁵ See AJP-3.4.5 *Allied Joint Doctrine for the Military Contribution to Stabilization and Reconstruction* for detail.

³⁶ See AJP-3.22 *Allied Joint Doctrine for Stability Policing* and AJP-3.21 *Allied Joint Doctrine for Military Police* for detail.

development. The long-term goal is to promote those processes which lead to lasting stability and self-sustaining peace.

- e. **Military contribution to non-combatant evacuations**³⁷. Non-combatant evacuation operations (NEOs) are national diplomatic initiatives, with Alliance forces participating in a supporting role. NEOs are conducted to relocate non-combatants threatened in a foreign country to a place of safety. Normally, Alliance forces would only support a NEO in the framework of a NATO-led operation and that support would not include the evacuation of nationals, which remains a national responsibility. However, nations could conduct NEOs for their nationals on a bi-national or multinational basis using NATO doctrine. Generally, a force committed to a NEO should have the capability to provide security, reception and control, movement, and emergency medical support³⁸ for the civilians and unarmed military personnel to be evacuated.
- f. **Extraction.** Extraction operations may be described as missions where a NATO-led force conducts or assists in the withdrawal of military missions and units from a crisis region. A force committed to an extraction operation should have the necessary assets for transporting the personnel to be extracted. An extraction operation is most likely to be conducted in an uncertain or hostile environment. In a hostile environment, a loss of consent could occur or the HN government may not have effective control of the territory in question. Under these circumstances, planning must anticipate a potential need for a NATO extraction force. In the past, NATO has established extraction forces, on a temporary basis, to enhance the safety of international missions.
- g. **Military contribution to sanctions.** In broad terms, the enforcement of sanctions is designed to force a nation to abide by international law or to conform to a resolution or mandate. Sanctions generally concern the denial of supplies, diplomatic, economic, and other trading privileges, and the freedom of movement of those living in the sanctions area. Sanctions may be imposed against a specific party or over a wide area embracing all parties. These operations apply coercion through interdiction of movement of certain types of designated items into or out of a nation or specified area. These operations are military in nature and serve both political and military purposes. The political objective is to compel a country or group to conform to the objectives of the initiating body. The military objective is to establish a barrier, allowing only non-sanctioned goods to enter or exit.

³⁷ See AJP-3.4.2 *Allied Joint Doctrine for Non-Combatant Evacuation Operations* for detail.

³⁸ May include the need to provide adequate medical support for children, pregnant mothers and the elderly. See AJP-4.10(B) *Allied Joint Doctrine for Medical Support* for detail.

Depending on geography, sanction enforcement normally involves some combination of air, land, maritime, and SOF assets. Examples are embargoes, and the enforcement of exclusion zones and no-fly zones (NFZs).

- (1) **Embargoes.** An embargo means a prohibition or restriction on the entry or exit of goods, persons, and services into and/or from states through sea or airports or across land. Today, the term is generally associated with sanctions that prohibit the movement of specific cargoes in and out of a territory. Enforcement of embargoes normally involves maritime interdiction operations. They may also include embargoes against economic or military shipping. In addition to air and maritime assets, land assets and SOF have specialized capabilities that may be employed in support of embargoes. Embargoes have several distinct advantages over other compelling measures involving hostile actions and are conducted to resolve disputes through measures short of armed conflict, while allowing limited and controlled force to be used, if necessary. If tensions rise, the affected nation's military ability can be diminished by an effective embargo on military supplies. The effectiveness of any embargo may occur in the medium- to long-term. Intelligence and particularly economic and civilian indicators may be needed to plan and assess the effectiveness and impacts of any embargo. Additionally, precise ROE should be established to minimize an unwanted escalation of the crisis resulting from attempts to break the embargo.
- (2) **Exclusion zones.** An exclusion zone is established to prohibit specified activities. Exclusion zones can be established in the air, at sea, or on land. The measures are usually imposed by the UN, or other international bodies due to breaches of international standards of human rights or flagrant abuse of international law regarding the conduct of states. The sanctions may create economic, political, military, or other conditions where the intent is to change the behaviour of the offending nation.
- (3) **No-fly zones.** A NFZ is a special type of exclusion zone. A NFZ is airspace of specific dimensions set aside for specific purpose in which no aircraft operations are permitted, except as authorized by the appropriate commander and controlling agency. It can be established above a party's territory or in a neighbouring country. Enforcing a NFZ that has been established by mandate of a sanctioning body is a unique mission that involves preventing a party from flying in certain airspace. NFZ enforcement could involve air, maritime, and land assets supported by surveillance and command and control systems from a combination of friendly and neutral nations. Depending on the specific scenario and the threat to NATO forces,

NFZ enforcement could be comprised of defensive counter-air operations involving combat air patrols or surface-based air defence, or offensive counter-air operations such as suppression of enemy air defences or attack operations on adversary air installations. ROE must be clearly articulated to effectively support execution of these operations.

- h. **Military contribution to freedom of navigation and overflight.** These operations are conducted to demonstrate international rights to navigate sea or air routes. Freedom of navigation is a sovereign right accorded by international law. Common law has long recognized that a coastal nation may exercise jurisdiction and control within its territorial sea. These rights have been implemented in the UN convention on the Law of the Sea. This convention accords the right of “innocent passage” to ships of other nations through a nation’s territorial waters. Passage is “innocent” as long as it is not prejudicial to the peace, good order, or security of the coastal state. International waters are free for reasonable use by all nations. The international civil aviation organization develops the norms that regulate the national and international use of airspace. Freedom of navigation by aircraft through international airspace is a well-established principle of international law. Aircraft threatened by nations or groups through the extension of airspace control zones outside the established international norms will result in legal measures to rectify the situation.³⁹

Section 6 – Command and control

Introduction

- 1.67 **Command.** Command is defined as *the authority vested in an individual of the armed forces for the direction, coordination, and control of military forces*. Command authority is allocated formally to a commander through orders and directives. To command is to exercise that authority by motivating and directing people and organizations. Exercising command requires leadership and decision-making. To make decisions, commanders combine personal experience, training and study with operational situational awareness, understanding and staff advice. Commanders will determine whether a decision is required, what the decision is to be, and when the decision is to be made and enacted. They will then use their command authority and personal leadership to ensure decisions are understood and executed, enabled and supported by control measures.

³⁹ See MC 0372/2 NATO Military Policy for Non-Article 5 Crisis Response Operations for detail.

1.68 **Control.** To control is to manage and direct forces and functions consistent with a commander's command authority. Control of forces and functions helps commanders and staffs:

- calculate, acquire and apply resources to support the mission;
- develop specific instructions from general guidance;
- integrate and synchronize actions throughout the JOA;
- provide resources to maintain freedom of action, delegate authority and direct operations from any location;
- determine the status of organizational effectiveness;
- identify variance and correct deviation from set standards; and
- provide a means to measure, report, and correct performance.

Principles of joint and multinational command

1.69 **Unity of command.** Unity of command means that all the forces operate under one designated commander. It requires a single commander with the requisite authority to direct all forces in pursuit of the agreed objectives or end state. At the military strategic, operational and tactical levels of command, a fundamental tenet of C2 is unity of command, which provides the necessary cohesion for the planning and execution of operations; this is a significant part of a principle of operations – unity of effort. Command relationships, by which commanders achieve this authority, will be determined when a JTF is established. These relationships will acknowledge the constraints that are placed on the use of national force contributions and supporting national assets and the extent of military activities of other authorities in a designated JOA. As a minimum, a commander would normally have operational control over all NATO or attached forces within a JOA. When unity of command (for forces or agencies outside the JTF) is not wholly achievable, unity of effort should be established using clear coordination arrangements.

1.70 **Continuity of command.** Command should be continuous throughout an operation. During an operation further enhancing unity of command is desirable through continuity of command. In principle, 'the commander who plans should execute'; however, circumstances may not permit this. The higher command authority, in consultation with the operational level commander, should arrange a succession of command; an operational level commander should in turn arrange an alternate headquarters to meet operations contingencies.

- 1.71 **Chain of command.** The C2 structure is hierarchical and should be defined and understood by all levels of command, to ensure a complete understanding of command responsibilities throughout the C2 system. A clear chain of command strengthens integration between components. Where necessary and appropriate, direction and orders to a subordinate commander may include tasks for specific force elements, subject to any limitations imposed by nations. Irreconcilable differences may need to be referred up the chain of command for resolution at the strategic level.
- 1.72 **Integration of command.** The command structure should ensure that the capabilities of the nations, or those of several nations, are directed decisively to achieve the operational objectives in the most effective way. Component commands, to which national contingents contribute, are normally environmental or functional, but the specific task organization will reflect the higher commander's specific operations requirements. An efficient and comprehensive liaison structure, linking the JTF HQ, all force elements and other organizations, such as IOs and NGOs, is an essential element of the C2 structure.
- 1.73 **Mission command.** A commander's responsibility for mission accomplishment is total, but delegation of authority to subordinates and their responsibility to act in support of the higher commander's intentions are included in the principle of decentralization. Through mission command, commanders generate the freedom of action for subordinates to act purposefully when unforeseen developments arise, and exploit opportunities. Mission command encourages the use of initiative and decentralized decision-making. Commanders who delegate authority to subordinate commanders need to state clearly their intentions, restrictions, designate the objectives to achieve and provide sufficient forces, resources and authority required to accomplish their assigned tasks. Commanders should also identify those operational-level decisions which are retained, while offering necessary latitude to subordinates.
- 1.74 **Decision-making.** Decision-making is one of the central activities of leadership and an essential aspect of command. Effective decision-making combines judgement with information; it requires knowing if to decide, when to decide, and what to decide. During the conduct of operations, commanders can develop an instinctive awareness of the operating environment which should help in deciding when to make decisions and in the making of those decisions. Commonly understood decision-making tools enable commanders and staffs to work together effectively. The following elements are essential to any decision-making process.

- a. **Understanding the nature of the problem.** By understanding the nature of the problem commanders can make well-informed and appropriate decisions. Strategic context review, joint intelligence preparation of the operating environment, evaluation of actors and factor analysis help commanders in this respect. An understanding of the intangible and wider factors surrounding an issue can be improved by previous experience, research, study, visits and discussions with key military and non-military actors.
 - b. **Direction and guidance.** Commanders should initially determine the nature of the decision required and the time available in which to make it, allowing sufficient time for subordinates' planning and preparation. They then need to issue sufficient planning guidance to the staff and subordinates to set in motion the action required to enable them to arrive at their decision.
 - c. **Consultation.** Early engagement with other headquarters and non-military agencies should enable commanders to understand the concerns of other commanders and leaders and to manage the likelihood and impact of subsequent changes in direction. Such consultation should occur at three levels:
 - higher level to seek guidance if required and to ensure awareness of the strategic level commander's intentions and vice-versa;
 - horizontally to national representatives, diplomatic staff, other organizations, their internal specialist advisors and senior staff;
 - lower to subordinate commanders to ensure that they understand the decision and context, have the opportunity to contribute, and feel a sense of ownership.
- 1.75 **Consideration.** Before reaching a decision, commanders should consider the recommendations from the staff as well as contributions of subordinate commanders. They should then apply their judgment, influenced by results of consultation upwards and laterally. Several methods can assist:
- a. **Risk management.** Commanders should identify, assess and manage the risks involved in their military operations, and provide guidance to the staff and subordinates for risk reduction, mitigation and exploitation. This should include delegating appropriate risk ownership to subordinates or transferring intolerable and unmanageable risk to superiors. The commander is ultimately responsible for accepting risk. For more on risk analysis and management, see Annex D *Military risk management*.
 - b. **Red teams, war-gaming and operational analysis.** Commanders may form an impartially-minded 'red team' to scrutinize and critique the logic and validity of the

plan, as it evolves both before and during execution. The process may include war-gaming and may lead to generating contingency plans. Operational analysis specialists can provide additional objectivity and technical rigour to operations planning and decision-making.

- c. **Blue team.** Commanders may appoint a reflective 'blue team' characterized by its high status, independence from the chain of command, and detachment from the mechanics of the headquarters itself. A blue team can critically assess the effectiveness of the planning process, and thereby indicate the validity of the commander's decision-making. The key roles of such a team are to observe and critique (often institutional) factors likely to impede effective planning, and then determine the impact of such factors upon decisions being reached, to indicate to the commander the potential weaknesses of their plan or at least the weaknesses in its rationale.
 - d. **Institutionalized dissent.** An experienced planning team may develop high levels of cohesion which can, in some circumstances, diminish the effectiveness of their advice to the commander. Perils such as groupthink (coming to premature conclusions that affirm prevailing assumptions) may be offset by employing an external dissenter. They will question internal assumptions and perspectives, and ensure that agreement is not simply achieved on the basis of conformity and acquiescence within the planning team.
- 1.76 **Decision and execution.** Commanders make decisions and should express them clearly and succinctly; this is the cornerstone of effective command. Back-briefs by subordinate commands provide an opportunity for clarification and reinforced understanding. Thereafter, commanders should ensure that the direction is disseminated in the manner they require and that their decision is executed correctly.
- 1.77 **Decision-making in practice.** The decision-making process will frequently be compressed, requiring activities to be undertaken concurrently rather than consecutively. It might be self-evident from the circumstances when a decision is required; if not, it should be clearly established during the direction stage. Consultation and consideration may mix together, leading to decisions being taken quickly. Reaching a decision may involve commanders exercising their own judgement on incomplete information. It is not possible to avoid risk: waiting and anticipating complete clarity will result in paralysis. Risk reduction is important and possible if critical information requirements are identified early in planning and the commander should regularly refine these. Commanders should use their judgement to decide what to delegate and to whom. While commanders may delegate their authority, they always

retain responsibility. All commanders require a clear understanding of the capabilities available to them, in both quantitative and qualitative terms. They should consider:

- what sort of tempo they are capable of, and what sort of tempo they need to be capable of;
- how they are organized (e.g. with sufficient interoperability and agility to be re-organized);
- whether they are capable of working with civil agencies, at what level and whether some reorganization is required;
- the optimum command, control and communication arrangements, and how to align authority with responsibility (which can be difficult in multinational operations);
- how to most effectively employ the forces available and to match tasks with groupings to avoid creating inter-component friction; and
- the key strengths, weaknesses and dependencies of the principal fighting systems, and whether the force is sustainable during each phase of the operation.

1.78 **Degrees of authority in operations.** A common understanding of the degrees of authority is a prerequisite for effective co-operation under NATO military command structures. The following definitions form the basis for this common understanding.

- a. Full command (FULLCOM) is the military authority and responsibility of a commander to issue orders to subordinates. It covers every aspect of military operations and administration and exists only within national services. The term 'command', as used internationally, implies a lesser degree of authority than when it is used in a purely national sense. No NATO or coalition commander has FULLCOM over the forces assigned to their since, in assigning forces to NATO, nations will delegate only operational command or operational control.

Authority	FULLCOM	OPCOM	OPCON	TACOM	TACON
Task organize the assigned element	X	X			
Assign missions to the assigned element	X	X	X (limited)		
Assign tasks to the assigned element for the purpose of which it has been assigned.	X	X	X	X (limited)	
May further delegate command authority	OPCOM OPCON TACOM TACON	OPCOM OPCON TACOM TACON	OPCON TACOM TACON	TACOM TACON	TACON
Coordinate movement, local defence, and force protection.	X	X	X	X	X
Planning and coordination	X	X	X	X	X
Administrative and logistic responsibility	X				
FULLCOM full command OPCON operational control TACON tactical control OPCOM operational command TACOM tactical command					

Figure 1.1 - Degrees of authority in operations

- b. Operational command (OPCOM) is 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 and/or tactical control as the commander deems necessary. It does not of itself include responsibility for administration or logistics. Beside full command the gaining commander may task organize only under OPCOM the assigned unit and thus assign separate missions to it and its component parts. A commander may employ assigned forces under OPCOM for any purpose.
- c. Operational control (OPCON) is 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 and 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. For forces allocated under OPCON the gaining commander may not break up the organizational integrity of the force for separate employment. Under OPCON forces assigned may only be employed within certain constraints such as function, time or location imposed by the higher authority. For example, the forces may only

be assigned for a single phase of a particular operation. This may be done for national purposes in the case of a multinational context, where it is in a participating nation's interest to constrain in some fashion the employment of the contributed force. Under OPCON the gaining commander may assign a mission to the assigned element that is distinct from, but related to, the gaining commander's overall mission.

- d. Tactical command (TACOM) is the authority delegated to a commander to assign tasks to forces under his command for the accomplishment of the mission assigned by higher authority. Under TACOM the gaining commander may only allocate to the assigned force a specific task consistent for the accomplishment of the mission and purpose assigned by the higher commander, that is, within the parameters of the current mission given by the higher authority. TACOM is used where the superior commander recognizes the need for additional resources for a task but requires the resources intact for a later role. Under TACOM the assigned force is allocated for specific tasks and is allocated normally for a limited period of time. This prevents the gaining commander from employing the assigned force in a role or manner not intended by the higher commander. When the task is complete or the specific timeframe expires, the TACOM relationship with the gaining force ends. TACOM is usually applied to specific situations and to elements that have unique capabilities.
- e. Tactical control (TACON) is the detailed and, usually, local direction and control of movements or manoeuvres necessary to accomplish missions or tasks assigned. TACON is generally used to indicate those units that will be located within another unit or formation's assigned geographical boundaries, and by so assigning, the gaining unit becomes responsible for coordination aspects within the shared area of operations. The gaining commander has authority to coordinate local defence, force protection and terrain allocation.
- f. Administrative control is the direction or exercise of authority over subordinate or other organizations in respect to administrative matters such as personnel management, supply, services and other matters not included in the operational mission of the subordinate or other organizations.
- g. Coordinating authority is the authority granted to a commander or other individual with assigned responsibility to coordinate specific functions or activities of two or more forces, commands, services or organizations. The commander or individual has the authority to require consultation between the organizations involved or their representatives, but does not have the authority to compel agreement. In case of disagreement between the organizations involved, the commander or

individual should attempt to obtain essential agreement by discussion. In the event they are unable to obtain essential agreement they shall refer the matter to the appropriate authority.

- h. If a nation so desires, some level of authority over logistics may be granted to a NATO commander over assigned logistic units and organizations in the JOA, including national support elements, Joint Logistic Support Group, and NATO force integration units that empowers them to synchronize, prioritize, and integrate their logistics functions and activities to accomplish the joint theatre mission. Any level of control over logistics would be specified in the nation's TOA letter and would not confer authority over the nationally owned resources held by a national support element, except as agreed in the TOA.⁴⁰

1.79 Command arrangements must accommodate the situation prior to and after TOA. A commander may delegate to a subordinate commander a clearly stated part of their authority. While commanders can delegate specific authority, they retain overall responsibility for their commands. Accountability involves a liability and obligation to answer for the proper use of delegated authority and resources; it includes the duty to act. Thus, the authority granted to a subordinate should be commensurate with the task given; the subordinate, meanwhile, remains accountable to their superior for its execution.

1.80 **Supported/supporting relationships.** The execution of NATO military operations will often be guided by the supported/supporting relationship when one command, force or unit should aid, protect, complement or sustain another. This key relationship provides the establishing authority with an effective means of weighting the phases and sub-phases of NATO operations with a subordinate commander typically receiving support from, and providing support to, other commanders. The number and importance of these relationships, in particular that support provided to a supported commander tasked with achieving the primary objectives in an operation, require the close attention of the commander and their subordinate commanders in the planning and execution of operations. The supported/supporting relationship allows the strengths and capabilities of the headquarters and forces of the military command structure to complement each other. Within a force, components or elements can support or be supported for the conduct of a particular activity to create effects. Subordinate commanders may be supported and act as supporting commanders concurrently. The supported/supporting relationship must work both ways. The supported commander must be able to participate and comment on developing

⁴⁰ See MC 0319/3 *NATO Principles and Policies for Logistics* for policy detail.

support plans of supporting commanders. A complete understanding of the supported commander's mission, assigned objectives, force capabilities and intent is critical to enable the supporting commander to meet their responsibilities flexibly.

- 1.81 **Command and control architecture.** All operations will be met by combining NCS and NFS deployable and static assets, optimized for the operation. In principle, the NCS has three levels of command: strategic, operational and tactical. Depending on the nature of the operation, there may be a need for component commands. The C2 of these components may be as separate components, such as a JFAC. When designing the joint C2 architecture, it should include the components necessary for C2 of all forces contributing to the operation and take into account coordination with other actors.
- a. **Strategic level.** At this level, allied forces are employed within a political-military framework endorsed by the MC and approved by the NAC to achieve the strategic objectives of the Alliance. SACEUR assumes the overall command of the operation at the strategic level. SACEUR issues strategic military direction to the subordinate commanders. SACEUR is responsible for preparing and conducting all Alliance military operations, including routine activities in accordance with the division of responsibilities. SACEUR also coordinates multinational support and reinforcing and designating supported and supporting commanders.
 - b. Following appropriate political decisions, SACEUR will designate an operational-level HQ. For European Union (EU)-led operations under the Berlin + agreement this may come from within SHAPE on the basis of the NATO-EU framework agreement. Partner nation involvement in the command arrangements is set out in the principles and modalities of the political-military framework for NATO-led Partnership for Peace operations.
 - c. **Operational level.** At this level, based on the strategic military direction, operations are planned, conducted, sequenced, synchronized, directed and sustained to achieve the objectives. During operations, commanders exercise their responsibilities through a JTF HQ. Air- and maritime-led predominant joint operations may not require a JTF HQ element in-theatre and this function could be fulfilled by an augmented component command HQ. For other types of operations, a deployed JTF HQ is required for at least the initial phase; during the sustainment phase, a composite HQ or an augmented component command HQ could replace the deployed HQ.
 - d. While C2 of JTF elements could be retained at the operational level, most situations will require capabilities to be placed in functional components under the commander JTF's command. The four standard functional components that may

be established are the maritime component command, land component command, air component command, and special operations component command. Furthermore, a JLSG might be established at component level, gathering logistic and other supporting functions at operational level. The NAC objectives, operating environments and contributions from nations for the operation will shape the size and structure of each, which may require adjustment as the operation develops. While force elements within each component will predominantly reflect its environmental focus, components may exchange capabilities, on either a permanent or a temporary basis, to maintain agility.

- e. **Tactical level.** At this level, battles and engagements are planned and executed within an overall operation. In principle, the operation dictates the type of command and formation deployed. The component commands provide the service specific expertise for the JTF, as well as operational level service specific advice on joint operations planning and execution.
- f. Liaison between components and JLSG, as well as with the JTF HQ, is essential. Inter-component coordination and liaison teams ensure that critical information is assessed and disseminated across the JTF. Some teams may play a fully integrated role within their host-component headquarters but they remain responsible to the donor component commander. The employment of high quality individuals as liaison officers is critical to component integration.

