

NATO STANDARD

AJP-3

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

Edition D, Version 1

AUGUST 2025



NORTH ATLANTIC TREATY ORGANIZATION

ALLIED JOINT PUBLICATION

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Allied Joint Publication-3

Allied Joint Doctrine

for the Conduct of Operations

Allied Joint Publication-3 (AJP-3), Edition D, Version 1,

dated August 2025,

is promulgated as directed by the Chiefs of Staff



Director Integrated Warfare Centre

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Summary of changes

Record of summary of changes for Allied Joint Publication (AJP)-03(D)
<ul style="list-style-type: none"> • Harmonized with AJP-01(F) including the deletion of transferred topics.
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<ul style="list-style-type: none"> • Updated principles and operational considerations.
<ul style="list-style-type: none"> • Added context of operations like human security, cross-cutting topics, legal, joint, interagency, multinational and public.
<ul style="list-style-type: none"> • Added multi-domain operations.
<ul style="list-style-type: none"> • Updated factors of command and control, supported/supporting interrelationships, agility and mission command.
<ul style="list-style-type: none"> • Added sustaining activities.
<ul style="list-style-type: none"> • Updated operational art.
<ul style="list-style-type: none"> • Describes fighting power as being reflected by combat power, fighting spirit and operational art.
<ul style="list-style-type: none"> • Updated joint action and joint functions framework.
<ul style="list-style-type: none"> • Added the operations process.
<ul style="list-style-type: none"> • Updated risk management to align with ISO-31000:2018(E).
<ul style="list-style-type: none"> • Deleted the annex on related capabilities to the joint functions.
<ul style="list-style-type: none"> • Deleted the annex on lessons learned.
<ul style="list-style-type: none"> • Added an annex explaining the operating environment, operational domains, effect dimensions and the engagement space.
<ul style="list-style-type: none"> • Changed the term “battlespace management” in “engagement space management”.
<ul style="list-style-type: none"> • Rearranged topics throughout the publication into three chapters and four annexes.

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References

NATO policy and Military Committee documents

MC 0133/5	<i>NATO's Operations Planning</i>
MC 0362/2	<i>NATO Rules of Engagement</i>
MC 0586/2	<i>Allied Forces and their Use for Operations</i>
MC 0668	<i>Concept for the Protection of Civilians</i>
MCM-0169-2019	<i>Joint Command and Control Concept of Operations</i>
MCM-0200-2020	<i>NATO Warfighting Capstone Concept</i>
MCM-0067-2020	<i>Concept for Deterrence and Defence of the Euro-Atlantic Area</i>
MCM-0286-2021	<i>NATO's Force Model</i>
MCM-0004-2023	<i>Alliance Concept for Multi-Domain Operations</i>
PO(2011)0293-AS1	<i>NATO Lessons Learned Policy</i>
PO(2016)0407	<i>NATO Policy for the Protection of Civilians</i>
PO(2021)0190	<i>NATO Policy on Preventing and Responding to Conflict-related Sexual Violence</i>
PO(2021)0336	<i>Action Plan for the Implementation of the NATO/EAPC Policy on Women, Peace and Security 2021-2025</i>
PO(2022)0200	<i>NATO 2022 Strategic Concept</i>
PO(2022)0280	<i>Human Security Approach and Guiding Principles</i>

NATO Standards¹

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 Sustainment of Operations</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>
AJP-10	<i>Allied Joint Doctrine for Strategic Communications</i>
AEMP-1	<i>Spectrum Management in Military Operations</i>

Other NATO publications

NATO BI-SC Dir 40-1	<i>Integrating Gender Perspective into the NATO Command Structure</i>
NATO BI-SC Dir 86-006	<i>Implementing PoC in NATO Operations, Missions and Activities</i>
CFAO	<i>NATO Bi-Strategic Commands Conceptual Framework for Alliance Operations</i>
NATO BI-SC Dir 080-006	<i>Lessons Learned</i>

¹ 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.

ACO Directive 80-1
AC35-D1040 REV 6

EAPC(C)D(2014)0019

ACO Handbook
NATOTerm

Lessons Learned

*Supporting Document on Information and Intelligence Sharing
with non-NATO Entities*

*NATO/EAPC Action Plan for the Implementation of UNSCR
1325 and Related Resolutions*

Protection of Civilians

The Official NATO Terminology Database

Other publications

International
Organization for
Standardization

*Risk management – Guidelines (ISO 31000:2018(E), 2nd
Edition)*

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Preface

Scope

1. Allied joint publication (AJP)-3, *Allied Joint Doctrine for the Conduct of Operations* is the NATO keystone doctrine to prepare, conduct, and assess joint operations throughout the continuum of competition.

Purpose

2. AJP-3 provides commanders and their staffs with direction and guidance on the conduct of joint operations at the operational level of operations. It is the foundational doctrine for the AJP-3 series.

Application

3. AJP-3 is written for NATO commanders and their staffs engaged in joint operations. The doctrine provides a useful framework for operations conducted by a coalition of partners and non-NATO nations. AJP-3 also provides a reference for NATO civilian and non-NATO civilian actors.

Structure

4. Chapter 1 introduces the fundamentals applicable to the conduct of operations. While each operation is unique, these fundamentals are applicable to every operation. Chapter 2 provides guidance on preparation, sustaining, transition and termination. Understanding these essential elements for the conduct of operations precede the execution of operations. Chapter 3 discusses the execution of operations by providing guidance on the operations process, operational art, operations management and assessment. Four annexes are added to provide in depth guidance on the operating environment, the joint headquarters, engagement space management and risk management. A lexicon is added consisting of acronyms and abbreviations (Part 1) and terms and definitions (Part 2).

Linkages

5. AJP-3 builds on the principles described by AJP-01, *Allied Joint Doctrine* and complements other level-1 keystone publications and is especially related to AJP-5, *Allied Joint Doctrine for the Planning of Operations*. It contains overarching doctrine for level-2 and -3 doctrine publications.

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Chapter 1 – Fundamentals

Section 1 – Introduction

Military strategy

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 tactical level activities to strategic objectives. Tactical successes have intrinsic value but, more importantly, they are the means to achieving strategic objectives. Capabilities that are required by multiple tactical commands are often controlled at the operational level to enable them to be allocated when required. The scale of the operational level is not pre-defined; it should assume a size and shape commensurate with the requirements of the campaign. Notwithstanding the size and shape of the operational level, the headquarters (HQ) is generally joint, inter-agency and multinational.

1.2 At the operational level, emphasis should be placed on orchestrating operations and activities of multiple actors across the five operational domains,² troop contributing nations as well as non-military actors and exploiting the synergies that can be attained; the success of the process determines the ability of a joint task force (JTF) to achieve its objectives. Planning for complex operations also requires cooperation with non-military actors.³ At the operational level it is critical to interact effectively with other actors in order to conduct appropriate planning for crisis response. This interaction requires communication, planning and coordination, and is conducted by NATO military disciplines and functions.

1.3 *NATO's 2022 Strategic Concept* emphasizes NATO's continuous work toward a just, inclusive and lasting peace and remains committed to the rules-based international order (RBIO), involving military, political, economic and information instruments of power.⁴ The *Concept for Deterrence and Defence of the Euro-Atlantic Area* (DDA), supported by the *NATO's Force Model*, emphasizes that the Alliance's actions are focused to deter and, if necessary, defend against potential threats and challenges.⁵ Every effort, including the readiness and locations of the Alliance's forces, exercise cycles, engagements, and communications, proclaims to Allies, neutrals and adversaries the strength of the Alliance. These actions are appropriate, proportional, and defensive in nature.

1.4 Military means, although essential, are not enough on their own to meet the challenges to Euro-Atlantic and international security. The implementation of a comprehensive approach

² There are five operational domains: maritime, land, air, space and cyberspace, each conditioned by the characteristics of its operating environment.

³ See AJP-5, *Allied Joint Doctrine for the Planning of Operations*, for detail.

⁴ See PO(2022)0200, *NATO 2022 Strategic Concept*, for detail.

⁵ See Military Committee memorandum (MCM)-0067-2020, *Concept for Deterrence and Defence of the Euro-Atlantic Area*, and MCM-0286-2021, *NATO's Force Model*, for detail.

strives for actors and stakeholders to contribute from a position of shared purpose, responsibility, openness and determination. This takes 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 cooperation. Politically, at the strategic level, NATO is focused on building confidence and mutual understanding between nations. NATO's comprehensive approach actively builds closer links and liaison with actors and stakeholders while respecting the autonomy of decision-making of each organization. This comprehensive approach is a permanent feature of the Alliance's work.

Key tenets of doctrine

1.5 There are four key tenets of doctrine:⁶ the behaviour-centric approach; the comprehensive approach; the manoeuvrist approach; and mission command. They apply across the levels of operations and in any situation that the military instrument is used. The behaviour-centric approach recognizes that people's attitude and behaviour are central to attaining the end state, and that the Alliance has to take account of a much broader audience than simply the "enemy" or "adversary". The behaviour-centric approach is about a comprehensive and persistent understanding of audiences and how they can affect the Alliance's desired end state. This approach uses narrative-led execution to converge effects from every level of command and to preserve or change audiences' attitudes and behaviours. Audiences are segmented into three general categories - public, stakeholder and actor - depending on their ability to affect the end state. The comprehensive approach is the combining of available political, military and civilian capabilities, in a concerted effort, to attain the desired end state. This complements the manoeuvrist approach, which seeks to pit strength against vulnerabilities, mostly through indirect ways and means, targeting understanding, capability, cohesion and, ultimately, an adversary's will to contest. Mission command advocates centralized intent and decentralized execution, enabling the force to take calculated and managed risks and learn, anticipate and adapt more quickly than unsupportive and hostile actors. Together the tenets offer the prospect of achieving rapid gains or results that are disproportionately greater than the resources applied.