Chapter 2 – Preparation

Section 1 – Introduction

- 2.1 Before conducting operations, the North Atlantic Treaty Organization (NATO) should carry out preparatory activities. Both NATO and the troop-contributing nations (TCNs) are responsible for, and should work closely together, preparing the assigned troops for the operation. NATO will, in parallel, be conducting shaping activity⁴¹ focussed on the operating environment – in the joint operations area (JOA) specifically and more generally in the wider international community.
- 2.2 It is fundamental to prepare the wider operating environment to support the conduct of operations. Although not their direct responsibility, the operational-level commander will want to be aware of strategic activity and to contribute accordingly. NATO needs to establish the legitimacy of its intended actions and should obtain the general support of the international community. Achieving this will depend upon political and diplomatic activity, and direction issued through NATO from the nations supporting the operation. Preparing the operating environment includes developing an information strategy that identifies objectives both inside and outside the boundaries of the JOA. Strategic communications and civil-military interaction (CMI) are an integral part of the effort to achieve the Alliance's objectives. A resolute international community may influence the adversary's perception of their own chances of success, although it may not necessarily discourage them from pursuing their own aims.

Section 2 – Forming the joint task force

NATO forces generation, activation and deployment procedure⁴²

- 2.3 The Alliance has consultation procedures, crisis management arrangements, military capabilities, as well as civil emergency planning structures and tools. These ensure appropriate political military control over Alliance operations activities and clearly identify the authority to initiate operations planning. To conduct a NATO operation, it is necessary to generate and deploy mission-specific forces from within NATO forces and, where appropriate, from the forces of partners and other non-NATO nations. The force generation and deployment process can be tailored to satisfy the circumstances

⁴¹ Shaping activity is likely to be, but not restricted to, strategic communications or strategic diplomacy or reconnaissance and the commander might be involved. See AJP-01 *Allied Joint Doctrine* for detail.

⁴² See Annex C to MC133/4 *NATO's Operations Planning* for detail.

pertaining to each situation but, in any event, is dependent upon the timing of North Atlantic Council (NAC) decisions. The force generation process is continuous and cyclical. It will continue throughout the duration of an operation as long as the combined joint statement of requirements is not filled. Force activation is the responsibility of Supreme Allied Commander Europe (SACEUR).

- 2.4 SACEUR will initiate pre-deploying authorized enabling forces and allocate common funds. If pre-deploying enabling forces has not been authorized, any force pre-positioning is carried out under national authority. Where there is an urgent requirement to establish a NATO presence in the JOA pre-deploying the entire force could be authorized, prior to issuing the NATO execution directive. In any event, pre-deploying or deploying forces will be conducted in accordance with SACEUR's multinational detailed deployment plan. On arrival at the ports of debarkation, nations then authorize transfer of authority (TOA) of forces to SACEUR.
- 2.5 **Procedures for partners and other non-NATO nations.** The force activation procedures for non-NATO contributing nations (NNCNs) for a NATO-led operation are broadly similar to those for NATO members. Political approval will be an essential prerequisite for the involvement of any non-NATO nation in a NATO-led operation.
- 2.6 The NAC determines the participation by non-NATO nations as a result of political consultations. Non-NATO nations are kept informed through the Euro-Atlantic Partnership Council (EAPC), Operations Policy Committee, Euro-Atlantic Partnership Military Committee and other EAPC forums. The NAC will authorize participation of NNCNs in the NAC initiating directive and SACEUR will identify participation in the concept of operations (CONOPS). The CONOPS may be amended to satisfy NATO security considerations and is released to potential NNCNs to allow them to conduct national decision-making procedures. NNCN participation is confirmed in the force activation directive. Once NNCN have made initial force offers, NATO evaluates their suitability for the mission. If the NNCN forces are not already NATO certified, the NAC may authorize SACEUR to initiate initial certification of the NNCN contribution prior to the force generation conference.
- 2.7 A NATO command or sponsor nation undertakes force certification procedures to determine the following:
 - any military and/or political limitations (caveats) under which the forces may be required to operate;
 - details of organization, manpower, training, equipment, communications, logistics and medical facilities;

- effectiveness to accomplish missions and tasks specified in the operation plan (OPLAN);
 - interoperability in key functional areas including the ability to conduct all external communications in the English language; and
 - recommendations to SACEUR on employment.
- 2.8 Additional guidance on the criteria for selection, certification and participation of partners and other non-NATO nations may be included in the OPLAN. On completing force certification procedures, the NATO sponsor nations, who perform the assessment, will forward a report to SACEUR to identify any capability shortfalls and make appropriate recommendations regarding suitability for employment.

Establishing the joint task force headquarters

- 2.9 Alliance military structures must be able to rapidly deploy robust and mobile military forces where and when required for the full range of the Alliance's missions, and to sustain such forces for prolonged operations, at strategic distance and in austere environments. To meet this requirement and to utilize capabilities from all nations, NATO forces should be developed and operated jointly, with a high degree of multinationality. High readiness forces must be capable of rapid employment, for both combat and crisis response operations. To provide a continuous rapid response capability, extensive command and control and force preparations must be undertaken within the NATO command structure (NCS) and NATO force structure (NFS). A NATO rapid deployable capability, including the NATO Response Force as a core capability, is kept on stand-by, based on the long term rotation plan.
- 2.10 All headquarters (HQ) should be modular and adapted to the requirements of the operation. HQ can be afloat or on land, inside or outside the JOA, mobile or static. The location of the joint task force headquarters (JTF HQ) is an operational command decision. The location should also be in line with other considerations, such as the NATO strategic narrative. The decision should be made as early as practicable.
- 2.11 Command and control structures must ensure the ability to operate at three overlapping levels, military strategic, operational and tactical. In the current and emerging challenges for a safe environment and in the context of a comprehensive approach, a broader understanding of the levels is required. In particular, in-theatre commanders at the operational level will frequently deal with the local national strategic level in their areas of responsibility.

- 2.12 Both the NCS and NFS may be supported as required, for certain agreed tasks, by other HQ and forces, national or multinational entities and national specialists and staff officers.
- 2.13 **Communication and information systems.** The communication and information systems⁴³ (CIS) of the JTF HQ should be mobile, deployable, scalable, roll-on roll-off air transportable, rail and sea transportable, secure, robust and be able to operate in a downgraded mode⁴⁴. Scalable means that the architecture can change in size or scale, and robust refers to a system that holds up well under exceptional conditions. To meet these requirements, deployable CIS should match appropriate readiness requirements, be flexible, sustainable, separate and separable. Any CIS architecture will be resilient, modern, and interoperable in accordance with appropriate NATO standardization agreements. Early identification of the information exchange requirements at all levels would ensure timely CIS planning, deployment and activation.

Integrating the components

- 2.14 Optimum coordination between all component commands is only achieved when each component command knows the intentions and capabilities of the other components and also understands the impact of its actions on them. This is enabled through establishing liaison and communications networks. Each component has developed its particular tactics and these differences are accentuated cross-nation.
- 2.15 **Location of the component commands.** Each component commander should have equal access to the Commander Joint Task Force (JTF). In their turn the component commanders must balance the advantages of personal contact with their command responsibilities. As the joint forces air component command (JFACC) has no specific area of operations (AOO) but is operating within the whole JOA, it may be collocated with the JTF HQ. Close liaison between the JFACC and JTF HQ needs to be established. CIS enablers to some extent mitigate the disadvantages of separation but these do not replace the quality of understanding that arises through personal contact.
- 2.16 **Components' representation in the joint force command.** Each component command will have a senior representative, vested with authority to make recommendations and facilitate decision-making at the main joint operations planning

⁴³ See AJP-6 *Allied Joint Doctrine for Communication and Information System* for detail.

⁴⁴ See 3000 TC -530/Ser : NR 0034 // 2100/SHPPX/10/05-102978 *NATO Response Force Minimum Military Requirements* for detail.

group and joint coordination board. At the working level, component commands may also need specialists to represent their interests at the various sub-boards, meetings and other coordination mechanisms that make up the staff processes. When a component command is colocated with JTF HQ, this remit may be reduced. However, the joint forces maritime command, the JFACC and special operations component command will almost certainly require high quality liaison officers permanently placed within the JTF HQ.

- 2.17 **Liaison between component commands.** In addition to the liaison link up to the JTF HQ, liaison between component commands is vital. Inter-component coordination and liaison staff teams act as the principal method of coordination in ensuring critical information is assessed and disseminated throughout the chain of command. They also have an essential role to play in their host component's plans and execution, particularly regarding the synchronization of overall component activity. While liaison teams should be integrated into their host HQ structure, they are nonetheless responsible to their parent component command. The requirement for liaison officers is likely to require large numbers of individuals, and can be partially offset by CIS.
- 2.18 **Interagency coordination.** Military operations must be coordinated with those of other agencies and regional authorities. There is a requirement, facilitated through CMI to develop agreed cross-agency procedures although it must be recognized that many agencies will resist any encroachment on their own freedom of action. The commander should take an active interest in the establishing close relationships with all agencies, and to establish what, in terms of assistance, the JTF is able to provide.

Challenges of multinational operations

- 2.19 Multinational operations may face multiple challenges.
- a. **Political will.** Political will can be described as the commitment and determination of a politician or government to conduct activities to reach a favourable outcome (to them); it usually relates to unpopular or dangerous situations. In NATO, political will is expressed through the agreement signed by the NAC expressing an end state to an operation. Since the agreement describing the endsate is a product of consensus and expresses a level of determination at the time of release, as the situation evolves so the determination of NATO nations and partners is likely to evolve and fluctuate. This might reveal itself in several ways such as in changing force contributions, introducing caveats or extending national deployments.

Commanders will wish to maintain an awareness of this fluctuation as it applies to them directly and indirectly, and adjust their activities accordingly.

- b. **Common purpose.** Common purpose means that multinational partners strive for the same aim. This means consensus not only regarding the desired end state but also about the ends, ways and means to get there. Common purpose among NATO-members participating in an operation is important, as they operate within an environment where they interact with various other actors. These could be non-NATO members, wishing to participate as well as international organizations (IOs) and non-governmental organizations.
- c. **Interoperability.** Interoperability includes common operating procedures, based on terminology and doctrine, and on compatible equipment. Interoperability has to be verified, trained and refined by practice.

2.20 The more successful NATO is in overcoming these challenges, the better will be the cohesion of both the Alliance and the multinational force. When understood correctly, multinationality results in the following benefits:

- security far beyond the defence capabilities of single states;
- greater operational reach (smaller footprint for a single nation) in operations abroad;
- better sustainability in enduring operations due to the possibility of burden sharing;
- increased legitimacy as a multinational operation indicates agreement amongst multiple partners and not a unilateral approach; and
- access to a greater range of physical, conceptual and cultural capabilities.

2.21 **Rules of engagement.** NATO forces and NATO-led forces operate in accordance with international law. Rules of engagement (ROE) provide political, legal and policy direction to commanders at all levels for the conduct of military operations and the use of force. ROE will normally be developed as part of the OPLAN, which should result in a suitable set of ROE being available prior to the beginning of the operation. However, the commander JTF needs to continually review the initial ROE upon arrival in the JOA and should submit specific ROE requests through NATO military authorities for approval by the NAC.⁴⁵

⁴⁵ See MC 0362/1 *NATO Rules of Engagement* for procedures for requesting, authorizing, and implementing ROE.

- 2.22 To maximize military effectiveness, NATO multinational forces should, if possible, operate under the same ROE. However, it must be recognized that nations may have their own, more restrictive or permissive instructions in addition to the NATO ROE.. Nations should inform the NAC if such restrictions are in effect and the JTF HQ must be aware of these additional national restrictions to maximize the employment capabilities of all assigned and attached forces. The ROE should reflect the commander's intent, be developed in as much detail as possible, and should specifically address force options and employment considerations for non-lethal capabilities across the force.
- 2.23 In many operations, the legal framework will provide operational limitations and authorizations. In the case of operations based on host nation (HN) request/ consent, legal arrangements, agreements, and functional processes will ensure NATO activities comply with relevant restrictions and authorizations.

Training and training responsibilities

- 2.24 **Training.** Ideally, forces should be fully trained prior to deployment, but operation-specific training within the JOA may be required. Training is likely to be a continuing requirement, particularly during protracted multi-phase operations as forces require replacement or rotation and respond to political redirection or lessons identified and lessons learned from the current or other operations. Training under these circumstances should include the lessons learned and may be developed by an outgoing staff for execution by an incoming staff.
- 2.25 **Character of training.** Joint force training, which is a responsibility of the JTF HQ and the component commands, should involve the HN and other actors if appropriate. Training should familiarize the forces with the operating environment. The joint force's training will also demonstrate to adversaries and other actors the force capabilities. Training will be a whole-force activity. Operations security measures may limit the scale and realism of the training programme, however it should be closely related to the CONOPS.
- 2.26 **Joint task force headquarters.** The JTF HQ is responsible for the direction and guidance of the training programme to be implemented in the JOA if time and opportunity permit. The JTF HQ should promulgate the directives for the training programme after consultation with the component commands and SACEUR. These directives should include standardization requirements to ensure equal standards for all TCN. The JTF HQ, together with its component commands, will oversee the training programme to verify the readiness of its forces.

2.27 **Troop-contributing nations.** TCNs are responsible for providing trained, equipped and certified forces at appropriate readiness to meet the minimum military requirements. The nature of an operation may create specific or additional demands, particularly on logistic and equipment preparation, while the availability of host nation support (HNS) may simplify it. Survey parties can validate information on these aspects and report to the JFC and TCNs.

Section 3 – Pre-execution activities

2.28 Pre-execution activities present the commander JTF with an opportunity to create a relatively favourable starting position prior to the conduct of an operation. However, the JTF HQ staff should be aware that these activities can be disturbed or disrupted by an adversary. Clear and unhindered access to the JOA is also fundamental to the success of an operation. It is essential that lines of communications (LOC) are secured and maintained. However, the number and type of assets assigned to this mission will be dependent on the strategic and political environment.

2.29 **Assessment of logistic capabilities.** An early assessment of the infrastructure capabilities within the JOA is vital to the operation. The organization of a liaison network, especially with the HN, allies, coalition partners and the many other agencies likely to be operating in the JOA, can assist in gathering information to facilitate the analysis of the capabilities and shortfalls of the reception facilities within the JOA. By identifying the shortfalls, JTF HQ can, in close conjunction with Allied Command Operations (ACO), enhance the infrastructure capabilities within the JOA with military and/or commercially hired installations and facilities.

2.30 **Establishing and protecting lines of communications**⁴⁶. The LOC are all the land, water and air routes that connect an operating military force with one or more bases of operations, and along which supplies and reinforcements move. Operational LOC are the responsibility of the JTF HQ and should be established as early as possible. Operational LOC, particularly road and rail, are rarely only available to NATO forces. The indigenous population, humanitarian organizations and local forces will all rely on them too. Early clarity concerning responsibility and authority for the coordination of their use and for their maintenance and development will be required. The important nodes along the LOC are:

⁴⁶ See AJP-3.13 *Allied Joint Doctrine for the Deployment and Redeployment of Forces* for detail.

- 2.31 **Port of debarkation.** The port of debarkation (POD) is likely to be a sea, air or rail port of debarkation through which forces and supplies can be deployed into/close to the JOA.
- a. **Forward mounting base.** A forward mounting base (FMB) is a base, frequently a port, airfield or railhead, from which an operation may be launched into the JOA. A FMB is normally within SACEUR's area of responsibility, but not necessarily within the JOA. A FMB must be secured and not be directly exposed to, or at risk from, adversary action. An essential stepping stone into the JOA, the FMB should have the capacity for an insertion force to form-up within it, and subsequently should be able to handle reinforcements, reserves and evacuees. Its selection and occupation is a strategic matter for SACEUR with advice of the commander JTF.
 - b. **Forward operating base.** A forward operating base is a locality within the JOA from which subsequent operations are projected. Its selection and use is an operational matter for the JTF HQ and its component commands.
 - c. **Staging area.** The staging area is an area located between the mounting area and the POD through which all or part of the forces pass after mounting, for the purpose of refuelling, regrouping, training, inspection and distribution of troops and materiel. It is a general locality established for the concentration of troop units and transient personnel between movements over the LOC.
 - d. **Transit nation.** The deployment of JTF elements from their respective home bases to the JOA may depend on the use of the infrastructure of non-NATO nations. Early liaison by ACO with the nations identified as being critical to successfully deploying the forces facilitates the actual use of these transit nations' infrastructures.
- 2.32 Before deploying a force, or staging forces in or through another state, it will normally be necessary to obtain clearance from the HN. Once this has been granted, the more detailed coordination of relations with the HN will start in earnest. The provision of HNS⁴⁷ will involve bilateral or multilateral agreements to detail the agreed levels of support. The JTF HQ is likely to be granted authority to implement and manage existing HNS arrangements. The JTF HQ may wish, as a priority, to incorporate HN capabilities into the force logistic support system alongside the component command logistic elements.

⁴⁷ See AJP 4.5 *Allied Joint Doctrine for Host Nation Support* for detail.

Organizing the joint operations area

- 2.33 The area in which operations will be conducted is organized and labelled in such a way that all elements of a JTF have a common understanding of its principal boundaries. It is recognized that the operating environment may expand, become more dispersed and non-linear. Distinctions between forward and rear areas are becoming less clear-cut and urban conflict, terrorism, and irregular forces with their inherent asymmetric characteristics are more commonplace.
- 2.34 **Boundaries and areas.** In the NATO structure boundaries are mission-dependent. Boundaries will be used to enhance flexibility delineated by areas, limited by defining parameters such as time.
- a. **Theatre of operations.** A designated area, which may include one or more JOA. A theatre of operations may include land, air, space and sea outside a JOA.
 - b. **Joint operations area.** A JOA is a temporary area defined by SACEUR, in which a designated commander JTF plans and executes a specific mission at the operational level. A JOA and its defining parameters, such as time, scope of the mission and geographical area, are contingency- or mission-specific and are normally associated with a JTF. The designated commander would plan and conduct military operations within a JOA to accomplish a specific mission.
 - c. **Area of operations.** The AOO is an area within a JOA defined by the joint force commander for conducting operations.
 - d. **Area of interest.** The area of interest (Aoi) is, for a given level of command, the area of concern to a commander relative to the objectives of current or planned operations, and which includes the commander's areas of influence, operations and/or responsibility, and areas adjacent thereto.
 - e. **Area of responsibility.** The area of responsibility (AOR) is, for a given level of command, an area assigned to a commander to plan and conduct operations.

Strategic deployment and reception, staging, onward movement and integration⁴⁸

- 2.35 Distinction is made between strategic deployment from the home base to the JOA and deployment within the JOA. The former is considered as inter-theatre deployment and the latter as intra-theatre deployment. Reception, staging, onward movement and integration (RSOMI) is incorporated in the latter.

⁴⁸ See AJP-3.13 *Allied Joint Doctrine for the Deployment and Redeployment of Forces* for detail.

- 2.36 **Deployment.** The varied nature of military operations requires commanders to consider different options for deployment. The options selected depend on desired effects and planning considerations. This implies that the required sustainment capacity quite often determines the initial available manoeuvre capacity. Furthermore, even though Alliance political authorities may have approved an operation, further approval may be required for deploying assigned reinforcement forces; lead-time to obtain approval may impact on availability and must be highlighted in the deployment timeline.
- 2.37 **Deployment responsibilities.** The TCNs are primarily responsible, in close conjunction and coordination with SACEUR, for deploying their national contingents from the respective home bases to the PODs. TCNs prepare for deploying their contributions by matching the unit readiness to the readiness of the strategic lift assets needed to effect the deployment. At the strategic level, ACO is responsible for deployment synchronization issues, strategic military guidance and direction to subordinate commanders and therefore coordinates national support. Specifically, ACO develops the multinational detailed deployment plan, monitors and coordinates the use of strategic lift with the nations through the allied movement coordination centre, and coordinates, prioritizes and de-conflicts strategic movements.
- 2.38 Elements of the JTF are capable of self-deployment into and within the JOA. The limits of this relative autonomy are determined by the scale of the supporting equipment, the distance between the reception facilities and the new location, whether staging area, assembly area or AOO, as well as by the size of the formation. In specific operations, an autonomous intra-JOA deployment may not be acceptable, e.g., for political reasons or for force protection purposes.
- 2.39 Deployment is executed in accordance with SACEUR's approval, based upon the commander JTF's required date as well as the relevant direction and guidance. One of the key tasks for the JTF HQ and the component commands is assessing the situation in the JOA and developing the appropriate mix of forces elements in the enabling forces. This task may be made more complex by strategic lift constraints, both in capacity and dimension.
- 2.40 The commander JTF should be granted coordinating authority at the earliest possible stage to facilitate establishing forces in the JOA and to enforce the commander's intent. Once selected, POD and FMB need to be established prior to deploying the main force. To ensure the correct level of reception at the PODs or FMBs, it is essential that advance logistic resources are deployed early, enabling efficient onward

movement. The exact composition of the logistic enabling forces will be operation dependent; therefore, a pre-deployment survey is essential.

- 2.41 **Reception, staging, onward movement and integration.**⁴⁹ RSOMI is the process that transforms deploying forces into forces capable of meeting the commander's operational requirements. This is mainly a task at the operational level. NATO commanders and nations should consider three overarching principles that apply to RSOMI. These are collective responsibility, unity of effort and synchronization. RSOMI of forces is fundamental to the concept of operations that envisions projecting mission-tailored combat power within a JOA at the right time and in the right sequence. For this reason the commander must prioritize and exercise coordinating authority and, where granted, command and control over the RSOMI process.

Planning and executing the strategic deployment, reception, staging, onward movement and integration process

- 2.42 Planning and executing deployment and RSOMI is a command-led, whole-force activity. During the build-up of forces, the joint force may expand rapidly in size and the level of burden on the HN(s) by the force may increase significantly. The commander JTF should endeavour to maintain relations with the HN(s) and maintain support for the joint force presence at a high level. Public affairs and information activities in the JOA can help to facilitate achieving this aim. The JTF should avoid influencing life in the HN(s) to such a degree that support is weakened or lost. This may require restraint and flexibility of conduct, and will require consideration for local customs and traditions by all members of the joint force.
- 2.43 The build-up of forces may also be used as a show of force and power projection. It should deliberately influence an adversary's behaviour and their situational awareness. The build-up of forces is not solely a logistic operation; it should also be considered in terms of information activities.

Transfer of authority⁵⁰

- 2.44 To ensure the properly coordinated deployment of forces in-theatre, including their transit to NATO-designated assembly areas, nations should authorize TOA of forces as early as possible. Nations will TOA their forces declared to SACEUR after approval of the OPLAN, release of the NAC execution directive and activation order in their

⁴⁹ See AJP 3.13 *Allied Joint Doctrine for the Deployment and Redeployment of Forces* for detail.

⁵⁰ See MC 0133/4 *NATO's Operations Planning* for detail.

designated NATO assembly area or at the point of embarkation. Issuing the ACO activation order initiates release of national forces and TOA to SACEUR, as well as authorizing the deployment of NATO forces. In cases where NAC has authorized pre-deploying enabling forces, the ACO Activation of Pre-deployment message initiates release of enabling forces and TOA to SACEUR, as well as authorizing their deployment. Under the control of commander JTF, through J3, integration is the process of conducting the synchronized transfer of operationally ready units into the higher echelon within the JTF. Some elements of integration could occur at any stage during deployment. Successful integration completes deployment and may include acclimatization, training and situational awareness. Nations control their own capabilities, until release to NATO through the TOA mechanism. It is nations' responsibility to provide their deployed force with the required combat effectiveness before TOA.