Section 2 – Allied operations

Stages of a joint operation

1.6 Each operation consists of a logical order of events. These events or stages may occur in sequence, parallel, or overlap depending on the situation and mission. Situational awareness and information management are common to every stage of an operation and should be in place well in advance of a NATO response to a crisis and continuing in support of subsequent stages. A typical joint operation includes:

⁶ See AJP-01, *Allied Joint Doctrine*, for detail.

- analysis (framing the problem and operating environment);
- development of an operation plan;
- force generation and preparation, including resources, personnel and equipment provision, assembly and pre-mission training;
- sustainment build-up;
- theatre entry or deployment to the area where operations are to be conducted, or to reinforce or replace in-place forces;
- conduct of operations (supported by the operations process plan-prepare-execute) and continuous assessment and review, and adjusting the conduct of operations as required;
- operation (mission) termination and transition;
- re-deployment of forces; and
- identification of lessons during the operation.

NATO's activities across the continuum of competition

1.7 The *North Atlantic Treaty* and the *NATO 2022 Strategic Concept* are core documents that articulate NATO's transatlantic consensus. The three core policies of deterrence and defence, projecting stability and the fight against terrorism, apply across the continuum of competition. Furthermore, these three core policies facilitate the complementary tasks of deterrence and defence; crisis prevention and management; and cooperative security. Together they provide a solid foundation for the collective defence and security of the Alliance. The adoption of *NATO's Force Model* strengthens and modernizes the NATO Force Structure, supports NATO's core tasks and resources the Alliance's new generation of military plans.

1.8 NATO strengthens its ties with partners that share the Alliance's values and interest in upholding the RBIO. NATO enhances dialogue and cooperation to defend that order, uphold the Alliance's values and protect the systems, standards and technologies on which the RBIO depends. NATO increases outreach to countries across the globe and remains open to engage with any country or organization, if doing so could bolster the Alliance's security.

1.9 NATO's core tasks, addressed by NATO's core policies, are executed by defining and achieving strategic objectives. Using competition's campaign mindset, NATO uses the campaign themes (peacetime military engagement, peace support, and warfighting) to rapidly transition the focus of its activities in order to keep up the campaign's momentum.⁷ A campaign is a set of military operations planned and conducted to achieve a strategic objective. Within the continuum of competition, a wide range of operations may be undertaken

⁷ See AJP-01, *Allied Joint Doctrine*, for detail.

according to Alliance purposes. NATO operations may be categorized by identifying specific characteristics that differentiate them.

Campaign themes

1.10 Campaign themes use the concept of limitations (such as objective, means, area, time, rules of engagement and other political constraints) and the concept of intensity (the expected degree and frequency of violence of the subordinate operations) to provide the framework for campaigns. The selected themes reflect the political context and strategic narrative that guides the ends, ways and means requirements. The themes support operational art in guiding tactical operations to achieve the desired strategic objectives.

1.11 Campaign themes are often interdependent and cannot be thought of as a linear or sequential progression. NATO achieves strategic objectives by persistently and deliberately delivering peacetime military engagement, peace support and security-themed campaigns to attract and deter audiences, and, if necessary, deny malign actors their objectives. This constrains adversaries, discourages unsupportive stakeholders and prevents competition from escalating. There are four main campaign themes, and their relation with the continuum of competition is shown in Figure 1-1.

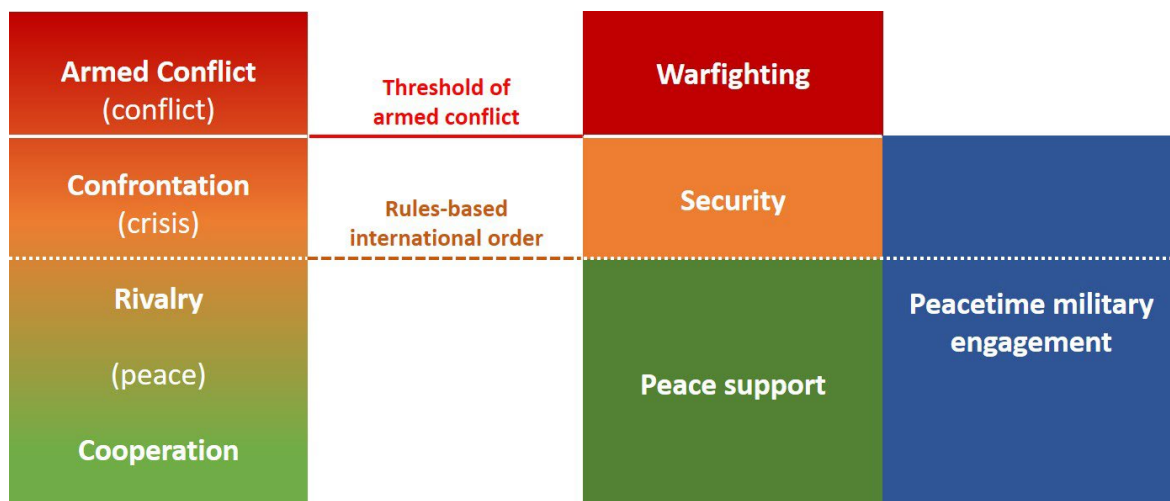


Figure 1-1: Most common relationships between campaign themes and the continuum of competition

- a. **Peacetime military engagement.** The military interacts with allies, partners and other stakeholders during peacetime to develop relationships and improve capabilities contributing to NATO's core policies. Two of the more common activities it conducts as part of a peacetime military engagement campaign are capacity building and humanitarian relief.
- b. **Peace Support.** NATO commits its military into the rivalry zone impartially under the campaign theme of peace support. The intent is to preserve peace or to intervene

early to prevent conflict, maintain stability, safeguard prosperity and reinforce the rule of law. It most commonly can be summed up as peacekeeping, and peacebuilding.

c. **Security.** In the area of confrontation, NATO detects, deters and, if required, responds to strategic competition's operating techniques, especially threshold shifting. This may be contesting sub-threshold activity or conducting peace enforcement operations. It requires an agile and adaptable posture, speed of recognition and decision-making.

d. **Warfighting.** At the high end of the competition continuum, NATO employs its military forces to conduct combat operations which may be against another state's armed forces, or it may be directed over a relatively longer period of time against irregular forces. It may also use its forces for a major crisis response operation.

Operations and activities

1.12 Operations may include combat and crisis response operations such as the military contribution to: security force assistance;⁸ stability policing;⁹ countering weapons of mass destruction;¹⁰ peace support;¹¹ humanitarian assistance;¹² counter-insurgency;¹³ and stabilization.¹⁴ While each operation is unique, operations have in common that they consist of a tailored combination of four groups of tactical activities: offensive, defensive, stability and enabling activities. Each activity is intended to create (or contribute to) a particular effect on the understanding, capability and/or will of others. Knowledge of the relationships between campaign themes, operations and tactical activities and the associated doctrine assists in understanding the context and the design of an operation. Competence in planning and executing these tactical activities is fundamental to a JTF's fighting power.

Multi-domain operations

1.13 The Alliance's approach to the developing concept of multi-domain operations (MDO) will enable NATO's military commanders to prepare, plan, orchestrate, and execute synchronized activities across all domains and environments,¹⁵ at scale and speed in collaboration with other instruments of power, stakeholders and actors.¹⁶ This delivers tailored options, at the right time and place, that build advantage in shaping, contesting, and

⁸ See AJP-3.16, *Allied Joint Doctrine for Security Force Assistance*, for detail.

⁹ See AJP-3.22, *Allied Joint Doctrine for Stability Policing*, for detail.

¹⁰ See AJP-3.23, *Allied Joint Doctrine for Countering Weapons of Mass Destruction in Military Operations*, for detail.

¹¹ See AJP-3.24, *Allied Joint Doctrine for the Military Contribution to Peace Support*, for detail.

¹² See AJP-3.26, *Allied Joint Doctrine for the Military Contribution to Humanitarian Assistance*, for detail.

¹³ See AJP-3.27, *Allied Joint Doctrine for Counter-Insurgency*, for detail.

¹⁴ See AJP-3.28, *Allied Joint Doctrine for the Military Contribution to Stabilization*, for detail.

¹⁵ See Annex A for more details on domains, environments, effect dimensions, operating environment and engagement space.

¹⁶ See MCM-0004-2023 (INV), *Alliance Concept for Multi-Domain Operations*, for detail.

fighting while it presents dilemmas that influence positively the attitudes and behaviours of adversaries and relevant audiences.

1.14 The DDA introduces and describes the character and requirements for MDO. The employment of force in a multi-domain approach to counter the adversary's multi-domain offensive operations is at the core of the DDA. Both NATO's *Warfighting Capstone Concept* and DDA provide frameworks for MDO in the Alliance. The DDA sets the foundation for harnessing an MDO approach in operational planning and force employment through its work strands, namely: planning; force modelling; and requirements.

1.15 For MDO, military commanders orchestrate the employment of capabilities across all domains and converge effects by changing the weight of effort or relative advantage (e.g. through a change in operational tempo or the provision of additional capabilities). The increased prominence of space and cyberspace provides additional context for operations that requires commanders to take into account regarding force organization and operating areas. The following four principles are foundational to the successful conduct of MDO:

- unity;
- interconnectivity;
- creativity; and
- agility.

Section 3 – Principles, context and operational considerations

Principles

1.16 Understanding the principles of joint and multinational operations which have proved successful is key to success. 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 twelve principles of joint and multinational operations are:¹⁷

- unity of effort;
- definition of objectives;
- maintenance of morale;
- initiative;
- freedom of action;
- offensive spirit;

¹⁷ See AJP-01, *Allied Joint Doctrine*, for detail.

- concentration;
- economy of effort;
- security;
- surprise;
- flexibility; and
- sustainability.