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Chapter 3 – Execution

Section 1 – Introduction

- 3.1 During operations execution, the commander aims to achieve efficiency, effectiveness and synergy of the force components conducting tactical actions to create the intended effects as described in the operations design⁵¹. This is achieved through operations management and through this, the joint force will:
- employ assigned capabilities according to the operation plan to accomplish the mission;
 - assess the effect of each action in terms of the progress towards achieving the objectives, including any risk, and the resources required for its success;
 - exploit a favourable situation, or mitigate an unfavourable one, by adjusting or developing plans; and
 - revise the operational estimate at regular intervals, unless dictated by a significant change in the operational situation or when operations assessment necessitates a change.
- 3.2 North Atlantic Treaty Organization (NATO) operations will normally conclude when the end state is attained. In some cases, the end state will include military strategic objectives that, once achieved, allow transitioning to other instruments of power and agencies to take place as the means to achieve broader aims.

Section 2 – Command and control factors

- 3.3 **Joint and multinational nature.** The underpinning characteristic of all NATO operations is its joint and multinational nature. While this poses challenges for interoperability, prior to execution the commander and staff will have identified the relative strengths and limitations of the available force directly under command as well as those capabilities being employed by other partners and actors not under command. Through common understanding, planning and preparation, the capabilities of the force will have been matched to the requirements of the mission.
- 3.4 **Commander's intent.** The commander's intent is the foundation of the operations design. It is a concise, written statement how the commander envisages the forces to

⁵¹ See AJP-5 *Allied Joint Doctrine for the Planning of Operations* for detail.

conduct the operation. The commander will communicate the intent to the staff and subordinate commands ensuring a common understanding. The commander produces the intent based on the findings depicted in the mission analysis and initiates the development of the courses of action through the commander's planning guidance. While there is no specified format for the commander's intent, a generally accepted construct includes the purpose and objective(s).

- a. **Purpose.** The purpose explains to what end the military action is being conducted. The purpose helps the force pursue the mission without further orders, even when actions do not unfold as planned and it enables exploitation when the execution unfolds more favourable than expected. Thus, if an unanticipated situation arises, participating commanders understand the purpose of the forthcoming action well enough to act decisively and within the bounds of the higher commander's intent.
- b. **Objective(s).** In operations, an objective is a clearly defined and attainable goal that contributes to the attainment of the end state. Objectives describe what the commander is tasked to achieve in regard to military conditions that define mission success. The commander's intent also describes these desired conditions as integral part of the higher command's objectives and describes how own objectives contribute to attaining the end state.

3.5 **Commander's character.** Command is a human activity and the commander is the key individual in its execution; it is their plan being executed. Command requires intellect, moral and physical courage, intuition and practical ability. These skills are applied through established principles, practices and procedures, themselves reinforced through training, education and experience. Understanding the situation provides commanders with the insight and, eventually, foresight to make effective decisions, as well as to manage the associated risks and subsequent effects.

3.6 **Commander's approach.** Command styles are dependent on personality, and there is no single formula or template. In deciding on their approach to commanding the joint force during execution, the commander should be aware of the following factors.

- a. **Apply mission command.** Mission command is as applicable to subordinate staffs as it is to subordinate commanders to achieve objectives and deliver effective control and coordination.
- b. **Disseminate intent widely.** Commanders should personally issue their intent, mission and concept of operations and articulate in detail how they are going to command the operation. These elements, especially commander's intent where commanders express the overall effect they wish to create, are critical in enabling subordinates to act purposefully.

- c. **Build and maintain relationships.** Effort spent in building relationships both within and outside the force will contribute to generating understanding, trust and confidence from a shared situation and similar experiences. Credibility and patience will further enhance a commander's ability to build relationships especially with non-NATO partners and actors.
 - d. **Maintain morale.** Morale, the confidence and well-being felt by individuals and groups, is generated and maintained through a combination of factors in which the commander has a key role to play. These factors are: effective leadership; discipline (both personal and collective); shared experience; and a shared common goal.
 - e. **Extend personal influence.** Commanders are likely to be required to generate influence over domestic, international and host-nation decision-makers and audiences. Key to this is identifying the point, audience or actor where the most effective influence can be generated and maintained, underpinned by credible military capability where appropriate.
 - f. **Remain agile.** By remaining agile a commander is able to seize and retain the initiative, and maintain decision making advantage over adversaries, to exploit opportunities and reinforce success. Agility will improve resource effectiveness, since a commander will be able to identify changes required in the weight of effort. This will contribute to ensuring that opportunities created by success are exploited and that redundant activity is minimized.
- 3.7 **Locating the command.** How best to command a force, and from where, is an important part of execution. Identifying the location is the joint responsibility of the commander and staff and depends on the type of operation and the stage or phase. The most suitable position for the commander is always where they can best lead and make decisions. Communication and information systems (CIS) provides the means for commanders and their staff to access information, which in turn supports decision-making and issuing direction and guidance. CIS may also allow a commander choice of location (alongside considering the requirements of the operation and the prevailing situation) and it may allow them to be physically separated from their main headquarters (HQ). However, a commander's location should always allow them to:
- assess the situation and impose their will upon it;
 - communicate intent, direction and guidance;
 - access information to maintain understanding and make decisions;
 - leverage staff support for planning and decision-making; and

- operate as securely as possible, remaining free from physical and electronic attack as conditions allow (size of HQ, type of operating environment).

Section 3 – Operations management

Introduction

- 3.8 A critical function of the commander is to manage the joint operations area to assist in coordinating and synchronizing joint force actions. Commanders should strive to integrate military actions and coordinate activity between military and non-military actors to achieve coherency. However in many cases, the most that can be achieved may only be de-confliction.
- 3.9 **Coordination.** When two or more force elements operate in the same battlespace their activities should be coordinated, and where necessary, integrated. Where these activities are concurrent and cannot be separated, they should be subject to some form of control. The degree of control required depends on a range of factors, for example on the extent to which the force elements are required to interact, and is dependent upon the level of shared situational awareness across the joint force. Coordination and control may be based on interaction between organizations and are procedural in nature.
- 3.10 **Synchronization.** Synchronized actions, within the overall construct of orchestrated actions, is standard practice at the operational level. Synchronizing action often require force elements to agree and commit, in advance, to coordinating courses of action (COAs) to resolve anticipated conflict. Synchronized actions may comprise elements working independently (but known to each other) and/or elements working closely together. This approach enables the efforts of otherwise discrete force elements to be concentrated, at a time and place that is anticipated to be decisive; it does not necessarily optimize use of the battlespace nor provide a commander with maximum agility.
- 3.11 Dynamic coordination and synchronization of actions enables greater interaction between force elements, and the potential for better mutual support to achieve coherency across force elements. The benefits of this approach are clear: increased scope for mission command; enhanced operational tempo; more efficient operationsconduct ; and the opportunity to introduce confusion amongst the adversary. The attendant risks must be considered, such as that of autonomous action, for example in the absence of full situational awareness, leading to friendly fire.

Synchronizing actions requires significant staff planning and rehearsal, but has the benefit of reducing risks. Dynamic synchronization possibly offers greater rewards but relies heavily on the ability of force elements, and commanders at all levels, to respond effectively to changes in the operational situation. At all levels, dynamic coordination and synchronization requires communications and information systems to enable both situational awareness and effective command and control. Thus, operations management is facilitated through a combination of battlespace management and shared situational awareness.

Battlespace management

- 3.12 Battlespace management describes the necessary adaptive means and measures and procedures that enable the dynamic synchronization of activities in the battlespace. Battlespace management combines and integrates the elements of a joint force to accomplish the commander's intent and mission; it is thus a key enabler to the success of joint operations. Integrating force elements through battlespace management procedures enables coordination and synchronization according to the commander's priorities. Battlespace management is not an end in itself, but a process that facilitates and seeks to maximize operational effectiveness and minimize constraints and can contribute to reducing the risk of fratricide. A detailed discussion on battlespace management is at Annex C *Battlespace management, planning and execution*, however the main elements of battlespace management are:
- coordinating and synchronizing the activities of force elements, including non-NATO actors;
 - contributing to situational awareness and freedom of action; and
 - mitigating friction caused by the existence of boundaries and seams between force elements and between the joint force and other actors.
- 3.13 Battlespace management should involve all components and all national contingents operating in the joint operations area (JOA). Efforts should be made to include non-military actors, where relationships allow. This process includes actors from host nations, international organizations (IOs), non-governmental organizations (NGOs) and other governmental departments. Commanders should try to achieve at least unity of purpose with other such actors, even if they lack unity of command.
- 3.14 Battlespace management applies at all levels of operations. While different means and measures are relevant at the different levels, all activities require a degree of integration, coordination, synchronization and prioritization. Strategic battlespace

management considerations include diplomatic agreements for access and overflight. At the operational level, battlespace management focuses on issues such as competing demands for host-nation support. At the tactical level, boundaries may be drawn between areas of operation to integrate different force elements.

- 3.15 The extent to which inter-agency battlespace management measures are practicable, or can be formalized, will vary according to the situation. Friendly and neutral actors may be amenable to collaboration and to some integration if they understand that it will decrease risk to them. Measures should be adopted to at least deconflict military and non-military activities and all actors should be encouraged to consider cooperating in any process.

Situational awareness

- 3.16 The situational awareness needs of commanders and staffs will vary at each level and within and between HQ, although many of the systems and displays will be common. Interpreting and using data is a key consideration. Shared situational awareness allows friendly forces the knowledge of each other's location is, where adversary forces are, and the location of neutral agencies and bystanders, as well as their intentions and the freedoms and constraints they are operating under. In broad terms, the common operational picture (COP) comprises different geo-referenced layers, consisting of status, capabilities and possible intentions of own and adversary (as well as of other groupings of interest) posture and sustainability, important locations, critical infrastructure and actions within the JOA. Information on the physical environment (geography, meteorology, oceanography and hydrography)⁵² will also be important for planning purposes. A variety of tools can be used to engender understanding, aid de-confliction, and enhance synchronization.
- a. Commanders make decisions based on their understanding of the operating environment. Knowledge management and development, and information management processes provide timely and relevant information requirements in support of the comprehensive approach to planning, decision making and execution; to include all activities involved in identifying, collecting, filtering, fusing, processing, focusing, disseminating and using information.
 - b. Communications and information systems enable the transfer and sharing of situational awareness. Efficient picture management, including exploitation of information, is essential for maintaining situational awareness. If ineffectively

⁵² See AJP-3.11 *Allied Joint Doctrine for Meteorological and Oceanographic Support to Joint Forces* and AJP-3.17 *Allied Joint Doctrine for Geospatial Support* for detail.

- managed, the volume of information available may restrict a commander's situational awareness rather than enhance it. The CIS architecture must be integrated with command and control, intelligence and operational capabilities and comply with national and NATO legal restraints and security regulations.
- c. A COP is described as a single identical display of information relevant to an operating environment, shared by more than one command or system, that facilitates planning and assists all echelons to achieve situational awareness. Where integrated technology permits, a COP should be compiled. The COP may show information such as boundaries, last reported locations and the operational effectiveness of force elements; and assessed locations of opponents and other actors against a common geospatial and temporal reference. Operational commanders should understand the limitations of the data sources that feed a COP and that significant latency may exist with individual tracks, particularly in the maritime environment. Understanding the limitations of the COP will enable effective decision making and enhance situational awareness. During multinational operations, a coalition common operational picture is to be compiled from the tactical pictures of the battlespace. It then can be provided in a 'read only' format to designated recipients by the respective multinational headquarters. The method of provision depends on the level of interoperability amongst the participants.
 - d. Synchronization matrices, derived as output from the estimate process, have traditionally proved to be useful tools in showing the broad order activities that require to be sequenced, as well as indicating, at a glance, possible areas of de-confliction or uncertainty. In complex operating environments and operations, synchronization matrices may quickly become too large to manage as a single product and may need to be broken down, such as by phase, line of operation or actor, to maintain utility.

Section 4 – Information management

- 3.17 Information management (IM) processes information to gain understanding. It is a command-led activity requiring dedicated specialist support to manage an organization's information resources for handling data and information acquired by one or many different systems, individuals, and organizations in a way that optimizes access by all who have a share in that data or a right to that information. The role of IM is to provide a timely flow of relevant information that supports all aspects of planning, decision making, and execution; to include all activities involved in the identification, collection, filtering, fusing, processing, focusing, disseminating, and

using information. It is an essential process to receive, organize, store, control, and secure an organization's wide range of data and information in a manner that facilitates availability to relevant users, while preventing inadvertent disclosure of sensitive or proprietary information. IM is important for the commander's battle rhythm and the development and sharing of information to increase both individual and collective knowledge. It also promotes understanding of the operating environment and enables the commander and staff to better formulate and analyze COAs, make decisions, execute those decisions, and understand results from previous decisions. Effective IM improves the speed and accuracy of information flow and supports execution through reliable communications. The process is used to manage the organization's information resources and optimize access to information by all who need it. As the key joint force staff integrator, the chief of staff (COS) may be responsible for managing the IM process, while the communications system directorate of a joint staff ensures the operation and connectivity of the supporting CIS and processes. Many joint task force headquarters (JTF HQ) will have an IM officer and an IM plan, and may also form a joint IM board to serve as a focal point for information oversight and coordination. IM feeds the development and sharing of knowledge based information products.

- 3.18 A JTF HQ requires a continuous flow of quality information to support operations. Information flow strategy is developed to ensure that this quality information gets to the right place on time and in a form that is quickly usable by its intended recipients. To that end, the effective flow of information requires the information to be:
- a. **Right time and place.** The requirements for specific types of information often are predictable. Positioning the required information at its anticipated points of need speeds the flow and reduces demands on the communications system (e.g. using portals and folders to post required information).
 - b. **Mobile.** The reliable and secure flow of information must be commensurate with the JTF HQ's mobility and operating tempo. Information flow must support vertical and horizontal data sharing (e.g. collaborative planning).
 - c. **Accessible.** All levels of command who have a need to know must be able to pull the information they need to support concurrent or parallel planning and mission execution. If possible, channel information to the required user via automated means, reducing the need for manual exchange (e.g. graphic depiction of forces in a COP).
 - d. **Fused.** Information is received from many sources, in many mediums, and in different formats. Fusion is the logical blending of information from multiple sources into an accurate, concise, and complete summary. The main goal of IM is to reduce information to its minimum essential elements and in a format that can

be easily understood and acted on (e.g. threat assessment disseminated in graphic form on an automated COP system).

- 3.19 **Commander's critical information requirements.** The commander sets the tone for the entire command by establishing priorities for information requirements and dissemination. The commander defines what information is needed and how it should be delivered. Additionally, the commander focuses the staff by designating certain information as critical. These commander's critical information requirements (CCIR) will change over time as the situation continues to evolve. Properly developed information requirements ensure that subordinate and staff effort is focused, resources are employed efficiently and decisions can be made in a timely manner. Information requirements focus on friendly forces, the operating environment or the adversary. The commander will identify only those information requirements, which are particularly important to him to maintaining situational awareness and planning future activities. Therefore CCIRs are limited since they must be linked to the critical decisions the commander anticipates making. This focuses the commander's subordinate commanders' and staff's planning and collection efforts.
- 3.20 Commanders use CCIRs to help them confirm their vision of the area of operations, assess desired effects and to support a decision to accomplish their mission or to identify significant deviations from that vision due to, for example, adversary actions. CCIRs help the commander to tailor their command and control organization. They are central to effective information management, which directs the processing, flow, and use of information throughout the force. While the staff can recommend CCIRs, only the commander can approve them. CCIRs are continually reviewed and updated to reflect the commander's concerns and the changing situation.
- 3.21 **Knowledge sharing and understanding.** Information can be collected, processed, and stored as structured or unstructured content, such as in reports and databases. However, it must be shared to be of value to decision makers. It must also complement IM with processes to create an organizational culture that encourages and rewards knowledge and information sharing to achieve shared understanding. Knowledge sharing is characterized as an activity within a learning environment, rather than defined as a purely systematic process with inputs and outputs.
- a. For example, the free exchange of ideas between the commander and staff that should typify early operations design is an activity that shares the individual knowledge of numerous functional experts and promotes shared understanding. In a similar way, the after-action sessions that a commander conducts with subordinate commanders and staff during and following an operation create an

environment of learning in which participants share knowledge and increase their collective understanding.

- b. Certain products are particularly relevant to understanding. For example, the commander's intent is a knowledge-based product that commanders use to share their insight and direction with the joint task force (JTF). The intent creates shared purpose and understanding, provides focus to the staff, and helps subordinate and supporting commanders act to achieve objectives without further orders, even when operations do not unfold as planned. Likewise, lessons-learned databases are knowledge-based products that help users avoid previous mistakes and adopt proven best practices. These databases exemplify how IM and decision-support processes can improve future operations by sharing knowledge gained through experience.
- c. Another aspect of knowledge sharing and understanding is collaboration, which enhances C2 by sharing knowledge and aiding the creation of shared understanding. Although the value of face-to-face interaction is indisputably preferred, capabilities that improve long-distance, asynchronous collaboration among dispersed forces can enhance both planning and execution of joint operations. A collaborative environment is one in which participants are encouraged to solve problems and share information, knowledge, perceptions, ideas, and concepts in a spirit of mutual cooperation that extends beyond the requirement to coordinate with others. This is particularly important in relationships with interorganizational partners, since their objectives and perceptions of the desired end state will not always coincide with the military's. Collaboration requires sharing of information with host nation, relevant agencies, interorganizational partners, NGOs, and members of the private sector in accordance with NATO extant regulations⁵³. Commanders should determine and provide guidance on what information needs to be shared with whom and when.

⁵³ See AC35-D1040 REV 6 *Supporting Document on Information and Intelligence Sharing with non-NATO Entities* for detail.

Section 5 – Joint task force headquarters management processes

3.22 **General.** The commander and staff use a number of processes and procedures, such as joint planning and targeting, to support numerous JTF HQ requirements, activities, and products. IM, the JTF HQ decision cycle, and battle rhythm are especially important for the efficient management of everyday JTF HQ operations. The IM process facilitates decision-making by improving the speed and accuracy of information flow as well as supporting execution through reliable communications. The battle rhythm is a routine cycle of command and staff functional events intended to synchronize HQ actions and activities.

3.23 **Joint task force headquarters decision cycle.** The JTF HQ decision cycle is a method that depicts how command and staff elements determine required actions, codify them in directives and orders, execute them, and monitor their results. The decision cycle has four phases (see Figure 3.1).

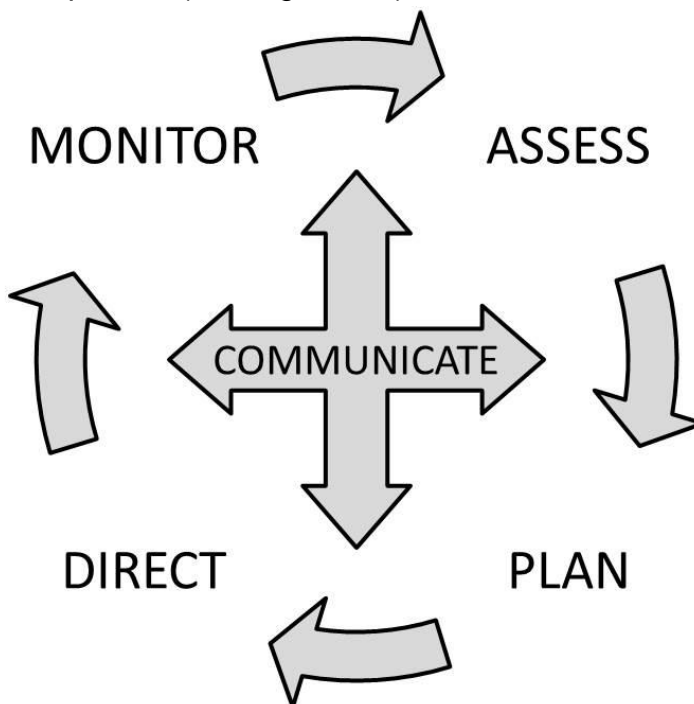


Figure 3.1 – Joint task force headquarters decision cycle

- a. **Monitor.** Monitoring involves measuring ongoing activities that may impact the operating environment or impact ongoing or future operations. The baseline for this measurement is the plan which allows the staff to assess the current status against the one envisioned in the plan. The commander and staff identify where the current situation deviates from the one envisioned in the plan. Although staff

sections monitor their individual staff functions to maintain current staff estimates, the preponderance of the JTF HQ monitoring function is conducted by the centres (see para a), and is depicted visually through the COP display.

- b. **Assess.** Within the JTF HQ decision cycle, assessment is determining the impact of events as they relate to overall mission accomplishment. This is the operations assessment process. Fundamental to operations assessment are judgments about actual progress in designated mission areas as measured against the expected progress in those same mission areas. These judgments allow the commander and the staff to determine where adjustments must be made to operations and serve as a catalyst for planning. Ultimately, operations assessment allows the commander and staff to keep pace with a constantly evolving situation while staying focused on mission accomplishment.
- c. **Plan.** In the planning portion of the decision cycle, the commander and staff make adjustments to the current plan or develop new plans, branches, or sequels with the purpose of successful completion of the overall mission.
- d. **Direct.** The commander directs actions to ensure that current orders and directives are completed as intended. This direction is done with the broader purpose of accomplishing the overall mission. Tools like the commander's intent and CCIRs assist the commander in this role. The preponderance of the commander's directing function is conducted by the joint operations centre (JOC).

3.24 **Battle rhythm.** Effective operations require synchronizing strategic, operational, and tactical processes, to ensure mission planning, preparation, and execution. This process, called battle rhythm, is a routine cycle of command and staff activities intended to synchronize current and future operations in accordance with the JTF HQ decision cycle.