Joint, interagency, multinational and public context

1.17 The application of a comprehensive approach in operations requires greater ability to cooperate with a wide range of partners. It also requires the JTF to adopt a coordinated approach to operations that is recognized by the population and the media as crucial to the success of operations. While designing this coordinated approach the JTF should understand the context within which the operation is conducted, in particular the joint, interagency, multinational and public context (see Figure 1-2).

- a. **Joint context:** joint describes operations involving at least two services. Each service has capabilities that complement the others.
- b. **Interagency context:** employed in a comprehensive whole-of-alliance approach utilizes other instruments of power in addition to military power to achieve shared objectives and interests.
- c. **Multinational (combined) context:** leverage the capability and capacity of multiple nations to achieve shared objectives and interests.

d. **Public context:** non-state actors, including the national and international public, international organizations, non-governmental organizations and the private sector including the media (both domestic and foreign) can have a significant influence on the JTF's operations. If interests align and efforts are complementary these increase trust, support and legitimacy to the JTF.



Figure 1-2: The joint, interagency, multinational and public context

Legal context

1.18 NATO operations are conducted within the applicable legal framework and in accordance with policies approved by the North Atlantic Council. This may include international law, in particular the law of armed conflict (LOAC) and international human rights law (IHRL), as well as the domestic law of the sending and receiving nation.

1.19 **Law of armed conflict.** LOAC is the body of international law that regulates the conduct of hostilities during armed conflict. LOAC consists of treaty law, including the Geneva Conventions of 1949 and their Additional Protocols, and customary international law. Its main principles are humanity, military necessity, distinction and proportionality.

1.20 **International human rights law.** International human rights law consists of treaty law, including the *European Convention on Human Rights* and the *International Covenant on Civil and Political Rights*, and customary international law. Some human rights treaties may provide for derogation from certain provisions but only in limited circumstances. NATO member states may be bound by different international human rights law obligations and may interpret similar treaty-based obligations differently. The extent to which IHRL impacts military operations and activities should be assessed on a case-by-case basis, taking into account all circumstances, including relevant provisions of applicable domestic law.

1.21 National laws. In addition to international law, NATO forces should adhere to their own national laws. Where the deployment of NATO forces is predicated on host nation consent, NATO forces should also show respect for the domestic laws and customs of the receiving state. The provisions of a status of forces agreement (SOFA) or memorandum of understanding normally addresses the applicability of host nation domestic law to NATO forces in such circumstances.

1.22 Status of forces agreement. The NATO SOFA defines the status of forces of a NATO member that by agreement is sent to operate in the territory of another NATO member state. In the case of non-NATO member states, a comparable SOFA is one of the first legal considerations a JTF staff should address in establishing an expeditionary operation. NATO HQ normally negotiates such an agreement with the host nation. A SOFA deals with the legal status of NATO forces and typically contains provisions concerning criminal jurisdiction, immunity, claims and other matters. Such provisions may also be regulated by other forms of agreements, for instance, a memorandum of understanding.

1.23 Host-nation support agreements. In most operations, multinational forces are dependent on arrangements with local authorities or with other troop-contributing nations (TCNs) in order to sustain its presence over time in a theatre of operations. This requires legal arrangements between the parties involved covering the logistic and financial support to field operations. In addition, the TCN as well as NATO itself requires the purchasing of goods and service inside or outside the joint operations area (JOA).

1.24 Rules of engagement. Rules of engagement (ROE) for NATO forces are guidance and directives to NATO commanders and the forces under their command or control that define the circumstances, conditions, degree and manner for the use of force. ROE also describe and regulate behaviour and actions of NATO forces that may be construed as provocative, in peacetime, crisis or conflict. NATO ROE are authorised by the North Atlantic Council on approval of the operational plan. Commander joint task force should continually review the adequacy of ROE, and commanders at any level may request a change to the ROE should it be necessary to carry out their assigned task. Commanders submit such requests, with justification, through their chain of command. North Atlantic Council (NAC) retains the responsibility for authorising changes to NATO ROE profiles. Military Committee (MC) 362/2 provides guidance on the development, implementation and application of NATO ROE.¹⁸

1.25 Self-defence. Although NATO ROE control the use of force, individuals and units have an inherent right to defend themselves against attack or an imminent attack. NATO ROE do not limit this right. Personnel should be aware that different national interpretations of self-defence may have an operational impact. For instance, some member states do not allow

¹⁸ Rules of engagement are developed in close coordination with every level of the NATO command structure, in accordance with Military Committee (MC) 362/2 guidance and Allied Command Operations rules of engagement management directive.

the use of deadly force to protect property. This may affect the national forces a commander chooses to engage in force protection in certain situations.

1.26 National caveat. Every contingent remains subject to its national laws concerning the use of force, the employment of military force, the exercise of self-defence by its personnel, and other aspects of operations affected by ROE. It is accordingly recognized that nations issue restrictions and/or amplifying instructions to national armed forces to ensure compliance with domestic law, international obligations and policies. It is imperative that contingents give early notification to NATO commanders of any national caveats or amplifying instructions as these may influence how commanders decide to execute a mission.

Military contribution to human security

1.27 NATO's human security approach is drawn from that of the United Nations, which conceptualised human security as a multi-sectoral approach to security that identifies and addresses widespread and cross-cutting challenges to the survival, livelihood and dignity of the people. The categories of human security are: economic security, food security, health security, environmental security, personal security, community security and political security. These categories go beyond the security that can be offered by military activity, but human security may be threatened by conflict or promoted by military intervention.

1.28 For NATO, taking a human security approach means embedding considerations for the comprehensive safety and security of the population into all stages and levels of Alliance operations, missions and activities, wherever NATO operates, with the objective of preventing and responding to risks and threats to all people, especially in conflict or crisis situations.¹⁹ NATO's Strategic Concept considers that human security, in particular the protection of civilians and civilian harm mitigation, is central to NATO's approach to crisis prevention and management.

1.29 The NATO human security approach complements and reinforces NATO's women peace and security agenda. It is people centred, protection and prevention oriented, takes into account local customs, is consistent with international law, respects the humanitarian space, and fully respects the sovereignty and territorial integrity of States. It also commits NATO to working with other international actors to address the broader conditions fuelling crisis and pervasive instability, and to contribute to stabilization and reconstruction.

1.30 NATO is committed to ensuring that the entire population is minimally impacted by conflict and disaster. This commitment must be integrated in all NATO operations: in pre-execution activities, in conduct, management and assessment of operations, and in transition activities. NATO has identified six cross cutting topics that collectively constitute the military contribution to human security and provide for legally and policy compliant planning and conduct of operations that protect civilians. In addition, they outline the responsibility of military personnel to recognize, report and respond to international humanitarian law and

¹⁹ See PO(2022)0280, *Human Security Approach and Guiding Principles*, for detail.

human rights violations, as well as to know who to refer survivors of such violations to. The six cross cutting topics are:²⁰

- protection of civilians;²¹
- children and armed conflict;
- cultural property protection;
- combatting trafficking in human beings;
- conflict related sexual violence; and
- building integrity in operations.

Gender perspective

1.31 The term 'gender' refers to the social differences and relations between women and men, which were learned through socialization and determine a person's position and value in a given context. A gender perspective should be considered during every stage of NATO operations and missions, with men and women participating equally to achieve comprehensive and enduring outcomes. This acknowledges that conflict impacts men, women, boys and girls differently, which can have tactical to strategic implications for missions and operations. Developing a comprehensive understanding of the military operating environment (OE), including the broader civilian setting, is critical to the effectiveness of the armed forces in the field. Furthermore, gender inequalities are often exacerbated during periods of crisis and conflict and, if not addressed, may become enduring, thus perpetuating instability. NATO is committed to fully implementing the *UN Security Council Resolution 1325 on Women, Peace and Security* and related resolutions, across its core tasks as a framework for integrating a gender perspective.

Peacetime vigilance

1.32 NATO's command and force structures are continuously engaged in activities supporting NATO's core tasks. Across the continuum of competition these activities are referred to peacetime vigilance through to maximum level of effort operations. Peacetime vigilance is characterized by activities performed by standing commands and forces in periods of duration from short to continuous.

²⁰ See AJP-01, *Allied Joint Doctrine*, for detail.

²¹ Protection of civilians (persons, objects and services) includes all efforts taken to avoid, minimize, and mitigate the negative effects arising 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 violence by other actors. The protection of civilians framework provides tools to better understand the human environment, mitigate civilian harm, facilitate access to basic needs and contribute to a safe and secure environment, advocating a population-centric analysis.

1.33 Peacetime vigilance also supports military resilience and civil preparedness. The Alliance and its member countries need to be resilient to resist and recover from a major shock such as a natural disaster, failure of critical infrastructure, or any kind of attack.

1.34 Layered resilience considers the interdependencies of NATO military resilience with civil resilience. The layered resilience concept includes enhanced understanding, coordination and support, across instruments of power planning and execution, connecting civil and military layers to enhance Alliance resilience, and to be able to operationalize resilience requirements.

Operational considerations

1.35 The principles of joint operations outlined previously are, in turn, supported by the following operational considerations. The operational considerations are always relevant; however, their relative importance depends on the campaign theme.

- a. **Consent.** Promoting consent and cooperation from the host nation (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 mission's objectives. Consent and cooperation can promote perceived legitimacy if it can be shown to the parties that their status and ultimate authority increases if they successfully resolve their own disputes.²² 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.
- b. **Political will.** Political will is the commitment and determination of a politician or government to conduct activities to reach a favourable outcome; it usually relates to unpopular or dangerous situations. In NATO, political will is expressed through the agreement signed by the NAC expressing the mission's objectives. This agreement is a product of consensus and it expresses the level of determination at the time of release. As the situation evolves, it is likely that the determination of NATO nations and partners fluctuates and also evolves. This might reveal itself to such as in changing force contributions, introducing caveats, cancelling or extending national deployments. Commanders should maintain an awareness of this fluctuation as it applies to them directly and indirectly, and adjust their activities accordingly.
- c. **Mutual respect and understanding.** The respect in which the NATO-led force is held is a direct consequence of its professional conduct and how it treats the local population and recognized authorities. Through a UN mandate, SOFA, or other special agreements, the NATO-led force may have 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 that the same