- a. A battle rhythm sequences actions and events within a JTF HQ that are regulated by the flow and sharing of information to support all decision cycles. It is essentially a schedule of important events that should also be synchronized with other levels of the command. The battle rhythm is commander-centric and all efforts of the staff must be directed toward supporting decision-making.
- b. The JTF HQ battle rhythm consists of a series of meetings, report requirements, and other activities. These activities may be daily, weekly, monthly, or quarterly requirements. Inputs and outputs of the various events should logically support each other as well as decision-making. Typically, the JTF HQ battle rhythm is managed by COS. This includes establishing and monitoring the battle rhythm to ensure that it effectively supports planning, decision-making, and other critical

functions. There are several critical functions for a battle rhythm; these include (but are not limited to) the following:

- provide a routine for internal staff interaction and coordination;
 - provide a routine for interaction between the commander and staff;
 - synchronize staff organizational activities; and
 - facilitate planning by the staff and decision-making by the commander.
- c. Many factors influence the establishment of a battle rhythm. Subordinate commanders are responsible for linking the planning, decision, and operating cycles of their command to those of the higher HQ and should synchronize their unit battle rhythm with that of the higher HQ. Like any process, there must be a well-understood abbreviated process to the rhythm to enhance responsiveness. To prevent confusion, the COS, usually through the JOC, closely manages this aspect. Additional meetings, briefings, request for information and producing serious incident reports are all used as appropriate. The battle rhythm is influenced by multiple factors.
- (1) **The higher level HQ battle rhythm and reporting requirements.** The battle rhythm must balance the requirement to inform Supreme Allied Commander Europe's (SACEUR) battle rhythm with the daily battle rhythm of the components. This will be particularly complicated during multinational operations where the sometimes widely varying time zones cause significant dislocation, particularly as the lead nation's requirements will always come first.
 - (2) **Political considerations.** Because military activity is conducted under political authority, the flow up and down the chain of command to politicians must be accurate and timely. However, military networks need to be highly responsive to near real-time media reporting, which enables politicians to be aware of incidents before the formal chain of command can draw in all the relevant facts. For the Military Committee (MC) to meet its remit to both inform and advise political authorities, as well as take the decisions appropriate at that level, the COS has to ensure the staff provides information in a timely manner up through SACEUR to the MC.
 - (3) **International influences.** The multinational nature of the operating environment adds to the briefing requirement. The timing of briefings to international authorities or organizations such as the United Nations, Organization for Security and Cooperation in Europe, as well as to coalition

partners, will have significant influence on the commander's personal schedule, to the extent that it can become their principal activity.

- (4) **Shift changes.** Shift changes should take place within individual cells in the period after the commander's brief. This ensures a smooth transition between outgoing and incoming staff and the maintenance of shared situational awareness.
- 3.25 **Battle rhythm development.** Battle rhythm should be designed to ensure there is sufficient periods of unscheduled time to enable commanders and staff the ability to think and work; not constrained by meetings and deadlines. There should be dedicated time periods for staff interaction with the commander, for battlefield circulation, and for other staff work. The detailed JTF HQ battle rhythm starts with identifying those events that require commander and staff interaction. Develop a logical arrangement of events around the JTF HQ decision cycle by adding all key internal events requiring commander participation. These also relate to the JTF HQ staff and the components and should show all decision boards as culminating events.
- 3.26 **Battle rhythm considerations.** The reason for having a battle rhythm event should be understood with a clearly defined purpose. Inputs and outputs must be identified, providing a rationale and linkage to other battle rhythm events. Events that provide input to follow-on events obviously, should occur beforehand. Not only is it important for the order of events to be logical, there should also be sufficient time for preparation between events. This ensures that the outputs from one event are synthesized and properly staffed before they are used for follow-on battle rhythm events. Battle rhythm events are not conducted simply by themselves. If a battle rhythm event does not contribute to the decision-cycle or improving situational awareness then it most likely should not be part of the battle rhythm. Once established, discipline of the battle rhythm is necessary.
- 3.27 **Harmonization with component commands' battle rhythms.** The operational tempo of each component will vary, for example the joint force air component (JFAC HQ) achieves high tempo by maximizing sortie rate. The targeting process should include time for consultation with authorized decision makers if target sets are not already approved in advance due to the fact that target sets could include those with strategic as well as operational and tactical significance. Thus, air operations and their associated air tasking orders are typically planned and executed as a 72 hour cycle (48 hour planning period and 24 hour execution period). Other components have different cyclical requirements and action times and the extent to which the JTF HQ can coordinate and synchronize the disparate component cycle rates will contribute

greatly to force synergy. There is clearly more to this aspect than simply allocating slices of the daily battle rhythm not already used up, and the various liaison networks have a significant role to play in anticipating requirements and in thinking laterally.

3.28 **Cross-functional organizations that support the joint task force headquarters staff as part of the battle rhythm.** These functional integrating structures provide the forums for bringing together members of the staff to focus on specific requirements to provide recommendations to the commander. They make staff coordination more routine, increase cross-functional integration, facilitate monitoring, assessment, and planning, provide venues for commander’s decisions, and allow for the management of current operations, future operations, and future plans. These can be both physical venues or virtual collaboration and participation with other stakeholders and headquarters. As a practical matter, the staff should only establish and maintain those cross-functional organizations that enhance planning and decision-making within the HQ. They establish, modify, and dissolve these entities as the needs of the JTF HQ evolve. The cross-functional organization of the staff must facilitate the planning and decision-making processes that are crucial to the JTF HQ

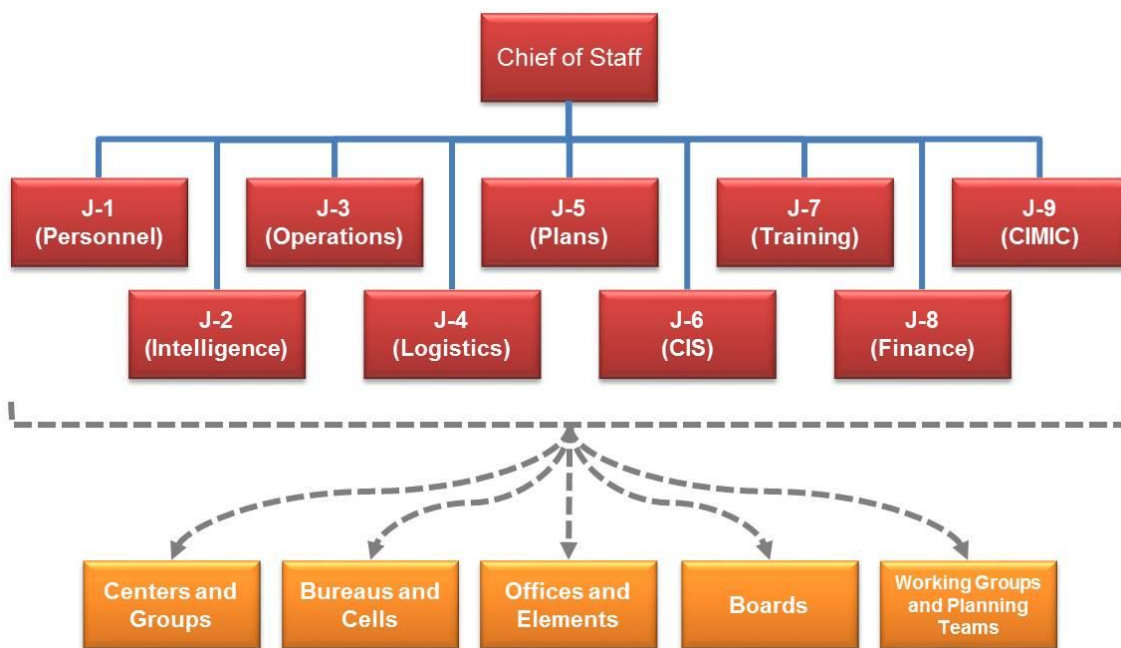


Figure 3.2 – Cross functional staff

success. Figure 3.2 is a notional depiction of the basic relationships within the cross-functional staff structure. Generally, these teams are established and execute planning under the supervision of the chief of staff. As the planning teams move through joint

planning process, they ultimately gain guidance, intent, and decisions via designated decision boards. The commander is kept advised of ongoing, near-term planning initiatives through appropriate mechanisms (e.g., CCIRs, serious incident reports, or battle update assessments).

- a. **Centre.** Centres are permanent, cross functional staff integrating organizations. A centre is an enduring functional organization, with supporting staff, designed to perform a joint function within the JTF HQ. Often, these organizations have designated locations or facilities. Examples of centres include the JOC and the joint personnel recovery centre. The JOC is the most familiar centre typically found in a joint HQ with dedicated manning and facilities to integrate the activities of the staff for current operations. The JOC focuses on supporting the direct, monitor, assess, and plan functions for the commander.
- b. **Group.** A group is an enduring functional organization formed to support a broad function within a JTF HQ. Normally, groups within a JTF HQ include a Joint Operations Planning Group (JOPG) that manages JTF HQ planning. JOPG functions include leading designated planning efforts, resourcing and managing subordinate planning teams, and coordinating planning activities with other staff directorates.
- c. **Cell.** A cell is a subordinate organization formed around a specific process, capability, or activity within a designated larger organization of a JTF HQ. A cell usually is part of both a functional and traditional staff structures. An example of a cell within the traditional staff structure could be a fire support coordination cell subordinate to the operations branch within the J-3. An example of a cell within a functional staff structure could be a current operations cell within the JOC.
- d. **Bureau.** A bureau is a long-standing functional organization, with a supporting staff designed to perform a specific function or activity within a JTF HQ. A joint visitors bureau is an example of a bureau common to many JTFs.
- e. **Office.** An office is an enduring organization that is formed around a specific activity within a JTF HQ to coordinate and manage support requirements. An example of an office is the joint mortuary affairs office.
- f. **Element.** An element is an organization formed around a specific function within a designated directorate of a JTF HQ. The subordinate components of an element usually are functional cells. An example of an element is the joint fires element and the joint intelligence support element.
- g. **Boards.** A board is an organized group of individuals within a JTF HQ, appointed by the commander (or other authority) that meets with the purpose of gaining

guidance or decision. Its responsibilities and authority are governed by the authority that established the board. Boards are chaired by a senior leader with members representing major staff elements, subordinate commands, liaison officers, and other organizations as required. Two different types of boards are usually formed.

- (1) **Command board.** A command board is chaired by the commander, and its purpose is to gain guidance or decision from the commander.
 - (2) **Functional board.** A functional board's purpose is to gain functionally specific guidance and decisions from the commander (or designated representative) based on a staff recommendation. These boards often focus on synchronizing a particular function, allocating resources between ongoing or future operations, or maintaining continuity of purpose across ongoing operations.
- h. **Working group.** A working group (WG) is a permanent or ad hoc organization within a JTF HQ formed around a specific function whose purpose is to provide analysis to users. The WG consists of a core functional group and other staff and component representatives.
 - i. **Planning team.** A planning team is a functional element formed within the JTF HQ to solve problems related to a specific task or requirement. Planning teams and WGs are complementary. WGs enhance planning through their provision of functional staff estimates to multiple planning teams. In contrast, planning teams integrate the functional concepts of multiple functional WGs into plans and orders. The planning team is not enduring and dissolves upon completion of the assigned task.

3.29 Typical battle rhythm events

- a. **The commander's brief.** The commander's brief is ordinarily the start of the daily cycle, setting the foundation for staff effort and the basis of briefing over the next period. The commander is briefed on the last and next 24 hours in detail, and the following 48 hours in outline. It is given by the outgoing watch and should be attended by all available staff. It usually concludes with the commander who may wish to emphasize certain aspects. Once the commander has departed, the COS should give further points of guidance and direction. Briefing material prepared for the commander's brief is usually archived for the official commander's war diary.
- b. **Joint coordination board.** The joint coordination board is the commander's principal meeting. Its aim is to assist the macro aspects of JTF activity and effects synchronization, specifically to issue commander's priority guidance across the

components, and to resolve potential areas of conflict. It comprises as a minimum the commander, COS, component commanders (in person, by video teleconference, or represented by their senior liaison officers), political advisor, legal advisor (LEGAD), chief JOC, the strategic communications advisor and other individuals as required.

- c. **Assessment board.** The assessment board is the formal forum where the operations assessment is presented to the commander for them to endorse. The assessment board ordinarily meets at critical junctures when an operational assessment dictates or when delivering an assessment outside the JTF. The assessment board should culminate in a recommendation(s) to the commander. Once endorsed, these recommendation(s) are tasked to the joint coordination board WG, the JOPG or a functional area for planning. The roles and responsibilities of the assessment board include:
- agreeing upon a common understanding of the state of an operation;
 - synchronizing assessment products with the requirements of higher HQ;
 - allowing for commander's direction and guidance on moving the operation forward; and
 - approving assessment products for dissemination outside the HQ or outside NATO.
- d. **Joint Operations Planning Group meeting.** The JOPG is the principal working level planning group for JTF HQ. The aim of the JOPG meeting is to review the operation plan, monitor current force planning activity, approve completed force level plans and initiate additional direction for contingency planning. All staff division heads attend with specialist advisors as necessary.
- e. **Operational planning teams.** Operational planning teams (OPTs) are small planning groups focused on specific, or specialist planning activity, with tailored membership. A number of OPTs may run concurrently with leadership devolved to the most appropriate staff branch. Following the break-up of the JOPG, the headquarters may form OPTs to staff discrete aspects of the operation. They will report to the COS with recommendations within an established deadline.
- f. **Joint targeting coordination board.** The commander will establish a joint targeting coordination board with representatives from the JTF HQ and all components and, if required, national liaison representatives. Typically the joint targeting coordination board reviews target information, develops targeting guidance and priorities while preparing and refining joint target lists to recommend to the joint force command (JFC). During operations, the joint targeting

coordination board will also maintain a restricted target list. The joint targeting coordination board is the primary agency for synchronizing and managing joint targeting efforts. It will: prepare target lists for joint coordination board review and, if necessary, JFC approval; validate changes in the targeting database; and coordinate target material production, as developed through the targeting process.⁵⁴

- g. **Information activities coordination board.** The information activities coordination board provides a forum for coordinating, de-conflicting and monitoring all information environment related plans and activities⁵⁵. It ensures information activities are coherent and synchronized with other actions (potentially) affecting the information environment. The information activities coordination board provides the forum for collective coordination of the JFC's information activities. Within the scope of its assigned functions, the information activities coordination board will initially coordinate target nominations related to information and information systems to facilitate subsequent harmonization at the joint targeting coordination board. It will also provide advice on possible effects in the information environment created by other military actions. It also liaises with all functional areas especially with J2, J3, J5, public affairs, civil-military coordination and the LEGAD and with subordinate commands. Furthermore, the information activities coordination board coordinates with outside agencies.
- h. **Joint collection management board.** J2 chairs the joint collection management board to coordinate collection activities between components, contributing nations, and complementary national agency activity. The overall purpose of the joint collection management board is to review, validate, de-conflict and prioritize all joint intelligence, surveillance and reconnaissance (JISR) collection requirements and assigned capabilities. The joint collection management board seeks to prioritize, coordinate and synchronize the JISR activity between the joint level and the subordinate formations (land, maritime, air, and special operations forces components). At the joint level, subordinate formation component collection management elements participate in the joint collection management board. The board should include, but is not limited to, representation from targeting, current operations, current plans, future plans, electronic warfare, imagery intelligence, signals intelligence, human intelligence, psychological operations, information operations, engineers and CIMIC amongst others. At the joint level, key intelligence requirements management and collection management elements

⁵⁴ See AJP-3.9 *Allied Joint Doctrine for Joint Targeting* for detail.

⁵⁵ See AJP-3.10 *Allied Joint Doctrine for Information Operations* for detail.

inside the intelligence staff and all supporting/supported components should attend.

Chapter 4 – Operations assessment

Section 1 – Purpose

- 4.1 The purpose of operations assessment is to inform the commander if the operation is being executed as planned and if the operation is achieving the desired results. Operations assessment is critical because no planning process can guarantee success, and progress must be continually reviewed against achievement of objectives so that plans can be adjusted as necessary. An important element of operational art, operations assessment has to be considered at the outset of an operation, continuously throughout an operation and periodically. It must be done formally to support the preparation of the periodic mission report and at an operation's conclusion.
- 4.2 Operations assessment provides evidence for adjustment to the plan, decision-making and to provide formal feedback on the progress and results of an operation. Results of assessment may also inform the lessons process and deliver input to risk management. Whichever process is adopted it requires sound military judgement at its heart and cannot become mechanistic. Operations assessment should maintain the differentiation between performance and effectiveness but avoid adding unnecessary burden on staffs by compelling them to develop a huge amount of quantitative measurements and to collect the supporting data.
- 4.3 Beyond measuring progress, informing decisions and focusing planning there are several other key reasons for conducting operations assessment.
 - a. Operations assessment uses structured methods to gather and collate evidence over the duration of the operation and preserves an institutional memory that can be used to learn from each other's experiences.
 - b. Operations assessment can provide credible indications that can be used to support the commander's information operations and help identify actions to counter adverse media or information used by an adversary.
 - c. The structured process enables the military to keep track of and share information with other non-military actors resulting in a better understanding of the interconnections and interdependencies between military and non-military activity and how they should be coordinated and synchronized. This supports a comprehensive approach.

Section 2 – Stages of operations assessment

4.4 The operations assessment process involves four stages:

- assessment design and support to planning;
- development of a data collection plan;
- data collection and treatment; and
- analysis, interpretation and recommendations.

4.5 Assessment design and support to planning and development of a data collection plan will be conducted during operations planning, while data collection and treatment, and analysis, interpretation and recommendations will be conducted continuously during execution. All stages of the operations assessment process require cross headquarters coordination but the analysis and interpretation of data and the development of recommendations, especially, require the contribution of subject matter expertise from all staff functions and special advisors. The inclusion of an assessment working group in the battle rhythm will facilitate this contribution.

4.6 Operations assessment feeds the commander's decision cycle through the assessment board. Each component channels its assessment up the chain to the commander joint task force (JTF). The commander JTF is responsible for developing guidance on the conduct of operations assessment. The output of the operational level assessment will feed the strategic commander's operations assessment process. Operations assessment is conducted at a timetable that best meets a commander's needs, based on the scale, complexity and tempo of operations.

Section 3 – Operations assessment at the strategic, operational and tactical level

4.7 At the military strategic level, operations assessment involves continually measuring the state of identified systems. Measuring system states can begin as soon as the key elements for monitoring are identified, even before a plan is developed. This establishes a baseline and supports creating effects and achieving objectives. This results in an overall evaluation of progress towards the North Atlantic Treaty Organization end state and the subsequent development of conclusions and recommendations that support military strategic decision making for the strategic military Commander, and informing the North Atlantic Council.

- 4.8 At the operational level operations assessment focusses on the desired effects and is aligned with the planning horizons to support both operations synchronization (mid-term planning) and operations planning (long-term planning). This distinction is not a fundamental delineation between a mid-term and a long-term operations assessment but rather a difference in emphasis. An assessment of progress towards the end of the current phase or upcoming decisive conditions is required to support course of action development or adjustment and, possibly, branch planning; whereas an assessment of progress towards the achievement of objectives is required to support planning for sequels, termination and transition.
- 4.9 At the tactical level operations assessment measures the achievement of planned decisive conditions, actions, tasks or activities for each particular component.

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Chapter 5 – Termination

Section 1 – Introduction

- 5.1 Alliance operations have both political and military goals. Military activities will usually not suffice to attain the end state. While every operation is directed towards a goal, at some point military action is no longer the main effort. It may be necessary for one mission to change the operations theme or terminate and be replaced by another as part of a wider strategic plan. The commander should focus on what happens when the objectives have been achieved, how to preserve what has been gained, and how to ensure it endures. As the objectives may be achieved before the end state is attained, a follow-on force or adjusted mission may be required.

Section 2 – Termination

- 5.2 Operations should be planned and conducted with a clear understanding of the end state and the corresponding acceptable conditions that should exist to end operations. It is the strategic commander's responsibility to make the appropriate examination and to determine termination criteria which describe military and non-military conditions that justify the recommendation to terminate operations.
- a. Termination criteria influence the elements of operations design as they enable development of military objectives. Termination criteria describe the standards that should be met.
 - b. Termination criteria should account for a wide variety of operational tasks that the joint force may need to conduct, to include disengagement, force protection, transition to post-conflict operations, reconstitution and redeployment.
 - c. Once approved, the criteria may change. It is important for commanders and staff to monitor potential changes as they may result in a modification to the military objectives as well as the commander's operational approach. As such, it is essential for the military to maintain a dialogue between actors.

Section 3 – Transition

- 5.3 Transitioning is a conditions-based activity. Transition can take several forms, some of which are:
- transition from one North Atlantic Treaty Organization (NATO) force to another;

- transition from NATO to non-NATO military forces;
 - transition from NATO to a United Nations non-military force; or
 - transition from NATO to host nation (HN) forces or civilian control.
- 5.4 Transition activities comprise the progressive transfer of functions, supporting institutions, infrastructures and responsibilities between actors to reach an enduring level of capability for the HN so that it is not dependent on a significant operational NATO military contribution. The aim is to transition all the functions performed by the joint force in an orderly fashion. Some functions may develop into activities conducted by a combination of Alliance and local government and security as transition advances. Once all transitions are complete, the Alliance force can depart or remain, but under a new or revised mandate.
- 5.5 The commander joint task force (JTF) should plan for termination and the transition phase as soon as possible. From the start of operations planning, activities aimed at initiating and shaping the transition process may be considered. Forces involved should work towards an effective transfer of responsibility to ensure coherence. Transitions between military forces may take the form of relief-in-place, or transition-by-function, such as medical and engineer services.
- 5.6 Transitions are often a period of risk and uncertainty in which gains made by the Alliance and other actors can be reversed if the correct structures are not in place to underpin a long-term sustainable solution. Poorly timed and ill-conceived transitions will generally foster and perpetuate instability. Regions or institutions may transition at different times and this should be recognized and incorporated into the transition plan to ensure success. The transition plan will be based on realistic, accurate and shared understanding of the capabilities, responsibilities and resources of the participants.
- 5.7 Security transition strategies must contribute to sustaining security in the post-transition environment. The transition process is part of a longer-term reform and transformation process that will be managed by other actors. The Alliance should be prepared to provide security capabilities until they can be relieved by local forces or other actors.
- 5.8 Transitions are negotiated processes with the HN and other actors. This makes them non-linear and dependent on HN political processes and interests, which may change over time. Flexibility is vital, requiring those planning transition activities to identify the range and limits of acceptable outcomes and to work within those limits to develop the transition plan.

- 5.9 Transition activities are likely to take place in a multilateral, inter-agency setting, with NATO being one of several actors involved. The ability of any single actor to manage transition activities as a whole, or to define its outcomes, will be limited. Therefore, no one actor will have the freedom to plan and execute transition activities alone. In particular, NATO must cooperate with those agencies involved in activities that will outlast any significant military presence. There are three key aspects that must shape any approach to transition activities.
- a. Transitions are a multinational and inter-agency process. Transitions typically occur within multinational and inter-agency environments, with multiple actors and agencies working within a HN on security, governance and rule of law. This environment creates dependencies between actors.
 - b. Transitions are a negotiated process. All actors, including the wider population, will have a view on the shape of any post-transition security environment – and such views may conflict. Negotiating the shape of this future security environment is more important than solely focusing on technical capability building. Commanders must develop a flexible, sustainable, technically-sound and politically-sensitive transition approach. Simple, flexible plans will allow greater resilience to any shocks or setbacks and commanders should aim for an acceptable range of outcomes. Understanding what defines this acceptable range is a key element of any transition activities planning.
 - c. Transitions are informed by operations assessment. Monitoring the progress of transition activities (including perceptions, relationships and behaviours) is vital to enable commanders to identify whether they have achieved their objectives or to adjust their activities as necessary. As a result, initial transition terms may be re-evaluated.

Assessing transition activities

- 5.10 Assessing transition activities that emphasizes continuous learning and analysis is required to adapt planning to the transition environment. Assessment frameworks should allow progress to be tracked with risks and issues being recognized and addressed early. Markers should be identified to detect and assess development progress. Security transition assessment should comprehensively consider related HN systems to promote and facilitate synchronization, coordination and integration. Moreover, identifying decisive conditions will assist in setting assessment and transition activities. Without a holistic approach to assessment, elements of transition activities may become uncoordinated, especially if multiple actors are involved.

- 5.11 Engaging with multinational and inter-agency actors, as well as those within the HN, provides effective means for building shared ownership and understanding of transition activities. Commanders must consider (and review) if the transition activities and the way in which NATO engages in them accord with the key aspects of a successful transition.

Effective transition activities

- 5.12 Transitions planning should enable commanders to both track specific progress against transitions plans and monitor the way in which partners are behaving and engaging. Commanders should consider the following:
- a. **Political primacy and focus.** Those involved in transition activities must be aware of the political situation, maintaining a political focus responsive to the internal politics of the HN while being embedded within the international environment and wider political context.
 - (1) **Flexibility.** Transition plans must accommodate uncertainty and be capable of flexible adaptation to a changing political context. Commanders should be prepared to react to change and remain flexible so that NATO can respond to opportunities or threats as they arise.
 - (2) **Identifying and understanding what motivates actors.** Transitions incorporate multiple actors and the interests of these groups and their sub-groups may be disputed. Transition initiatives must be considered in the context of their impact on the motivations and interests of these different actors.
 - (3) **Balancing international and indigenous knowledge.** NATO and other international actors can offer specific capability and technical knowledge while HN actors will have a more nuanced understanding of social structures, and appropriate local solutions. Locally-influenced solutions are likely to be more durable than those designed solely by international actors.
 - b. **Legitimacy.** It is important to specify what legitimacy entails and in whose eyes; developing domestic legitimacy provides long-term stability. Without legitimacy, transition activities may lack popular support and the broader political process could be undermined and will therefore be less likely to endure.
 - c. **Sustainability.** Longer-term success will rely on developing sustainable models and organizations that can provide effective day-to-day security while understanding the implications of these actions on the overall population. Sustainability should therefore be examined with regard to politics, organizations,

processes and resources. Sustainable balanced security institutions need to develop, and legal processes must be sustainable by the HN. As security transitions are frequently resource-intensive periods for the HN, resources may need to be sustained post-transition, including the provision of financial support or training⁵⁶.

- d. **Communication strategy.** Transition activities must be supported by a communication strategy that creates an accurate understanding of NATO's actions and intentions among audiences in support of NATO's interests and objectives.

Transition risks

5.13 Transition activities comprise an element of risk. Impact may extend beyond the tactical and operational levels. Commanders at all levels should consider the following risks when planning and assessing transition activities:

- a. **Timing.** Transitions may occur before actors feel fully confident and capable. The time required for capability and legitimacy to develop will need to be balanced with the risks that emerge from not achieving key security goals. Transitioning too soon can lead to deterioration in security and, ultimately, strategic mission failure. Premature transition activities may lead to a requirement to re-engage. Delayed transition activities may result in increased dependency.
- b. **State instability.** The political settlement and elements of the state may remain vulnerable for some time both during and after transition activities.
- c. **Human rights abuses.** Where parties to the conflict have been responsible for human rights abuse and Law of Armed Conflict infringements, the risks of retributive violence must be carefully assessed and mitigated. Abuse within the security and justice system can further undermine governance and hamper the transition and recovery. The risks are highest where integrating former combatants into the security apparatus is taking place or where state institutions, as well as conflicting parties, behave in a predatory manner towards the civilian population.
- d. **Conflict of interests.** Tensions may emerge regarding the scope and vision for transition among HN parties, neighbouring countries and international actors engaged in the transition. These interests must be carefully negotiated and managed.

⁵⁶ See AJP-3.16 *Allied Joint Doctrine for Security Force Assistance* and AJP-3.22 *Allied Joint Doctrine for Stability Policing* for detail.

- e. **Legitimacy.** If transition activities are not seen as legitimate, it is unlikely to endure. Those engaged in transition activities should therefore consider the implications of any choices they make on the legitimacy of their HN counterparts and support developing their legitimacy wherever possible.
- f. **Pursuing own political interests.** Powerful actors may seek to use the transition to further their own or their group's political purposes. This will undermine the legitimacy of the HN government and the transition process, and may ultimately lead to a return to violence or, in extreme cases, security sector collapse.

Section 4 – Post termination activities

5.14 **Redeployment.** The redeployment of forces⁵⁷ after termination of an operation is a highly complex political, military, economic and environmental matter. It is not simply a case of reversing the deployment plan, but rather a distinct operation in its own right. Redeployment comprises three phases at the minimum: planning, preparatory activities and execution. Redeployment may be directed when operations have terminated or higher authority directs movement of the assigned force. The joint force command should give the same considerations to redeployment as for deployment in regard to phasing of command and control (C2) and the desired order of departure. Specific enablers may deploy to the joint operations area (JOA) to help close locations, assist with drawing down support activities and provide specialist assets, skills and advice to redeploy personnel and materiel. Contractors may often deliver this function and early planning and integration can enable this. Functions could include:

- port of embarkation activities;
- removing temporary infrastructure;
- repackaging or disposing materiel and ammunition;
- cleaning and depollution to an appropriate standard; and
- preparing equipment for rearward movement.

Withdrawing capabilities from the joint operations area needs to be synchronized with the departure of:

- personnel;
- materiel; and

⁵⁷ See AJP-3.13 *Allied Joint Doctrine for the Deployment and Redeployment of Forces* for detail.

- deployed contractors.

Redeployment consists of the four stages disengagement, rearward movement, staging and dispatch within the JOA, and strategic redeployment from the JOA to the national location. Disengagement is the first stage of redeployment, in which a unit ceases operations, prepares its infrastructure for handover or remediation and prepares its personnel and materiel for rearward movement. Rearward movement, staging and dispatch and strategic movement should preferably be conducted in a permissive environment, with adequate force protection measures in place.

- 5.15 Redeployment planning is directed towards the ordered and efficient movement of forces (units or individuals) and equipment out of the JOA. Redeployment planning discusses recovery planning, including tasks, responsibilities and coordination.
- 5.16 One of the most important factors in planning the redeployment is timing. It will be extremely difficult to formulate a redeployment plan before the end state has either been attained or subsequent operations have been determined. Equally, it will reflect badly upon the conduct of the operation if the redeployment is seen to be a rushed, poorly planned affair. Therefore, it is vital that it is treated in the same thorough manner as the deployment and adequate time is given to its planning and preparation and redeployment should be considered from the beginning of the operation.
- 5.17 **Planning factors.** There are several factors requiring consideration during redeployment planning.
- a. Clear and detailed operational and logistic requirements to determine the scale of the redeployment.
 - b. Establishing a planning team.
 - c. Residual commitments, for example specialist logistic personnel, may remain in the JOA in an advisory capacity, e.g. to help reconstruction.
 - d. 'Earliest move' and 'All out by' timings should be clarified at the earliest stage to identify lead times and enable strategic lift planning to proceed.
 - e. Establishing specialist teams to staff the hand-over of HN assets and to coordinate termination of contracts. If the JTF has relied upon host-nation support, then a duty of care to the hosts exists. Every effort must be taken to ensure that environmental, political or financial difficulties do not degrade the relationship with the HN.

- f. Additional enabling force elements and specialists may be required to deploy to the JOA to facilitate the redeployment. These will require force generating, deploying and redeploying.
- g. Identifying the strategic movement assets to be made available by the troop-contributing nations.

5.18 **Command and control planning.** Irrespective of how well the operation was conducted, a poor redeployment may be the lasting image of the operation. There may be sensitivity about when and how planning is conducted, and its effects on own forces, local civilian and military morale. HN and multinational partners should be taken into account. It is essential that the C2 of the redeployment is planned in advance and given careful consideration. Supreme Allied Commander Europe will retain operational command (OPCOM) of all assigned forces (except for nations non-delegating OPCOM due to specific restricted agreements) until transfer of authority to the different contributing nations. The commander JTF should retain operational control of all assigned forces deployed in the JOA throughout the operation.

ANNEX A – Joint staff functions

General

A.1 The circumstances surrounding the establishment of a joint task force headquarters (JTF HQ), its relationship with any existing North Atlantic Treaty Organization (NATO) headquarters (HQ) in the joint operations area (JOA), the assigned forces' mission and the environment in which the mission is to be accomplished will dictate the staff requirements and functions. The commander should organize its staff, as deemed necessary to optimize its ability to plan, conduct and support the operation successfully.

Principal advisors

A.2 The commander usually has three principal advisors: the chief of staff (COS), the political advisor (POLAD) and the legal advisor (LEGAD). Beside these advisors the commander can add additional functional advisors if required, such as a tribal or cultural advisor. Grouping both military and civilian specialists alongside or within the command group in a special advisory group is an established method. Furthermore, usually a deputy commander and deputy/assistant chiefs of staff are appointed, who also advise the commander.

- a. **Chief of staff.** The COS should be an experienced commander in their own right and, with the understanding they possess, coordinates the work of the staff divisions by giving clear direction and setting priorities. They should also coordinate and fuse the work of the wider HQ including the joint force elements. It is their role to ensure the staff pulls together as a team and has good esprit de corps.
- b. **Political advisor.** POLADs are civil servants or military personnel selected to advise the commander, but they rarely form a cell or branch within the joint force command (JFC) and JTF HQ. Principally they advise on NATO policy; local, national, regional and international political issues; and political issues related to Allies, partners, non-NATO contributing nations (NNCN) and host nation (HN); and relationship with international organizations (IOs), non-governmental organizations (NGO), and other actors.
- c. **Legal advisor.** LEGADs can be either civil servants or military lawyers selected to advise the commander. Principally they advise on international law and mandates; rules of engagement (ROE); operational law issues specifically related to Allies, partners, NNCN and HN; any other legal matters.

- d. **Cultural advisor.** Cultural advisors have detailed knowledge of and field experience with people, cultures, religions and concerns in the area in which an operation is taking place. Cultural advisors provide commanders and staffs with expert information about the cultural aspects, implications, consequences, and when appropriate, possible courses of action to address requirements and events that affect accomplishing the mission.
- e. **Gender advisor.** Gender advisors advise, assist and support the implementation of NATO policies on gender perspectives within the HQ functions and processes. As such the gender advisor serves as a cross-functional staff enabler, incorporating gender analysis and perspectives into all planning for an operation or mission and thereby enhancing effectiveness.
- f. **Special operations advisor.** Special operations advisors advise the joint force commander and staff, on the proper employment of special operations forces (SOF) capabilities. To ensure that SOF activities are synchronized between the joint force HQ and the special operations component command, the Special operations advisors should maintain appropriate coordination with the special operations component command and any SOF liaison elements established to support the joint force.

Staff structure

- A.3 The basic organization of the JTF HQ is the staff directorate. Typically, the staff directorates are the J-1, J-2, J-3, J-4, J-5, J-6, J-7, J-8, and J-9. These primary staff directorates provide staff supervision of related processes, activities, and capabilities associated with the basic joint functions. These staff directorates provide expertise and experience for the planning, decision-making, execution, and assessment processes within the JTF staff. The directorates also manage systems and processes internal to their staff directorate. Based on mission requirements and the nature of the operating environment, additional staff directorates can also be established, such as resource management. Creating additional directorates does not fundamentally change any of the staff processes described in this Annex. The following staff functions, mentioned below, will usually be established and reflect the classical J1 to J9 staff structure.
- A.4 **Personnel and administration (J-1).** The personnel and administration staff's principal role is to advise the commander and staff on the personnel policies and manpower management systems and procedures established by national authorities for their force components. Personnel and administration staff responsibilities include personnel management, accounting, entitlements and benefits, morale, welfare,

recreation, postal services, safety, prisoners of war administration and casualty reporting. Personnel and administration staff should also coordinate personnel matters with the personnel staffs of the national contingents. Personnel and administration is responsible for establishing a joint personnel, resources and finance centre.

- A.5 **Intelligence (J-2)**⁵⁸. The role of the intelligence staff is to contribute to a continuous and coordinated understanding in a complex global environment, by providing predictive and actionable intelligence products to enable the commander to make appropriate decisions and take action to maintain security within the JOA. Intelligence is therefore both an aid to develop understanding and a critical tool for decision-making. Intelligence should drive operations by providing the user with intelligence that supports their particular needs and is tailor-made to those requirements. The intelligence staff will develop products resulting from the directed collection and processing of information regarding the environment and the capabilities and intentions of actors, to identify threats and offer opportunities for exploitation by decision-makers. Intelligence is not only about cataloguing an adversary's military forces and assessing their capability. It is also about understanding the adversary's culture, motivation, perspective and objectives. Recent operations have shown that the intelligence staff should consider not only the adversary, but also assess, in coordination with J-9, the population to determine the degree of support that segments of the population will provide to the adversary or to friendly forces.
- A.6 **Operations (J-3)**. The essential role of the operations staff is to act as the focal point through which the commander directs the conduct of an operation, ensuring unity of effort and the most effective use of resources supporting immediate and planned operations. As such the operations staff is usually responsible for establishing a joint operations centre (JOC). The operations staff may comprise sections/cells that cover maritime, land, and air operations plus sections/cells to cover special operation forces operations, force protection, military police functions, countering improvised explosive devices, personnel recovery⁵⁹, space operations, cyber activities, information activities, psychological operations (PsyOps), chemical biological, radiological, and nuclear activities, and targeting coordination. The operations staff is responsible for:
- coordinating and synchronizing the execution of an operation;
 - monitoring component commands plans and operations supporting JTF's operation within the JOA as well as the organization of the JOC;

⁵⁸ See AJP-2 *Allied Joint Doctrine for Intelligence, Counter-intelligence and Security* and subordinate documents for detail.

⁵⁹ See AJP-3.7 *Allied Joint Doctrine for Recovery of Personnel in a Hostile Environment* for detail.

- assessing the status and capabilities of assigned forces, as a pre-condition for the commander's decision on a course of action (COA) and their concept of operations (CONOPS);
- specifying the tasks for component commands, based on the commander's CONOPS;
- producing and distributing operation orders (branch plans) and fragmentary orders;
- assembling the JTF HQ and, if necessary, deploying a HQ to an approved site;
- recommending force organizations for planned operations;
- advising commanders on applicable ROE and suggesting changes/additions they may wish to consider;
- organize a joint coordination board;
- coordinating across the staff, updates and dissemination the commander's critical information requirements;
- coordinating the conduct of all subordinate operations, military activities, and joint functions in support of the joint task force within the JOA; and
- coordinating all joint fires and targeting, as well as the organization of the targeting cell⁶⁰.

A.7 **Logistics (J-4)**⁶¹. The logistics staff is responsible for assessing the logistics required achieving the operational objectives, integrating logistic planning into the operations planning process, and for ensuring that these support requirements are met throughout the operation. Based on the assessment, the logistics staff develops the logistic concept and plans in support of operations and coordinates the overall logistic effort. The size and complexity of operations, component participation and force contribution of the nations as well as the degree to which national and/or multinational logistics are to be integrated into the logistics concept may require specific logistic coordinating activities.

A.8 **Plans (J-5)**⁶². The plans staff assists the joint commander in preparing the operation plan and the planning for future operations. It coordinates these planning efforts within the JTF HQ and with higher, subordinate and adjacent commands and civil authorities.

⁶⁰ See AJP-3.9 *Allied Joint Doctrine for Joint Targeting* for detail.

⁶¹ See AJP-4 *Allied Joint Logistics Doctrine* for detail.

⁶² See AJP-5 *Allied Joint Doctrine for the Planning of Operations* for detail.

The plans staff is responsible for establishing, and forming the core of a Joint Operations Planning Group. The plans staff should conduct the following activities:

- determine, on the basis of the intelligence assessments, with the background of a comprehensive analyses of the operating environment, the military conditions for successfully achieving the objectives, including action to be directed against the opponents' centres of gravity (COGs) and that required to protect friendly COGs;
- develop COAs;
- provide planning guidance for the phased execution of the operation, with particular emphasis on the delineation of the areas of operation within the JOA and the time/phase synchronization of forces to achieve the objectives;
- promulgate the commander's decision on the COA through the operational planning directive and produce the CONOPS, and the operation plan (OPLAN);
- assist the JOC during execution;
- review the OPLANs of component commands; and
- conducting operations assessment throughout the operation to support the commander's decision making process.

A.9 **Communication and information systems (J-6)**⁶³. The communication and information systems (CIS) staff should ensure that adequate CIS support is provided for operations, and that interoperable CIS procedures are used at all levels in the joint force. Furthermore, to enable the commander's command and control requirements, the CIS staff should be included in the planning, coordinating and executing command, control, and communications architectures and in JOA CIS systems. The CIS staff is usually responsible for establishing a joint command, control and communication support centre to facilitate CIS management and network control. Activities which are critical to the NATO CIS must be fully coordinated between the information operations (Info Ops) cell within the JOC and joint command, control and communication support centre using the framework of the information activities coordination board.

A.10 **Training (J-7)**. The training staff is responsible for advising and managing in-JOA training during the joint force work-up period prior to starting the operation, and conducting training for augmentation forces added to an ongoing operation. The training staff would also liaise with a relief force to ensure a smooth transition and that lessons learned in-JOA are passed to the incoming force. If, however, the operation is

⁶³ See AJP-6 *Allied Joint Doctrine for Communication and Information Systems* for detail.

of short duration requiring no force rotation, or if the training requirement may be executed by operations staff, or if training is not required at all, then establishing a training staff may not be necessary. When necessary the training staff may be integrated as a separate cell in the JOC. J-7 is also responsible for collecting and disseminating within the staff, good practices and solutions to identified problems throughout a lessons identified/lessons learned process. It may animate a working group with other commands, if necessary

- A.11 **Budget and finance (J-8).** The budget and finance staff, under the lead of an appointed JOA financial controller, is responsible for preparing and executing the common funded mission budget for the operation on behalf of the commander. This includes the functional supervision of CCs. The budget and finance staff, responsible for procurement and fiscal issues, usually needs to be first in and last out of the JOA and will need to coordinate closely with nations. The other functional areas need to cooperate closely with budget and finance staff through appointed fund managers to provide appropriate funding for the requirements of the mission. The budget and finance staff is usually integrated in the the joint personnel, resources and finance centre.
- A.12 **Civil-military cooperation (J-9)**⁶⁴. Civil-military cooperation staff provides a capability that support a commander to achieve their objectives across the full range of NATO operations through interaction with appropriate non-military actors. In particular the civil-military cooperation staff takes a leading role in gathering, assessing and reporting information regarding the civil environment in cooperation with other military functions. CIMIC-staff should understand the environment in which they will operate and understand the workings of NGOs and IOs. They are capable of explaining military requirements to non-military actors and vice versa. Finally, they are able to carry out accurate assessments and provide advice to the commander.

Other staff functions

- A.13 **Military engineering advisor.** The senior military engineering advisor at the operational level provides advice to the joint commander in all aspects of the military engineering (MILENG) function. The overall commander's priority for the allocation of MILENG effort must be communicated to and appropriately supported by other functional areas. Priorities for MILENG activities and associated allocation of resources will be determined in the operational-level planning process in which the military engineering advisor and staff play a full part. They exercise coordination on

⁶⁴ See AJP-3.4.9 (3.19) *Allied Joint Doctrine for Civil-Military Cooperation* for detail.

behalf of the commander over the allocation of MILENG resources, such as engineer and EOD assets (including their task organization and command and control) throughout the joint force to ensure that capabilities and resources are used most effectively. At the operational level of the NATO command structure the MILENG division is an independent staff division placed under deputy chief of staff support ⁶⁵.

- A.14 **Provost marshal**⁶⁶. The Provost Marshal (PM) is the senior Military Police officer responsible for coordinating all police activities and the provision of specialist advice to the commander and staff. The PM may in addition be afforded a command function.
- A.15 **Medical advisor**⁶⁷. In order to ensure appropriate medical planning and medical support for the forces under command, commanders need an adequate medical staff structure to enable them to undertake medical estimates and produce appropriate medical plans, coherent with the overall operational plan, in a multinational environment. The medical advisor (MEDAD) in a JTF HQ is responsible for ensuring commanders and their staff are informed and aware of the health and medical implications of their potential courses of action. As a specialist staff officer, the MEDAD maintains direct access to the commander. The MEDAD may also be the force medical director. JTF HQ medical staffs will contribute to the planning and execution of JTF operational plans; contributions include medical intelligence assessments, medical threat assessments and operational plan components (e.g. medical Annex QQ).
- A.16 **Strategic communications**. Strategic communications will direct, coordinate, and synchronize the overall communication effort and will integrate the communication capabilities and information staff functions (including PA, PsyOps and Info Ops), which retain their functional responsibilities, with other military activities. This effort is undertaken to understand and shape the information environment.
- a. **Public affairs**. NATO military PA is to support commanders by communicating accurate information in a timely manner to audiences to improve public awareness and understanding of the military aspects of the Alliance's role, aims, operations, missions, activities and issues, thereby undermining adversary propaganda and enhancing the Alliance's ability to meet strategic and operational objectives by strengthening organizational credibility and public support. Audiences can be allied, international, regional, local or internal, depending on the issue or activity. Therefore, the PA office advises the commander on all media and internal

⁶⁵ See AJP-3.12 *Allied Joint Doctrine for Military Engineering* for detail. The publication is currently under review and will elaborate more on the functional aspect of MILENG.

⁶⁶ See AJP-3.21 *Allied Joint Doctrine for Military Police* for detail.

⁶⁷ See AJP-4.10 *Allied Joint Doctrine for Medical Support* for detail.

communications-related matters, and remain the lead function responsible for external communication. PA staff should maintain a close liaison with CIMIC. The media information centre will coordinate with the PA cells from associated non-military actors in the JOA (e.g. the United Nations and the European Union). The media information centre will interface with the international and local press, and will be responsible for implementing the public information strategy. The chief PA officer is, in principle, the commander's spokesperson, and as such should have direct access to the commander.

- b. **Psychological operations.** PsyOps⁶⁸ are planned activities using methods of communication and other means directed at approved audiences to influence perceptions, attitudes and behaviour, affecting the achievement of political and military objectives.
- c. **Information operations.** Information operations is a military function to provide advice and coordinate military information activities to create desired effects on the will, understanding and capability of adversaries, potential adversaries and other North Atlantic Council approved parties in support of Alliance mission objectives. Information activities are actions designed to affect information and or information systems and can be performed by any actor and include protective measures.

A.17 **Liaison.** All operations require significant coordination and liaison. Liaison personnel should be exchanged between: the joint task force command, higher command, adjacent units, HN, NATO contributing nation, NNCN, IOs involved in the operation and supporting forces assigned to the commander. Within the joint force, exchange from liaison elements between the functional components is critical to facilitate joint force coordination.

- a. Differences in language, culture, equipment, capabilities, doctrine and procedures are some of the challenges that require close cooperation. The commander should identify additional requirements and request them at the earliest opportunity. The maximum use of liaison personnel, especially in operations involving NNCN that may employ different doctrine or procedures, will enhance interoperability and contribute significantly to mission accomplishment.
- b. Establishing a liaison network throughout the joint force, indigenous population and non-military actors (such as major humanitarian organizations) will be a major supporting 'enabler'. During initial force generation planning, the appropriate operational requirement should be quantified in terms of quality personnel,

⁶⁸ See AJP-3.10.1 *Allied Joint Doctrine for Psychological Operations* for detail.