²² See AJP-01, *Allied Joint Doctrine*, for detail.

principles are recognized and implemented among the different national, cultural and ethnic elements within the formations which make up the force. Personnel should consistently demonstrate the highest standards of discipline exercised through controlled and professional behaviour on and off duty.²³ This also contributes to maintaining perceived legitimacy.

d. **Diversity.** Diversity includes employing different genders, capabilities, religions, expertise, races and cultures, including military culture. The complementary skills of personnel from different backgrounds, experiences, and cultures may increase the operational effectiveness of NATO operations, especially in light of the increasing complexity of civil-military interaction, public relations, and intelligence gathering.

e. **Transparency.** The mission and concept of operations, as well as the end state, should be understood by all. Achieving a common understanding helps reduce suspicion and mistrust and enhances operational effectiveness. Information should be gathered and shared wherever possible. While transparency of operations, including media access, should be the general rule, it is balanced against the security of the mission.

f. **Interoperability.** Interoperability, defined as the ability to act together coherently, effectively, and efficiently to achieve Allied tactical, operational and strategic objectives, has three dimensions: human (e.g. trust, language, training); procedural (e.g. doctrine, procedures, regulations, terminology); and technical (e.g. hardware, software, equipment, armaments, systems). Interoperability has to be verified, trained and refined by practice. Interoperability is difficult to measure, but adherence to NATO standards as well as participation in NATO exercises and training contribute to interoperability.

g. **Freedom of movement.** Freedom of movement is essential for any operation. The mandate, SOFA and ROE should allow NATO forces to perform their duties without interference from local groups and organizations. Experience indicates that various factions often try to impose local restrictions on freedom of movement. These restrictions should be detected early 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 applicable legal-framework and ROE.

h. **Strategic communications (StratCom).** StratCom is, in the military context, the integration of communication capabilities and information staff functions with other military activities, to understand and shape the information environment, in support NATO strategic aims and objectives.²⁴ StratCom is used at every level of command to appropriately inform and influence audiences' attitudes and behaviours through a behaviour-centric approach in pursuit of the desired end state. Actions, images and

²³ See Euro-Atlantic Partnership Council document EAPC(C)D(2014)0019 for detail.

²⁴ See AJP-10, *Allied Joint Doctrine for Strategic Communications*, for detail.

words are coordinated to carry a clear narrative in support of NATO's political and military objectives. StratCom provides the focused conception, planning, execution and evaluation of information activities which are enabled by a comprehensive understanding of audiences in a contested information environment. It also supports narrative-led execution of activities. Therefore, as part of the campaigning mindset, many NATO's activities have communication-related effects. To effectively influence audiences, a central narrative reinforces consistency of words, images and actions to develop or maintain credibility. Every action creates an effect in the information environment and that effect influences multiple audiences at local, theatre, national, or global levels. StratCom 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. NATO military policy on strategic communications provides military direction for StratCom and directs the establishment of a StratCom staff element within each NATO military HQ.²⁵ It groups together all StratCom, information operations, military public affairs and psychological operations personnel, functions, capabilities and assigned force elements, to provide an organizational structure that coordinates and synchronizes outputs, thereby enabling and maximizing their utility across campaign themes within the continuum of competition. Each communication staff function still retains its functional responsibilities and the chief public affairs officer retains a direct advisory role and direct access to the commander.

i. **Intermediate force capabilities.** Intermediate force capabilities include a vast array of existing capabilities that are already being employed to proactively engage while campaigning below the level of armed conflict. Adversaries know and exploit NATO's lethal capabilities and thresholds for their use. They avoid direct symmetrical engagements, instead manoeuvring below lethal thresholds, pursuing their aims observed but undeterred. Or, they act indirectly through proxies or intermediaries, blending in and engaging only at times and places of their choosing. Often, they purposely complicate engagements, deliberately taking positions near sensitive locations (e.g. civilian infrastructure, hospitals, buildings of historic or cultural importance) or near civilians to deny NATO an acceptable lethal response. NATO can apply coercive force and non-lethal capabilities to compel the adversary to change its adversarial behaviour – such as directed energy, noise and light; space- and cyberspace operations; electromagnetic warfare; establishing exclusion zones; information activities; and stability policing that create effects below the threshold of armed conflict – to fulfil these commitments.

j. **Environmental protection.** Environmental protection is integrated into NATO military activities, consistent with operational imperatives, to ensure that adverse environmental impacts are minimized.²⁶ Effective environmental protection enhances mission success by contributing to force protection, supporting operations primacy, and upholding the commanders' direction. It supports NATO's reputation and protects

²⁵ See MC 0628, *NATO Military Policy on Strategic Communications*, for detail.

²⁶ See MC 0469/2, *NATO Military Principles and Policies for Environmental Protection*, for detail.