- communications and transport, and then included in initial force generation planning. The commander will need to set policies and priorities to ensure a deliberate and structured allocation takes place at the earliest opportunity and certainly before the arrival of the main body.
- c. Liaison officers generally represent the interests of the sending commander to the receiving commander, but can greatly promote understanding of the commander's intent at both the sending and receiving headquarters. They should have the authority to speak for their commander and be of sufficient rank to influence the decision-making process at the level they are assigned. Liaison personnel should have sufficient knowledge of the capabilities and limitations of the staff/unit they represent. They should also be innovative and tenacious, but at the same time diplomatic and sensitive in respect of the force element or organization to which they are attached.
 - d. The sending commanders are responsible for ensuring that liaison personnel have sufficient communications equipment at their disposal to permit effective communications with their commands. This communication is especially important during the early stages of joint task force formation and planning. The receiving commander is responsible for providing the required equipment when liaison elements have to communicate from within the receiving command.

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Annex B – Related capabilities to the joint functions

- B.1 The joint functions are a framework that provides the commander and staff a means to visualize the activities of the force and to ensure all aspects of the operation are addressed. They are a point of reference, as well as a description of the capabilities of the force. A number of subordinate tasks and related capabilities help define each of the joint functions and some of them could apply to more than one function. In any joint operation, the commander joint task force (JTF) may choose from a wide variety of joint and service specific capabilities and combine them in various ways to perform joint functions and accomplish the mission. The operation plan/order describes the way forces and assets are used together to perform joint functions and tasks. However, forces and assets are not characterized by the functions for which the commander JTF is employing them. A single force or asset can perform multiple functions simultaneously or sequentially while executing a single task. A number of related capabilities that apply to more than one function are listed in this Annex B.
- B.2 **NATO integrated air and missile defence**⁶⁹. Integrated air and missile defence is defined as *all measures to contribute to deter any air and missile threat or to nullify or reduce the effectiveness of hostile air action to protect populations, territory and forces against the full spectrum of air and missile threats*. The joint force air and missile defence commander is the commander with overall responsibility for air and missile defence; normally, the component commander with the preponderance of air and missile defence capability and the command, control and communications capability to plan and execute integrated air and missile defence operations. They integrate and coordinate the air and missile defence assets of each force component into a coherent joint air defence plan.
- B.3 The joint force air and missile defence commander furthermore applies the principles of air defence to counter hostile air activity, including theatre ballistic missile defence (TBMD), and promulgates and employs common procedures for air defence battle management and the reduction of mutual interference, taking into account any air defence required and organized around maritime and land units. TBMD as a subset of ballistic missile defence, is the protection of deployed forces and high-value assets/areas within a theatre of operations from attacks by ballistic missiles. As the responsibilities of the joint force air and missile defence commander and the joint force air component commander are interrelated, they are normally assigned to one

⁶⁹ See AJP-3.3.1 *Allied Joint Doctrine for Counter-Air Operations* for detail.

individual. Generally the commander JTF delegates the air and missile defence operational level function to the joint force air component commander.

B.4 Chemical, biological radiological and nuclear defence⁷⁰. North Atlantic Treaty Organization (NATO) forces must be prepared to conduct operations despite the threatened or actual use of chemical, biological, radiological and nuclear (CBRN) substances. This includes threats from toxic industrial materials⁷¹. Any intentional use or accidental release of CBRN substances can create effects that may disrupt or delay the achievement of objectives. The commander JTF provides guidance to subordinate commanders on the balance between operational priorities and avoidance of CBRN hazards both within the 'statement of intent' or "commander's intent" and as guidance in the campaign plan. Policy application to minimize personnel exposure to CBRN hazards must be coordinated between national components, the host nation and other in-theatre agencies including, but not limited to, non-governmental organizations. It is the commanders' responsibility that plans take into account appropriate counter CBRN measures. Commanders at all levels must be provided with timely, accurate and evaluated CBRN threat, hazard, vulnerability and risk assessments. It is essential that CBRN staff engage early in the planning process and incorporate CBRN intelligence requirements into the intelligence collection plan.

B.5 The actual or threatened development, proliferation, or employment of CBRN by an adversary can affect forces by causing them to prepare for or conduct CBRN disablement activities, and for a specific operation, plan and prepare for threat management; and if directed, CBRN consequence management operations. Individual nations may adopt different approaches to medical countermeasures and regulations regarding the exposure of personnel. Therefore, different approaches are to be integrated into the overall force health protection system with regard to medical countermeasures. The levels, availability, and quality of CBRN defence equipment may vary. There may be a requirement to extend CBRN physical protection beyond the JTF, to include civilians in support of the operation, or neutrals in the joint operations area. Media attention will also be intense, and the identified or perceived threat of CBRN hazards will generate considerable disquiet both in the joint operations area and at home.

⁷⁰ See AJP-3.8 *Allied Joint Doctrine for Chemical, Biological, Radiological and Nuclear Defence* for detail.

⁷¹ Toxic Industrial Materials (TIM) is a generic term for toxic chemical, biological and radioactive substances in solid, liquid, aerosolized, or gaseous form created for industrial, commercial, medical, or domestic purposes.

- B.6 Military engineering.** Military engineering (MILENG)⁷² is a function in support of operations to shape the physical operating environment. MILENG as a function is coordinated by a military engineering staff. MILENG is an inherent aspect of each joint function; at all levels of command, in any mission, campaign or operation, and in all phases. It achieves the desired objectives by enabling or preventing manoeuvre or mobility; developing, maintaining, and improving infrastructure⁷³. MILENG incorporates areas of expertise such as engineering, Explosives Ordnance Disposal, Environmental Protection, military search and management of infrastructure, including contracted civil engineering. MILENG also makes a significant contribution to Countering Improvised Explosive Devices (C-IED); protecting the force; and providing life support.
- B.7 Countering improvised explosive devices.** The countering improvised explosive devices (C-IED) approach⁷⁴ provides commanders with the means to counter the improvised explosive device (IED) threat by identifying and attacking IED networks, preparing friendly forces to operate in an IED environment, and mitigating or neutralizing the impact of IEDs. By utilizing this approach, commanders will influence effects across all the joint functional areas. Effective C-IED will contribute to the Alliance freedom of action to conduct operations. C-IED is the responsibility of commanders at all levels. It requires the support and understanding of all those participating in operations as well as those preparing to deploy. The desired outcome of C-IED is to minimize the risks posed by an adversary's IED system so it is no longer a significant constraint on the successful conduct of operations. C-IED activities are principally against adversaries (primarily their capabilities) and not only against IEDs themselves. C-IED treats the IED as a systemic problem and aims to defeat the IED system. To mitigate and minimize the threat posed by IEDs, commanders and planning staff must understand the adversary and the IED system. The C-IED approach must be integrated into the planning and execution of activities at all levels.
- B.8 Logistics⁷⁵.** Nations and NATO have a collective responsibility for logistic support in operations. Responsibility for logistics reflects the fact that neither NATO nor a nation is capable of assuming complete responsibility for the logistic support of a NATO-led operation. Logistics must provide the right support in the right quantity in the right place

⁷² See MC 0560/2 *Military Committee Policy for Military Engineering* and AJP-3.12 *Allied Joint Doctrine for Military Engineering* for detail.

⁷³ Infrastructure is a cross-cutting aspect of support to Logistics and/or Manoeuvre, performed by MILENG. The interaction between this MILENG responsibility for infrastructure and the support to Logistics is expressed as "MILENG Support to Logistics" and also described in the MC 319/3.

⁷⁴ See AJP-3.15 *Allied Joint Doctrine for Countering Improvised Explosive Device* for detail.

⁷⁵ See AJP-4 *Allied Joint Logistics Doctrine* for detail.

at the right time. This should encourage the cooperative provision and use of logistic capabilities and resources to support the force effectively and efficiently. Standardization, cooperation and multinationality in logistics build together the base for flexible and efficient use of logistic support. It is recognized that the ultimate responsibility for support of national forces lies with the respective nations.

- B.9 The JTF headquarters role encompasses logistic planning and coordination, prioritization and synchronization and promoting collective and multinational solutions. The commander JTF will ensure that the logistic force structure is capable of supporting the operation including reception, staging, onward movement and integration / disengagement and rearward movement, staging and dispatch, and will coordinate support among contributing nations and the host nation to ensure operational success. To accomplish this, the commander JTF should be given sufficient authority over the logistic resources necessary to enable the commander JTF to deploy, employ and sustain the forces under command in the most effective manner.
- B.10 **Medical**⁷⁶. Medical support encompasses the full range of medical planning, preventive health advice and assessment, treatment and evacuation of the diseased and injured with the aim of minimising disease, injury and death and, returning to duty as many individuals as possible. The principal components of operational health care, around which the medical system is built, are medical command, control, communications and information, medical intelligence, force health protection, primary health care, secondary health care, medical logistics and medical evacuation. Medical capabilities and capacities should be proportionate to the JTF strength and operational risks and will be influenced by factors such as the medical threats, operational laydown and availability of and ability to fully utilize forward, tactical and strategic evacuation. In addition, these and other factors will have a significant influence on medical evacuation and treatment timelines. Whilst NATO doctrine provides guidance on timelines for evacuation and treatment, these timelines serve solely as useful planning guidelines for optimal medical outcomes. COM JTF will ultimately determine the operational evacuation and treatment guidelines to be met given factors such as strategic direction and guidance and risk. Risk management should be conducted in consultation with the relevant command and medical authorities.
- B.11 **Military police**. Military police (MP)⁷⁷ are designated military forces responsible and authorized for the control and maintenance of law and order and providing operational assistance through assigned doctrinal functions. These functions may be: police,

⁷⁶ See AJP-4.10 *Allied Joint Doctrine for Medical Support* for detail.

⁷⁷ See AJP-3.21 *Allied Joint Publication for Military Police* for detail.

security, detention, mobility support and stability policing. As one of the combat support elements, MP support the commander and the JTF with a wide variety of missions, ranging from peacetime military engagement, security tasks in support of stabilization and reconstruction, up to combat operations. Unique to the MP profession are specialized police certifications, training and equipment that increases the commander's ability to conduct operations. MP perform similar functions in all components (maritime, land, air and SOF) which allows seamless transition into joint and multinational operations. While component MP forces deployed in support of an operation may not be joint at their respective level, in order to achieve multinational unity of effort there must be a coordinating authority that synchronizes MP activities to maximize interoperability.

- B.12 **Stability policing**⁷⁸. Stability policing encompasses police-related activities intended to reinforce or temporarily replace the indigenous police, contributing to restoring and/or upholding public order and security, rule of law, and protection of human rights. Stability policing assets perform police activities in the mission area aimed to tackle possible threat sources and provide security to the local population by replacing and/or reinforcing indigenous police forces. Under a comprehensive approach, a combination of military and non-military actors, such as indigenous and international police forces, could be employed to achieve this goal.

⁷⁸ See AJP-3.22 *Allied Joint Doctrine for Stability Policing* and AJP-3.21 *Allied Joint Doctrine for Military Police* for detail.

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Annex C – Battlespace management planning and execution

Section 1 – Battlespace and enabling functions

General

- C.1 Battlespace consists of physical and non-physical environments, factors and conditions that must be understood to apply combat power, protect a force or accomplish a mission successfully. It includes the land, maritime, air and space environments, terrestrial and space weather; information, including cyberspace, and electromagnetic spectrum environments; North Atlantic Treaty Organization (NATO) and non-NATO actors in the joint operations area (JOA) and other areas of interest.
- C.2 Battlespace management is the use of all necessary adaptive means and measures that enable the planned and dynamic coordination, synchronization and prioritization of activities across all dimensions of an assigned area of operations within the battlespace. Battlespace management applies at all levels of operations and enables operational level activities in cooperation with relevant non-NATO actors. Effective battlespace management will ensure the appropriate allocation of three-dimensional space and the electromagnetic spectrum, over time, to various competing users, to maximize coordinated and synchronous operational effectiveness, while avoiding confusion leading to a risk to the mission and/or the force.
- C.3 Commanders must determine the degree to which battlespace management is required. Force elements operating independently in separate areas may have little need to coordinate or synchronize their activities. However, commanders who envisage high levels of interaction between force elements, working in close proximity to one another, must coordinate or synchronize their activities and may require extensive enabling battlespace management measures. As military forces create effects across an expanding volume of battlespace the potential for interference between NATO forces and other actors increases.
- C.4 Battlespace management must be included in all training for operations. At the operational level, this should address in particular the complexity of the joint battlespace, including deconflicting multinational, multi-agency, and host nation aspects of operations, across all environments.
- C.5 Measuring success represents one of the challenges of battlespace management. If an operation is successful, it could be suggested that battlespace management

processes and procedures have been effective. However, this fails to recognize the disproportionate effect that improvements to battlespace management can have on the planning and conduct of operations, and the rate at which the success is achieved.

Physical battlespace

- C.6 A single physical environment cannot be considered in isolation, as action in one environment may have battlespace implications for others.
- a. **Maritime.** The maritime battlespace includes the sea surface of the Earth, any volume of airspace allocated above it, below the surface to the sea floor, including any natural and constructed feature on or below the sea surface.
 - b. **Land.** The land battlespace includes the land surface of the Earth, natural and constructed features, the underground areas below it, and any volume of airspace allocated above it.
 - c. **Air and space.** The air battlespace includes the volume of airspace above the land and maritime battlespace up to the Karman line⁷⁹. Space represents a domain in its own right, but also serves as an enabler for the more traditional operating environments of maritime, land and air. Space-based capabilities enable strategic communications, command and control (C2), situational awareness (SA), and precision strike capabilities.

Non-physical battlespace

- C.7 Non-physical environments or domains pervade throughout, and interact across the maritime, land, air and space environments, and are not constrained by terrestrial or geographical borders. The non-physical environments cannot be considered in isolation, as action in one may have implications across multiple physical or non-physical environments. Activities in these environments should therefore be coordinated within the information activities coordination board.
- a. **Information.** The information environment includes the information itself, the individuals and organizations, in addition to the cognitive, virtual and physical space in which this occurs. The importance of worldwide distributed information, the speed at which information is communicated, the role of media and the reliability of information systems have created a situation in which no Alliance decision or action can be taken without considering its potential impact on the

⁷⁹ The Karman line (100 km above the Earth's sea level) is the internationally accepted boundary between the Earth's atmosphere and outer space.

information environment. Managing information supports better decision-making. In addition to managing friendly information, decision makers must be aware of adversary influence operations and the actions necessary to counter them.

- b. **Electromagnetic spectrum.** The electromagnetic environment covers a spectrum comprised of the orderly distribution of electromagnetic waves according to their frequency or wavelength. The electromagnetic spectrum pervades all other physical environments, providing potential benefit (a significant source of intelligence, for example) and potential vulnerability (in being comparatively easy to disrupt or deny). Awareness of adversaries' and regional nations' electromagnetic exploitation capabilities must be considered during planning and factored into the emissions control policy to prevent inadvertent disclosure by friendly assets. The intensive use of electronic based technology while managing the battlespace leads to a high degree of vulnerability in context to the electromagnetic spectrum.
- c. **Cyberspace.** Cyberspace is the virtual, non-physical domain formed by all information technology systems interconnected on a global scale. Cyberspace attacks are becoming more intense, complex and reflective of an increased level of sophistication. The risks and opportunities offered through offensive and defensive cyberspace activities make it an important element of the commander's battlespace management plan.
- d. **Time.** While the environments comprise the places where military forces conduct their activities, time indicates when or for how long. Time is used as a tool to orchestrate activities in all environments, through coordination and synchronization.

Boundaries

- C.8 The commander will conduct operations within an assigned JOA. The commander may receive guidance on any necessary conditions regarding movement into and out of it, relationships with adjacent joint operations areas, and pertinent agreements with other actors. Component commanders are assigned an area of operations (AOO) and may receive guidance based on political, diplomatic and legal, physical and operational considerations. The management of physical environments within the JOA is likely to be allocated to respective component or delegated commanders.
- C.9 Boundaries define areas of operations between force elements, such as formations of units, vessels or aircraft. Assigned AOOs should not be larger than that force element's area of influence. Additionally, AOOs should be exclusive and boundaries should not

overlap. AOOs may be contiguous (where there is a common boundary) or non-contiguous (without a common boundary).

C.10 AOOs may also be linear or non-linear. Many campaigns and operations will present significant geographic challenges. Often, AOOs and adversary situations will not allow for a linear and/or contiguous deployment. Therefore, coordination, cooperation and mutual support between all actors may become increasingly challenging.

Boundary changes

C.11 A permanent or temporary boundary change between components is the most common amendment to JOAs/AOOs and an important facet of battlespace management. Such changes enhance agility and can improve freedom of action. However, if changes are too frequent they can cause confusion and increase the potential for friendly fire. Where boundary changes are required, the following considerations should be taken into account:

- the impact on current and planned operations;
- priority of use, in terms of where the main effort lies and the capabilities of the forces and agencies involved;
- disposition of friendly, opponent and neutral parties; and
- speed and assurance of communication across the force to promulgate the changes.

Seams

C.12 A seam is the physical environment where assets in one AOO interact with, or impact assets or activities in another AOO. As the size and the geographic diversity of the seam increases, operations are likely to get more complex and the requirements for cross-component dialogue and planning become more important.

Technology

C.13 Technology can provide commanders with visibility over a defined area, and communications can enable them to command and control forces at range. Within a defined JOA/AOO, NATO forces may be required to operate at high tempo and with great agility. Multiple actors (military and non-military) operating in the same JOA/AOO present additional technological battlespace management challenges.

- C.14 The implications of emerging technology for battlespace management vary from one functional area to another. Information management and functional area systems are key enablers for situational awareness and depend on using technology effectively. NATO forces are increasingly, though not uniformly, network-enabled. These systems enable increasingly quick and accurate planning and provide control that is more dynamic. As battlespace management becomes increasingly dependant on information technology, it is important that Alliance members and potential coalition partners remain interoperable, otherwise the risk of losing the ability to share common situational awareness increases.
- C.15 Commanders should guard against complete reliance on technology to underpin battlespace management. Where possible, an independent back up solution, capable of a minimum battlespace management function, should be maintained. Battlespace management enabling networks should be designed to degrade with sufficient resilience to provide an opportunity to fallback on alternative systems, if available, in a controlled manner.
- C.16 The communication and information systems (CIS) architecture must be integrated with command and control, intelligence and operational capabilities and comply with national and NATO legal limitations and security regulations. The design, establishment and management of CIS architectures for all NATO operations have to be based on flexibility, compatibility, centralized control and mission tailoring. NATO CIS capability is mainly based on owned capabilities and systems able to ensure the previously mentioned requisites.

Tactical data links

- C.17 The exchange of tactical data via link has been a fundamental aspect of operations for many years, particularly in the maritime and air environments. Tactical data link (TDL) information is a key enabler for aspects of battlespace management at the operational level through its contribution to a common operational picture (COP). On multinational operations, however, individual nation security restrictions and other limitations of interoperability may restrict access to services such as TDLs, C2 networks and near real-time intelligence broadcasts, thereby degrading shared situational awareness (SA).

Electromagnetic spectrum management

- C.18 To deliver an operational advantage, it is necessary to create the ability to manoeuvre freely within the electromagnetic spectrum (EMS) and hence manage the

electromagnetic environment. This is accomplished by efficient and effective battlespace management processes that coordinate and deconflict use of the EMS. Without effective battlespace management, it is likely that emissions within the electromagnetic environment will interfere with one other. Battlespace management also includes the practical coordination and, where necessary and possible, deconfliction of all EMS usage within the operational environment. EMS coordination and deconfliction plays an integral part of managing the overall operating environment.

- C.19 Comprehensive management of the EMS is critical to ensure the most effective use of limited frequency assets within a joint force and between adjacent and higher authorities. It enables military electronic systems to perform their functions within intended environments without causing or suffering harmful interference. Such harmful interference may result in a loss of SA that, in turn, could severely hamper the ability to manoeuvre within the operating environment.
- C.20 In the JOA, the concurrent use of the EMS by NATO and non-NATO actors implies that the EMS cannot be controlled by any one user. However, it can be managed to minimize conflict between users. Therefore, spectrum managers must exercise authority over all operational users to effectively coordinate friendly use of the EMS, within constraints applied from non-military usage and spectrum availability.

Situational awareness and combat identification

- C.21 SA enhances decision-making, enables effective management of the operating environment and enhances the overall effectiveness of the joint task force (JTF). It supports the coordination and synchronization of military and non-military actions against an adversary, and is a key component of force protection.
- C.22 Combat identification is the means by which military units distinguish friend from adversary during operations, with the aim of reducing friendly fire and increasing the operational effectiveness of forces and weapon systems. This is achieved through the process of combining SA, positive identification and specific tactics, techniques and procedures. Combat identification impacts on all aspects of a JTF across the JOA.
- C.23 Combat identification solutions which are designed to prevent friendly fire between force elements are often employed under national doctrine, and therefore a degradation in SA may occur due to identification conflicts. This is particularly relevant when operating identification friend or foe and TDL equipment, and when forces operate under differing identification criteria. Operational commanders should consider the impact on operations from failing to deconflict combat identification

solutions when forming joint forces, and should test the outcome on COP compilation and risk of friendly fire.

- C.24 Battlespace management and combat identification are interrelated; both enable increased operational effectiveness and the avoidance of friendly fire. Combat identification and SA are critical to effective command and control. Combat identification contributes to SA and so enables more effective battlespace management. Equally, battlespace management contributes to SA and thereby enhances combat identification.

Section 2 Battlespace management planning and execution

General

- C.25 Effective battlespace management requires an iterative battlespace management planning process that begins at the outset of an operation, continues throughout the execution of an operation alongside the execution of the extant battlespace management plan, concluding only at the end of the operation.
- C.26 Battlespace management is an active process, as the continual evolution of the battlespace, including its shaping by other actor actions, will influence commander priorities and corresponding rules of engagement. Commanders require an effective method for proactive, as well as reactive battlespace management.

Command and control

- C.27 Effective C2, is essential to the success of NATO joint operations. It relies on cohesion and interoperability between all command levels. When two or more force elements operate in the same battlespace their activities should be directed, coordinated, sequenced and deconflicted to enhance combat effectiveness. Where activities are concurrent and cannot be separated, they should be subject to some form of control.
- C.28 The command and control arrangements required depend on a range of factors, such as the extent to which the force elements are required to interact, and is dependent upon the level of shared SA across the JTF. Direction, coordination and control may be based on interaction between units or procedural in nature.
- C.29 One of the most challenging environments for battlespace management and C2 occurs when maritime, land and air units operate in coastal environments, with topographical and geographical diversity, where force elements can be equipped with weapons

capable of engaging maritime, land and air targets. The addition of cruise and surface-to-surface missiles, designed to navigate and fly significant distances over the earth's surface, can further complicate C2 within this environment. Effective planning, non-delaying battlespace management arrangements and robust C2 are required to maximize combat effectiveness while minimizing the risk of friendly fire engagement.

Planning

- C.30 Battlespace management should be considered early in any planning, and appropriate battlespace management arrangements developed to suit the situation. Battlespace management plans, which should be as simple as possible but retain a degree of flexibility, must be communicated clearly and agreed by all actors. Successful battlespace management planning is underpinned by a presumption of free, rather than constrained, use of the battlespace, unless and until coordination and control measures are deemed necessary to facilitate interaction between force elements.
- C.31 Developing coordination and control measures relies upon consultation between commanders and planning staffs to preserve freedom of action and to avoid unnecessary restrictions. Thorough analysis of the operating environment should provide the Commander with an appreciation of the factors (specific to each dimension of the battlespace) that are likely to require battlespace management measures. Subsequent battlespace management planning is based upon the following (not exclusive):
- centralized battlespace management planning and direction, emanating from centralized command and control formations but involving as many actors as necessary; and
 - specific delegations to appropriate commanders and other authorities to manage particular aspects of the battlespace.

Structures and relationships

- C.32 The battlespace management staff should comprise expertise across all staff functional areas, with battlespace management operating as part of the headquarters battle rhythm. Battlespace management staffs should train together across all component, joint and coalition functions. They require expertise and levels of collective performance to employ not only traditional process-driven methods of battlespace management, but also the increasingly important dynamic methods to facilitate synchronized and coordinated actions. While battlespace management and the

battlespace are ostensibly military, consideration should be given to extending its composition to include non-military actors whose activities within the JOA may impact the force and/or mission. Commanders should establish appropriate liaison elements to non-military and/or non-governmental actors.

- C.33 Dependant upon the size and function of a headquarters on a specific mission, there are numerous options of how battlespace management functionality could be delivered.
- a. **Trust the process.** The Commander may be unwilling or unable to allocate specific battlespace management resources (human and material) to generate and activate a battlespace management cell. The Commander would therefore rely on existing cross-functional procedures to solve all battlespace management issues while accepting the high risk of battlespace management shortfalls that would need to be addressed dynamically.
 - b. **Use of battlespace management structure.** The commander generates and activates a specific battlespace management cell tailored to the mission and resources (human and material). Management can be modelled in two different ways.
 - (1) **Centralized battlespace management.** Battlespace management is planned and conducted via specific battlespace management meetings, working groups and boards led by the headquarters within the existing battle rhythm, accepting the risk of redundance with other battle rhythm events but ensuring the maximum coverage of battlespace management issues.
 - (2) **De-centralized battlespace management.** Battlespace management is planned and conducted through specific meetings, boards and working groups when the situations dictates. Clear delegation and collaborative cross-functional battlespace management understanding, planning, and execution are key requirements.
- C.34 If a battlespace management cell is established, its prioritized tasks should include setting the initial conditions for use of the battlespace, without being overly prescriptive as to management. The battlespace management cell, in conjunction with components and sub-units, should fuse its detailed knowledge of environment-specific considerations and potential frictions and formulate generic battlespace management plans and procedures to suit the operation. Subordinate unit staff can then address tactical battlespace management issues, at increasing levels of resolution, pertaining to their respective component or sub-unit.

- C.35 A battlespace management cell is likely to be engaged continuously during high-tempo operations. However, if initial battlespace management conditions endure and force capabilities and activities can be successfully coordinated and synchronized using in-place measures, then battlespace management may require little more than routine supervision. In practice the timing and frequency of battlespace management activities should reflect changes in the planning and/or operational tempo and be responsive to new or evolving operational risks.
- C.36 The composition of a battlespace management cell, although based upon a core membership structure, is likely to be adjusted and/or augmented to meet operational requirements and the chosen battlespace management option. All liaison officers or elements fulfil a significant role in identifying areas of potential inter-component / inter-agency friction and consequent requirements for battlespace management. Operations across environmental boundaries, such as maritime, land and air operations, benefit from the exchange of liaison officers/elements co-opted to relevant joint task force headquarters, component headquarters and other relevant actors.
- C.37 Liaison depends upon effective communication between co-located staffs or via communication and information systems across separate headquarters or other organizations. Robust voice communications and networked CIS that enable collaborative planning software, for example, greatly assist near real-time battlespace management. In the case of the latter, and providing that the network is protected against technical failure and adversary action and its reliability can be assured, then the demand on inter-component coordination and liaison may be greatly reduced.

Authorities, delegation and responsibilities

- C.38 Commanders are responsible for battlespace management within the JOA; however, they may delegate authority providing roles, responsibilities and limitations are clearly articulated.
- C.39 To maximize combat effectiveness, battlespace management authority and function should be delegated to the lowest possible level. However, overall battlespace management responsibility is retained at the delegating level, therefore it is essential that the delegating authority maintains oversight.

Annex D – Military risk management

Section 1 – Military risk

D.1 Allied forces face internal and external factors and influences that make it uncertain whether and when they will achieve their objectives. The effect this uncertainty has on their objectives is “risk”. The potential adverse consequences of a risk are generally referred to as threats.

Risk considerations

D.2 Risk has different implications at different levels of operations.

- a. **Strategic level.** Events that impact upon or change the overall strategic context may have strategic implications, in the worst case jeopardizing achieving strategic objectives or attaining the end state. Strategic risks are often associated with national standing, and the ability to exert influence at home and abroad. There may, for example, be an overly optimistic assessment of what the military instrument can achieve, undermining the credibility, and potentially even the feasibility, of (continuing) military intervention. Alternatively, any perceived lack of legitimacy may undermine political and domestic resolve, and support from the international community, including any necessary approval or cooperation from an indigenous population. Amongst partners in a coalition, any lack of cohesion – whether political or military – may also give rise to the risk of discord and, potentially, to dysfunction.
- b. **Operational level.** Risk at the operational level is associated with the relationship between strategic objectives and tactical activity. It may manifest itself in several ways. First, the risk may arise due to an act of planning, such as selecting an incorrect operational centre of gravity or operational decisive condition. Misplanning of this sort may threaten a commander’s ability to achieve their objectives. Alternatively, creating a particular decisive condition – even an initially ill-judged one – may present an unexpected opportunity that can be turned to a commander’s advantage. Secondly, a commander’s plan does not prevent risk arising during execution, either through external events or influences (such as a change in political circumstances) or through the performance of the joint task force (JTF) (which may include unexpected successes as well as unwelcome setbacks). The consequences of operational risk may be that a commander’s freedom of action is curtailed or an opportunity presents itself for exploitation.

These consequences may cause the JTF to pause, culminate or to increase tempo.

- c. **Tactical level.** Tactical risk arises from the results of both planned activity and other anticipated events, and the unplanned and unforeseen. What is planned or foreseen may have intended and unintended (foreseen and unforeseen) results, which may be favourable or unfavourable. Favourable results represent opportunities to be seized. Unfavourable results, in turn, represent potential threats. Clearly some of these risks can be addressed through contingency planning, but it is the responsiveness of the command and commander to recognize and act that reduces impact of those risks that are unforeseen, or arise from activities or events that are themselves unforeseen.

D.3 **Linkage between levels of risk.** In the same way that tactical events can have strategic repercussions, and strategic decisions can have tactical implications, so too, risks at the tactical level can have consequences at both the operational and strategic levels. Commanders should always be aware of this broader perspective when assessing likelihood, impact and ownership of risk. It may be appropriate for commanders at all levels to compare their risk assessments to identify those risks that may migrate up and down the chain of command.

D.4 **Relation with joint functions.** While command and control is vital when projecting effect in support of the mission, force protection⁸⁰ is the primary joint function for mitigating risks at the tactical level.

Risk appetite and tolerance

D.5 Military activity is inherently risky; taking calculated risks depends on risk appetite and risk tolerance. While risk appetite and tolerance are closely related they are different concepts where risk appetite is linked to taking risks and risk tolerance is linked to controlling risks. Both should be established to aid development of courses of action while balancing risks and objectives.

D.6 **Multinational operations.** In multinational operations the difficulty of handling risks is compounded as a result of the number and range of potential variables. There are two common areas of risk often associated with multinational operations.

- a. **Strategic cohesion.** Some of the most significant risks a commander may encounter are those associated with multinational cohesion at the strategic level.

⁸⁰ The fundamental aspects of force protection and guidance on the planning and implementation of force protection are described in AJP-3.14 *Allied Joint Doctrine for Force Protection*.

Just as determining a national strategic aim and objectives are sometimes difficult to discern, establishing a multinational aim and associated objectives can also prove challenging. Unless there is a clear collective purpose, such as provided by North Atlantic Treaty Organization Article 5, different national interests, domestic politics (including changes of government) and interpretations of international propriety and obligation, are all likely to have an impact. In such a strategic context, perhaps lacking an agreed strategy, a commander must understand and account for national interests.

- b. **Variance in risk appetite.** Each nation determines how its personnel are employed, normally based upon their own acceptable levels of risk. Moreover, as the threat is unlikely to be uniform across the joint operations area and may be subject to frequent change, risk treatment is unlikely to be the same across a JTF. Risk appetite will also change throughout the life of an operation; it may be larger at the start and smaller towards the end, and increasingly influenced by political factors as the operation progresses.

D.7 **Non-military actors.** While nations' government departments, international organizations and other civilian partners work in highly hazardous situations, they may withdraw their personnel if they judge that a lack of security is preventing them from working effectively. Accordingly, and as part of the contribution to a comprehensive approach, a commander should consider the risk appetite of non-military actors, determine their commitment of resources and personnel, and address the consequences of their activities being periodically unavailable.

Section 2 – Risk management

General⁸¹

D.8 Commanders and forces manage risk by identifying it, analysing it and then evaluating whether the risk should be modified by risk treatment to satisfy their risk criteria. Throughout this process, they communicate and consult with stakeholders and monitor and review the risk and the controls that are modifying the risk to ensure that no further risk treatment is required. Risk management can be applied to the whole allied joint force, at its many areas and levels, at any time, as well as to specific functions and activities. The relationship between the principles for managing risk, the framework in

⁸¹ This annex provides risk considerations inspired from civilian international risk standards as given in ISO 31000:2009(E). It also provides different models and schematics to use during presentation of risk. For risk management conducted during planning of operations AJP-5 refers.

which it occurs and the risk management process described in this annex are shown in Figure D.1.

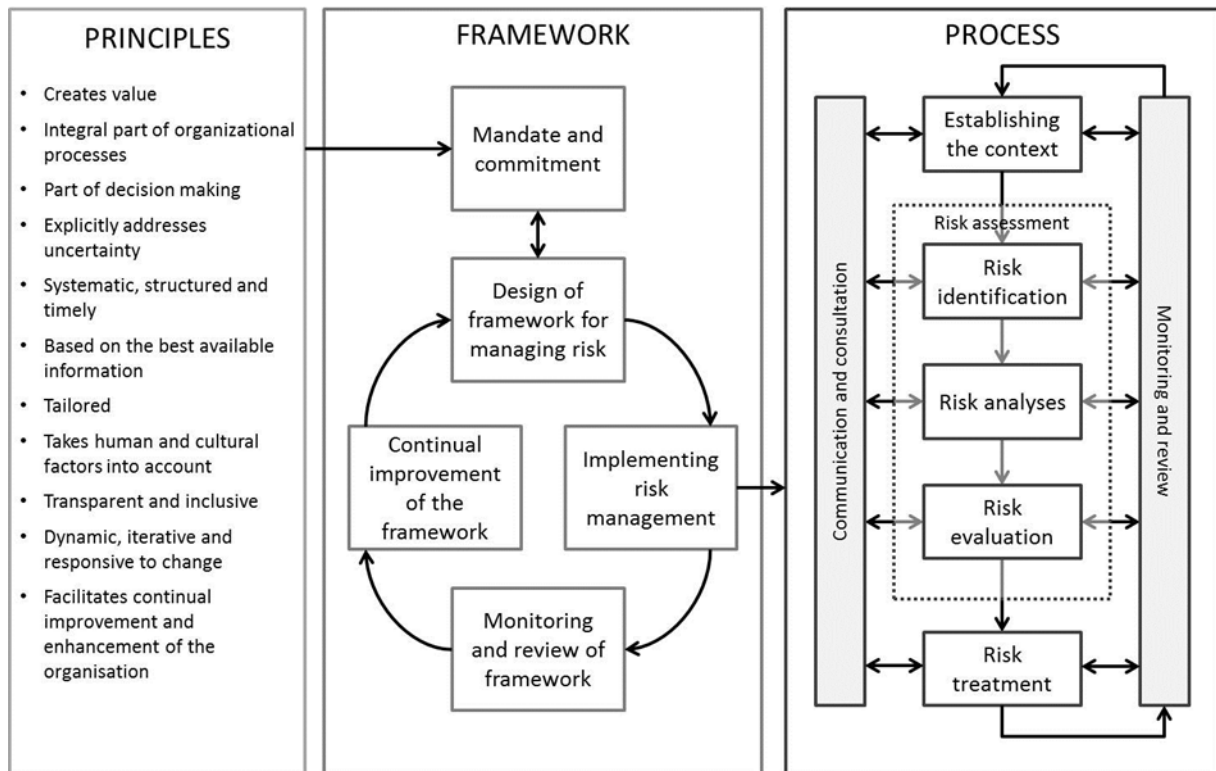


Figure D.1 – Relationship between risk management principles, framework and process

Principles

D.9 For risk management to be effective, the allied joint force should at all levels comply with the principles below.

- a. **Risk management creates added value.** Risk management contributes to the demonstrable achievement of objectives and improvement of performance of the joint force.
- b. **Risk management is an integral part of all joint force processes.** Risk management is not a stand-alone activity that is separate from the main activities and processes of the allied joint force. Risk management is part of the responsibilities of commanders and an integral part of all staff processes, including planning.

- c. **Risk management is part of decision making.** Risk management helps commanders make informed choices, prioritize actions and distinguish among alternative courses of action. Risk management leads to accountability.
- d. **Risk management explicitly addresses uncertainty.** Risk management explicitly takes account of uncertainty, the nature of that uncertainty, and how it can be addressed.
- e. **Risk management is systematic, structured and timely.** A systematic, timely and structured approach to risk management contributes to efficiency and to consistent, comparable and reliable results.
- f. **Risk management is based on the best available information.** The inputs to the process of managing risk are based on information sources such as historical data, experience, feedback, observation, forecasts and expert judgement. However, commanders should inform themselves of, and should take into account, any limitations of the data or modelling used or the possibility of divergence among experts.
- g. **Risk management is tailored.** Risk management is aligned with the allied joint force external and internal context and risk profile.
- h. **Risk management takes human and cultural factors into account.** Risk management recognizes the capabilities, perceptions and intentions of external and internal people that can facilitate or hinder achievement of the objectives of the allied joint force.
- i. **Risk management is transparent and inclusive.** Appropriate and timely involvement of commanders at all levels of the allied joint force, ensures that risk management remains relevant and up-to-date.
- j. **Risk management is dynamic, iterative and responsive to change.** Risk management continually senses and responds to change. As external and internal events occur, context and knowledge change, monitoring and review of risks take place, new risks emerge, some change, and others disappear.
- k. **Risk management facilitates continual improvement of the organization.** Commanders should develop and implement strategies to improve their risk management maturity.

Framework

- D.10 The success of risk management will depend on the effectiveness of the framework that provides the foundations and processes to embed it in the allied joint force. The

framework assists in managing risks through applying the risk management process at varying levels and within specific contexts of the allied joint force. The framework ensures that information about risk derived from the risk management process is adequately reported and used as a basis for decision making and accountability at all relevant levels. Figure D.1 shows the necessary components of the framework for managing risk and the way in which they interrelate in an iterative manner.

- a. **Mandate and commitment.** The introduction of risk management and ensuring its ongoing effectiveness require strong and sustained commitment by the joint force command (JFC).
- b. **Design.** The design of the framework takes into account the following elements:
 - understanding the allied joint force and its context;
 - establishing risk management policy including the risk appetite framework;
 - accountability;
 - integrating into staff processes;
 - applying resources; and
 - implementing internal and external communication and reporting mechanisms.
- c. **Implementation.** Both the framework for managing risk and the risk management process should be implemented in a timely and effective way.
- d. **Monitoring and review.** Adequate monitoring and review should be implemented to ensure that risk management is effective and continues to support staff performance.
- e. **Improvement.** Based on results of monitoring and reviews, decisions should be made on how the risk management framework, policy and plan can be improved.

Risk management process

- D.11 The risk management process should be an integral part of command and control, embedded in the culture, processes and operating procedures of the allied joint force.
- D.12 **Communication and consultation.** Communication and consultation with commanders and staff should take place during all stages of the risk management process. Therefore, plans for communication and consultation should be developed at an early stage. These should address issues relating to the risk itself, its causes, its consequences (if known), and the measures being taken to treat it. Internal and

external communication and consultation should take place to ensure that those accountable for implementing the risk management process understand the basis on which decisions are made, and the reasons why particular actions are required.

- D.13 Communication and consultation is important to address perceptions of risk. These perceptions can vary due to differences in values, needs, assumptions, concepts and concerns. Communication and consultation should facilitate truthful, relevant, accurate and understandable exchanges of information.
- D.14 **Establishing the context.** By establishing the context, the allied joint force articulates its objectives, defines the internal and external parameters to be taken into account when managing risk, and sets the scope and risk criteria for the remaining process. While many of these parameters are similar to those considered in designing the risk management framework, when establishing the context for the risk management process, they need to be considered in greater detail and particularly how they relate to the scope of the particular risk management process.
- D.15 When defining risk criteria, factors to be considered should include the following:
- the nature and types of causes and consequences that can occur and how they will be measured;
 - how likelihood will be defined;
 - the timeframe(s) of the likelihood and/or consequence(s);
 - how the level of risk is to be determined;
 - the views of commanders and supporting actors;
 - the level at which risk becomes acceptable or tolerable; and
 - whether combinations of multiple risks should be taken into account and, if so, how and which combinations should be considered.
- D.16 **Risk identification.** Commanders and staff should identify sources of risk, areas of impacts, events (including changes in circumstances) and their causes and potential consequences. The aim of this step is to generate a comprehensive list of risks based on those events that might create, enhance, prevent, degrade, accelerate or delay achieving objectives. It is important to identify the risks associated with not pursuing an opportunity. Commanders critical information requirements can aid the risk identification step. Comprehensive identification is critical, because a risk that is not identified at this stage will not be included in further analysis.

- D.17 **Risk analysis.** Risk analysis develops an understanding of the risk. Risk analysis considers the causes and sources of risk, their consequences, and the likelihood that those consequences can occur. Factors that affect consequences and likelihood should be identified. An event can have multiple consequences and can affect multiple objectives. Existing controls and their effectiveness and efficiency should also be taken into account.
- D.18 The way in which consequences and likelihood are expressed and the way in which they are combined to determine a level of risk should reflect the type of risk, the information available and the purpose for which the risk assessment output is to be used. These should all be consistent with the risk criteria. It is also important to consider the interdependence of different risks and their sources.
- D.19 Risk analyses can be undertaken with varying degrees of detail, depending on the risk, the purpose of the analysis, and the information, data and resources available. Analysis can be qualitative, semi-qualitative or quantitative, or a combination of these, depending on the circumstances.
- D.20 **Risk evaluation.** The purpose of risk evaluation is to assist in making decisions, based on the outcomes of risk analysis, about which risks need treatment and the priority for treatment implementation. Risk evaluation involves comparing the level of risk found during the analysis process with risk criteria established when the context was considered. Based on this comparison, the need for treatment can be determined. Decisions should take account of the wider context of the risk and should be made in accordance with legal, regulatory and other requirements. In some circumstances, the risk evaluation can lead to a decision to undertake further analysis. The risk evaluation can also lead to a decision not to treat the risk in any way other than maintaining existing controls. This decision will be influenced by the risk appetite and tolerance that have been established by JFC.
- D.21 **Risk evaluation tools.** Several tools are available to evaluate risk. Examples are the risk matrix, probability impact graph and a risk matrix which combines threats and opportunities. The risk management framework can be used to standardize the use of risk evaluation tools.
- a. **Risk matrix.** The risk of any particular event occurring may be plotted on a matrix, like the one shown in Figure D.2, showing the likelihood of a threat occurring, versus its impact. An activity or event may, for example, be classified as very high likelihood of occurrence, and low impact – overall, a medium risk score. To aid subsequent risk management, a commander may draw their own risk tolerance

line, to provide broad guidance. The acceptable threshold may need to be adjusted to the political situation or context. For example, in non-combatant evacuation operations and similar operations, there may be political imperatives that require the risk to nations' citizens and forces to be reduced to a greater extent than might be necessary in combat operations. However, no matter what the nature of the operation, the threshold should not be set to such a low risk extreme that the plan itself becomes risk averse. For example, casualties, deliberate or accidental, are a reality of operations and avoiding them completely may well impact adversely on accomplishing the mission as well as being impractical.

		Likelihood				
		Very high	High	Medium	Low	Very low
Impact	Very high	E	E	H	M	M
	High	E	H	M	M	L
	Medium	H	M	M	L	L
	Low	M	M	L	L	L
	Very low	M	L	L	L	L


	Risk tolerance line (example)
E	Extremely high risk
H	High risk
M	Moderate risk
L	Low risk

Figure D.2 – Example of a risk evaluation matrix

- b. **Probability impact graph.** Risk may also be plotted using a probability impact graph, an example of which is at
- c. Figure D.3. This builds on the matrix approach, by plotting each risk in terms of its impact and likelihood, within environmental or thematic areas. This allows the most severe risks to be highlighted and trends forecasted.

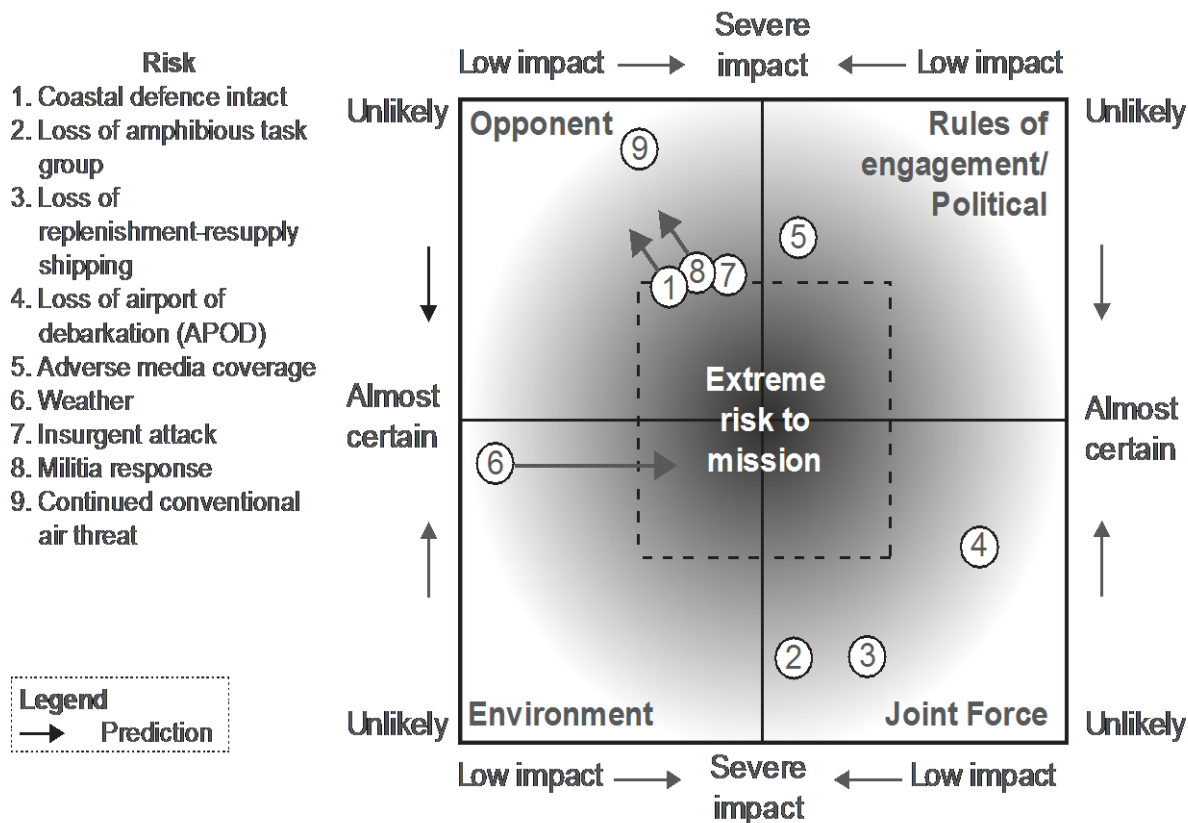


Figure D.3 – Example of a probability impact graph

D.22 **Risk treatment.** Risk treatment involves selecting one or more options for modifying risks, and implementing those options. Once implemented, treatments provide or modify the controls. Risk treatment involves a cyclical process of:

- assessing a risk treatment;
- deciding whether residual risk levels are tolerable;
- generating a new risk treatment if the residual risk levels are not tolerable; and
- assessing the effectiveness of that treatment.

- D.23 Risk treatment options are not necessarily mutually exclusive or appropriate in all circumstances. The options can include the following:
- avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk;
 - taking or increasing the risk to pursue an opportunity;
 - removing the risk source;
 - changing the likelihood;
 - changing the consequences;
 - sharing the risk with another actor; and
 - retaining the risk by informed decision at a higher command level.
- D.24 Selecting the most appropriate risk treatment option involves balancing the effort and cost of implementation against the likely benefits, with regard to legal, regulatory, and other requirements. A number of treatment options can be considered and applied either individually or in combination.
- D.25 Risk treatment itself can introduce risks. A significant risk can be the failure or ineffectiveness of the risk treatment measures. Monitoring needs to be an integral part of the risk treatment plan to give assurance that the measures remain effective. Risk treatment can also introduce secondary risks that need to be assessed, treated, monitored and reviewed. These secondary risks should be incorporated into the same treatment plan as the original risk and not treated as a new risk. The link between the two risks should be identified and maintained.
- D.26 The purpose of risk treatment plans is to document how the chosen treatment options will be implemented. The information provided in treatment plans should include:
- the reasons for selection of treatment options, including expected benefits to be gained;
 - those who are accountable for approving the plan and those responsible for implementing the plan;
 - proposed actions;
 - resource requirements including contingencies;
 - performance measures, constraints and restraints;
 - reporting and monitoring requirements; and

- timing and schedule.

D.27 Treatment plans should be integrated with the staff processes of the allied joint force and discussed with appropriate stakeholders. Commanders should be aware of the nature and extent of the residual risk after treatment. The residual risk should be documented and subjected to monitoring, review and, where appropriate, further treatment.

D.28 **Monitoring and review.** Both monitoring and review should be a planned part of the risk management process and involve regular checking or surveillance. It can be periodic or ad hoc, or a combination of both. Responsibilities for monitoring and review should be clearly defined.

D.29 **Recording the risk management process.** Risk management activities should be traceable. In the risk management process, records provide the foundation for improvement in methods and tools, as well as in the overall process.

ANNEX E – Lessons learned

Introduction

- E.1 The term lesson learned (LL) is broadly used to describe people, things, and activities related to the act of learning from experience to achieve improvements. The experience may be positive, as in completing a successful task or procedure, or negative, as in mission failure. A lesson must be significant in that it has a real or assumed impact on operations; valid in that it is factually and technically correct; and applicable in that it identifies a specific design, process, or decision that reduces or eliminates the potential for failures or reinforces a positive result. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact.
- E.2 The idea of LL in an organization is that, through a formal approach to learning, individuals and the organization can reduce the risk of repeating mistakes and increase the chance that successes are recurring. In the military context, this means reduced operational risk, increased cost efficiency, and improved operational effectiveness. LL describe more than just learning from experience, learning must be used to justify changes that will lead to improved performance. The purpose of LL procedures is to learn efficiently from experience and to provide validated justifications for amending the existing way of doing things, to improve performance, both during the course of an operation and for subsequent operations. This requires lessons to be meaningful and for them to be brought to the attention of the appropriate authority able and responsible for dealing with them. It also requires the chain of command to have a clear understanding of how to prioritize lessons and how to staff them.
- E.3 Everyone within an organization needs to be involved in a LL process for it to be successful. A lesson is not learned until something changes in the way the organization operates, and by those most affected by an issue. Operators are the most likely to identify potential lessons through direct observations since they are closely involved with the issues. Unless these lessons are submitted via a LL process, they may not be discovered by lessons learned staff officers and will not contribute to the learning process.
- E.4 An effective LL process should be an instrumental part of any organization's overall improvement process. The establishment of a lessons learned capability aims at enabling continuous improvement across the Alliance, thus enhancing the effectiveness of a joint force command or joint task force. Quality control of the way

military forces operate is difficult to achieve but one of the most reliable measures must be their performance on operations. Commanders must prioritize lessons, assign and track remedial actions, follow up to ensure their organization has actually learned and, just as important, be the driving force for sharing lessons.

- E.5 The commander is responsible for ensuring the force takes into account the requirement to capture lessons learned during all stages of an operation and that an appropriate mechanism has been established from the beginning. All units must be given clear direction on the capture, forwarding and storage of relevant data. The primary aim is to enhance joint force readiness and effectiveness by contributing to improvements in doctrine, organization, training, materiel, etc. Capturing and recording lessons needs to be done when the lessons are discovered. The more real-time the practice, the more effective it becomes. Waiting until the end of an operation to review lessons identified may reduce their impact.
- E.6 During the operations assessment process, the assessment cell acquires a deep understanding of favorable and unfavorable actions during the operations execution. Generalizations can then feed into a lessons identified/lessons learned process. The operations assessment cell keeps record of all operations design related data, products and decisions during the operation to support post operation analysis. The data collected can help staffs understand the operating environment and how military actions contributed to the success or failure of a mission. It preserves parts of the institutional memory that can be used to learn from each other's experiences. It supports observations and analysis leading to lessons learned and development of best practice.
- E.7 Identifying lessons for a multinational force requires careful consideration because some lessons will be a national responsibility and others will be for the Alliance to address. Commanders at all levels must recognize this from the outset for subsequent analysis and critical review. Strategic plans should include an LL annex providing operational commanders the necessary direction, timings and guidance to address these issues. Operational plans should also include similar LL guidance to the joint force. Likewise, lessons-learned databases are knowledge-based products that help users avoid previous mistakes and adopt proven best practices. These databases exemplify how the marrying of information management and decision-support processes can improve future operations by sharing knowledge gained through experience.

The NATO lessons learned process

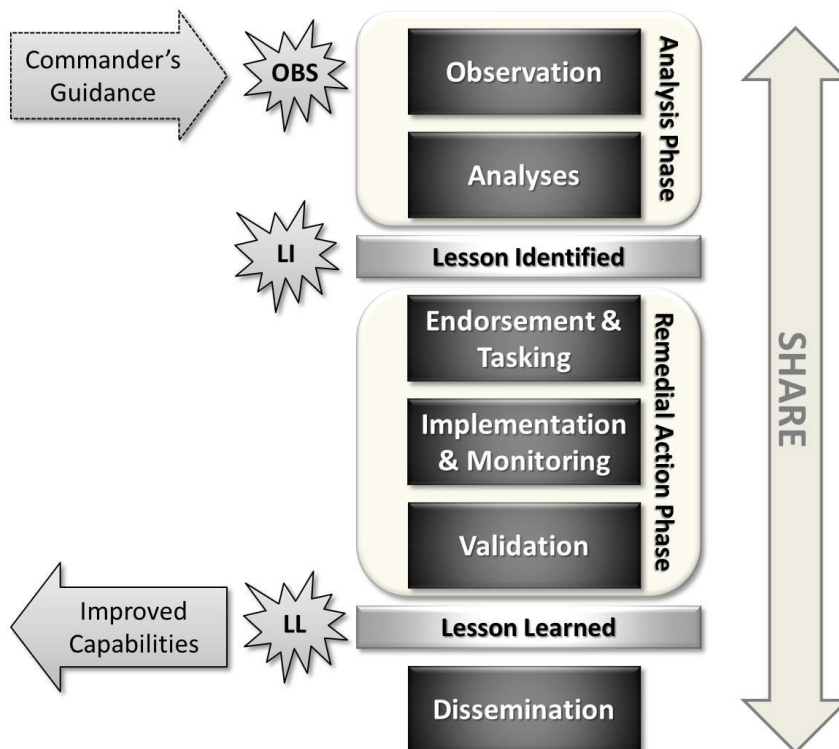


Figure E-1 – The NATO lessons learned process (simplified)

E.8 Figure E-1 illustrates a North Atlantic Treaty Organization (NATO) lessons learned process⁸² which is comprised of several phases and stages. The first phase, analysis, begins with gathering observations. An individual within NATO makes an observation: "a comment based on something someone has heard, seen or noticed that has been identified and documented as an issue for improvement or a potential best practice." The commander of the given body may provide guidance on the critical areas that need to be addressed for improvement. The observer, supported by lessons learned staff officers and subject matter experts within the chain of command, then analyzes the observation to identify its root cause. Once the root cause is understood, an appropriate remedial action that will address the root cause can be identified to correct the problem or sustain success. A remedial action is an activity or set of activities that corrects an issue identified for improvement or facilitates the implementation of a best practice. Additionally, the person or organization which should execute the remedial

⁸² For more information about lessons learned and the NATO lessons learned process, see Bi-SC Command Directive 80-6 *Lessons Learned*, ACO Directive 80-1 *Lessons Learned*, and the *NATO Lessons Learned Handbook*.

action will be identified during the analysis step. The output of the analysis is a lesson identified (LI). Once a LI is developed, the remedial action phase begins.

- a. The first step in the remedial action phase of the NATO LL process is endorsement and tasking. During this step, developed LIs will be presented to the organization's leadership for them to determine how to progress the LI through the LL process. First, the LI will be endorsed whereby it is approved for further action and the proposed remedial action is accepted or modified to be acceptable, and then an action body will be formally tasked to plan and implement the remedial action. The leadership also commits to providing the resources needed to implement the remedial action.
- b. The next step is implementation and monitoring, during which the action body will prepare and implement their remedial action through the use of an action plan and the lessons learned staff officers will support leadership in monitoring its implementation. After the remedial action has been implemented, some form of validation is needed, to verify whether the original issue has been successfully solved. Verification may involve further work and analysis, possibly using exercises or experiments.
- c. Following the completion of the remedial action and successful validation, the LI will be deemed an LL and the formal LL process concludes. However, it is important that further dissemination and publication of information occurs. Dissemination of the LL enables all parties to put the improvement into practice. As illustrated at the bottom of Figure E-1, information sharing takes place during the entire process.

The Joint Analysis and Lessons Learned Centre's role in the NATO lessons learned process⁸³

E.9 The Joint Analysis and Lessons Learned Centre (JALLC) is NATO's focal point for LL analysis and facilitates lessons sharing among Allies as well as with non-NATO nations and international organizations as appropriate. The JALLC is NATO's centre for performing joint analysis of operations, training, exercises and experiments, based on joint analysis requirements generated by both NATO strategic commands. The JALLC supports the exchange of LL and facilitates the development of LL capabilities.

⁸³ To facilitate the sharing of lessons within NATO, the JALLC has developed and manages the NATO Lessons Learned Portal. For more information on the NATO lessons learned go to the NATO Lessons Learned Portal at <https://nllp.jallc.nato.int/Pages/default.aspx>.

- a. NATO's LL policy states that the JALLC, as part of the NATO Command Structure, and subordinate to headquarters Supreme Allied Commander Transformation, provides analysis support to operations, training, exercises, and experimentation and maintains the NATO LL portal - a tool to facilitate the LL process. The JALLC is able to facilitate the sharing of LL, assist in the management and dissemination of LL NATO-wide, and provide advice on implementation.
- b. The JALLC also supports the overarching NATO LL capability by providing analysis expertise to operations, training, exercises and experimentation; providing LL training; managing the NATO LL portal; and engaging, through its JALLC advisory & training team, with NATO commands, Allies, partners and other entities to support their LL capability development. On request, the JALLC, through the JALLC advisory & training team, can provide LL assistance to Nations and NATO commands and agencies to assist in the establishment of their own LL capability and programs as well as provide advice on LL implementation.⁸⁴

⁸⁴ For more information about the JALLC's lessons learned outreach activities, see the JALLC advisory & training team's page at <http://www.jallc.nato.int/activities/jatt.asp>.

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Lexicon

Part I – Acronyms and abbreviations

The lexicon contains abbreviations relevant to AJP-3(C) and is not meant to be exhaustive. The definitive and more comprehensive list of abbreviations is in AAP-15.

ACC	Air Component Command
ACO	Allied Command Operations
ACT	Allied Command Transformation
AJP	Allied joint publication
AOO	area of operations
C2	command and control
CBRN	chemical, biological, radiological and nuclear
CCIR	commander’s critical information requirement
C-IED	countering improvised explosive devices
CIMIC	civil-military cooperation
CIS	communication and information systems
CMI	civil-military interaction
COA	course of action
COG	centre of gravity
COIN	counter-insurgency
CONOPS	concept of operations
COS	chief of staff
CSS	combat service support
CT	counterterrorism
EAPC	Euro-Atlantic Partnership Council
EMS	electromagnetic spectrum
EU	European Union
FMB	forward mounting base
FULLCOM	full command
GRF	graduated readiness force
HA	humanitarian assistance
HN	host nation
HNS	host-nation support
HQ	headquarters

HQ AIRCOM	Headquarters Allied Air Command
HQ LANDCOM	Headquarters Allied Land Command
HQ MARCOM	Headquarters Allied Maritime Command
IED	improvised explosive device
IM	information management
Info Ops	information operations
IO	international organization
JALLC	Joint Analysis and Lessons Learned Centre
JFAC	joint force air component
JFACC	joint forces air component command
JFC	joint force command
JISR	joint intelligence, surveillance and reconnaissance
JLSG	joint logistic support group
JOA	joint operations area
JOC	joint operations centre
JOPG	Joint Operations Planning Group
JTF	joint task force
JTF HQ	joint task force headquarters
LCC	land component command
LEGAD	legal advisor
LI	lesson identified
LL	lessons learned
LOC	lines of communications
MC	Military Committee
MCC	maritime component command
MEDAD	medical advisor
Mil PA	military public affair
MILENG	military engineering
MJO	major joint operation
MP	military police
NAC	North Atlantic Council
NATO	North Atlantic Treaty Organization
NCS	NATO Command Structure
NEO	non-combatant evacuation operation
NFS	NATO force structure
NFZ	no-fly zone
NGO	non-governmental organization

NNCN	non-NATO contributing nation
NSHQ	NATO Special Operations Headquarters
NSO	NATO Standardization Office
OBS	observation
OPCOM	operational command
OPCON	operational control
OPLAN	operation plan
OPT	operational planning team
PA	public affairs
PoC	protection of civilians
POD	port of debarkation
POLAD	political advisor
PsyOp	psychological operations
ROE	rules of engagement
RSOMI	reception, staging, onward movement and integration
SA	situational awareness
SACEUR	Supreme Allied Commander Europe
SHAPE	Supreme Headquarters Allied Powers Europe
SOCC	special operations component command
SOF	special operations forces
SOFA	Status of Forces Agreement
SOTG	special operations task group
SSG	Signal Support Group
StratCom	strategic communications
S&R	stabilization and reconstruction
TACOM	tactical command
TACON	tactical control
TBMD	theatre ballistic missile defence
TCN	troop-contributing nation
TDL	tactical data link
TOA	transfer of authority
UN	United Nations
WG	working group

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Part II – Terms and definitions

air and missile defence

All measures to contribute to deter any air and missile threat or to nullify or reduce the effectiveness of hostile air action to protect populations, territory and forces against the full spectrum of air and missile threats. (MC 0613 – Not NATO agreed)

area of influence

An area wherein a commander is directly capable of influencing operations, by manoeuvre or fire support systems normally under his command or control. (This term and definition modifies an existing NATO-agreed term and/or definition and will be processed for NATO-agreed status. TTF 1972-0003, revalidation ongoing)

area of interest

For a given level of command, the area of concern to a commander relative to the objectives of current or planned operations, and which includes the commander's areas of influence, operations or responsibility, and areas adjacent thereto. (NATO Agreed)

area of operations

An area within a joint operations area defined by the joint force commander for conducting tactical level operations. (NATO Agreed)

area of responsibility

For a given level of command, an area assigned to a commander to plan and conduct operations. (This term and definition modifies an existing NATO-agreed term and/or definition and will be processed for NATO-agreed status. TTF 2009-0002, revalidation ongoing)

battlespace

The environment, factors and conditions that must be understood to apply combat power, protect a force or complete a mission successfully. Note: It includes the land, maritime, air and space environments; the enemy and friendly forces present therein; facilities; terrestrial and space weather; health hazards; terrain; the electromagnetic spectrum; and the information environment in the joint operations area and other areas of interest. (NATO Agreed)

best practice

A method or technique that has been generally accepted as superior to any alternatives because it produces results that are superior to those achieved by other means or because it has become a standard way of doing things. (Not NATO Agreed)

centre of gravity

The primary source of power that provides an actor its strength, freedom of action, and/or will to fight. (NATO Agreed)

counterterrorism

All preventive, defensive and offensive measures taken to reduce the vulnerability of forces, individuals and property against terrorist threats and/or acts, and to respond to terrorist acts. (NATO Agreed)

decisive condition

A combination of circumstances, effects, or a specific key event, critical factor, or function that, when achieved, allows commanders to gain a marked advantage over an opponent or contribute materially to achieving an objective. (NATO Agreed)

end state⁸⁵

The political and/or military situation to be attained at the end of an operation, which indicates that the objective has been achieved. (NATO agreed)

environmental protection

The prevention or mitigation of adverse environmental impacts. (NATO Agreed)

force protection

All measures and means to minimize the vulnerability of personnel, facilities, equipment and operations to any threat and in all situations, to preserve freedom of action and the operational effectiveness of the force. (NATO Agreed)

information activities

Actions designed to affect information or information systems. Note: Information activities can be performed by any actor and include protection measures. (NATO Agreed)

information environment

A composite of the information itself, the individuals, organizations and systems that receive, process and convey the information, and the cognitive, virtual and physical space in which this occurs. (This term and definition proposed as a new NATO-term and/or definition and will be processed for NATO-agreed status. TTF 2013-0066, addition ongoing)

⁸⁵ MCM-0041-2010, Annex B defines end state as 'the NAC approved set of required conditions within the engagement space that defines an acceptable concluding situation to be attained at the end of a strategic engagement'.

information operations

A staff function to analyze, plan, assess and integrate information activities to create desired effects on the will, understanding and capability of adversaries, potential adversaries and audiences approved by the North Atlantic Council in support of Alliance mission objectives. (This term and definition is proposed as a new NATO-term and/or definition and will be processed for NATO-agreed status. TTF 2007-0400, addition ongoing)

irregular activity

The use or threat of force by irregular forces, groups or individuals, frequently ideologically or criminally motivated, to effect or prevent change as a challenge to governance and authority. (NATO Agreed)

joint logistic support group

A logistics-centric, force-generated, deployed, component-like joint organization, discharging operational-level responsibilities, through joint operational and tactical-level activities. (TTF 2011-1800, proposal 2 as of 2017-02-28, addition ongoing)

joint operations area

A temporary area within a theatre of operations defined by the Supreme Allied Commander Europe, in which a designated joint commander plans and executes a specific mission at the operational level. (NATO Agreed)

lesson identified

A observation that, after being subject to an analyses, has a determined root cause and a recommended remedial action and action body to resolve the observed problem, which can be proposed to the appropriate authority. (Bi-SCD 080-006 – Not NATO Agreed)

lesson learned

An improved capability or increased performance confirmed by validation, when necessary, resulting from the implementation of one or more remedial actions for a lesson identified. (Bi-SCD 080-006 – Not NATO Agreed)

liaison

The contact, intercommunication and coordination maintained between elements of the military and/or other non-military actors to ensure mutual understanding and unity of purpose and action. (NATO Agreed)

line of operation

A path linking decisive conditions to achieve an objective. (NATO Agreed)

naval cooperation and guidance of shipping

The provision of NATO military cooperation, guidance, advice, assistance and supervision to merchant shipping to enhance the safety of participating merchant ships and to support military operations. (NATO Agreed)

objective

A clearly defined and attainable goal for a military operation, for example seizing a terrain feature, neutralizing an adversary's force or capability or achieving some other desired outcome that is essential to a commander's plan and towards which the operation is directed. (NATO Agreed)

operation

A sequence of coordinated actions with a defined purpose. (NATO Agreed)

Notes:

1. NATO operations are military.
2. NATO operations contribute to a wider approach including non-military actions.

operation plan

A plan for a single or series of connected operations to be carried out simultaneously or in succession.

Notes:

- 1 – It is the form of directive employed by higher authority to permit subordinate commanders to prepare supporting plans and orders.
- 2 – The designation 'plan' is usually used instead of 'order' in preparing for operations well in advance.
- 3 – An operation plan may be put in effect at a prescribed time, or on signal, and then becomes the operation order.

(NATO Agreed)

operational art

The employment of forces to attain strategic and/or operational objectives through the design, organization, integration and conduct of strategies, campaigns, major operations and battles. (NATO Agreed)

port of debarkation

A seaport, airport or railhead where personnel, equipment and/or stocks are unloaded from a means of transport. (NATO Agreed)

security intelligence

Intelligence on the identity, capabilities and intentions of hostile organizations or individuals who are or may be engaged in espionage, sabotage, subversion, terrorism and organized crime. (NATO Agreed)

theatre of operations

A designated area, which may include one or more joint operations areas. Notes: A theatre of operations may include land, air, space and sea outside a joint operations area. (This term and definition modifies an existing NATO-agreed term and/or definition and will be processed for NATO-agreed status. TTF 1993-0023, modification ongoing)

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