NATO from current and future environmental legal action. Factors to be considered include pollution prevention, waste management, spills, impact on cultural property, use of natural resources, and overall protection of flora and fauna.

k. **Mass casualty situations.** A mass casualty situation is a situation in which an initial disparity exists between the casualty load and the local medical capacities and capabilities. This situation can occur anytime, anywhere in the JOA, and can for example be caused by a natural disaster, terrorist attack, mass transport accident, chemical/biological/radiological/nuclear incidents, toxic industrial material incident, or combat. With regard to the medical system, a casualty is a person who is lost to an organization by reason of having been declared dead, wounded, injured, or diseased. With regard to the personnel system, a person who is detained, captured or missing is also considered to be a casualty. An effective response to a mass casualty situation poses significant and complex challenges to the commander as it usually requires the use of non-medical resources in addition to the management and evacuation of a high number of patients. The response includes the situational assessment, command and control, resource management, security and force protection, fire services, explosive ordnance disposal, coordination with civilian entities, debriefing and recovery.

Section 4 – Command and control

Command and control

1.36 Command and control (C2) is defined as the authority, responsibilities and activities of military commanders in the direction and coordination of military forces as well as the implementation of orders related to the execution of operations. The role of commanders and their interaction with their staffs and environment are central in C2.

1.37 C2 is a distinguished joint function in that it is required to effectively direct and coordinate military operations. The key to successful C2 is the ability to appreciate the OE quicker than the opponent, enabling early identification of actions-to-take and timely decision-making. Planning at an appropriate tempo provides both the commander and their authorized subordinates the ability to make appropriate, timely decisions. Effective decision-making processes in the JTF are critical for the commander to best employ multinational formations.

1.38 **Command.** Command is a continuous process exercised by a commander, that gives subordinate organizations direction for achieving objectives nested within a clearly communicated and understood intent. The essence of command lies in creativity and will. Command is an intrinsically deliberate, human activity involving authority as well as personal responsibility and accountability. This ties command with a commander. Alongside legal authority, command contains human authority, which an individual earns by virtue of personal credibility and by demonstrating competence.

1.39 A commander is the individual mandated by the Alliance to achieve a tasked mission. Their primary responsibility is to generate and orchestrate fighting power, balancing the ways

and means to achieve objectives to obtain favourable outcomes (the ends). This demands collaboration and coordination. The range of ways and means available to the commander is affected by the characteristics of the force and the OE with its three main components (human, physical, and information). The topography, climate and the different urban, agricultural, natural and industrial landscapes each present threats and opportunities for the mission. Societal aspects also impact, sometimes in non-obvious ways, the operation. The application of fighting power should suit the prevailing situation and conditions. This includes being aware of political, resource and legal constraints. The effectiveness of the commander depends on leadership, i.e., the ability to provide purpose, direction, trust and motivation.

1.40 Control. Control is the authority exercised by a commander over part of the activities of subordinate organizations, or other organizations not normally under their command, encompassing the responsibility for implementing orders or directives. Control is the capability to bring the other joint functions together in order to resource the achievement of the overall goal specified by the commander.²⁷ It ensures that operations are progressing in the determined direction and that if deemed necessary course is changed in a timely manner. With an operation that involves civilian partners, the commander's control challenge increases; coordination and deconfliction may be the best that can be achieved with organizations outside the command structure. Providing other organizations, irrespective of the relationship, with relevant information essential for their operations is a key requirement.

1.41 Control is often executed by a staff, established and functioning in accordance with the commander's guidelines. The challenge for the staff is in optimizing planning activity to inform and support the range and scope of decisions, ensuring they are taken at the appropriate level. The focus of this activity is not the production of large and complex operation orders, but forwarding timely and concise direction and guidance.

Command and control agility

1.42 The C2 structure should be tailored to the specific OE. C2 agility enables commanders to effectively and efficiently employ the resources they have in a timely manner in a variety of missions and circumstances.²⁸ As each operation is unique, information availability should be optimized through modelling information networks and appropriate information transfers. This facilitates collaboration which can range from tightly constrained to unconstrained. Commanders should foster appropriate structures and behaviours and establish whenever possible decentralized decision-making by adopting an appropriate command culture. Commanders identify when a change of the applied C2 approach is required and promote the ability within their JTF for agile C2 by procedures, equipment, training and education.

²⁷ See Chapter 3, Section 3 for detail.

²⁸ See also MCM-0169-2019 (INV) *Joint Command and Control Concept of Operations*.

Unity of command or unity of effort.

1.43 Traditionally, military C2 has been underpinned by the principle of unity of command. In this, responsibility for the conduct of a campaign is vested in a single responsible commander, who could reasonably expect to have C2 of the military assets allocated to them for completion of the task. Under the comprehensive approach, however, many assets and capabilities might not be under a commander's direct command but likely be owned by other actors who often have their own separate aims. Instead, therefore, the commander may need to create the effects and obtain desired capabilities by seeking to align multiple actors through a common unity of purpose. Regardless, several enduring critical elements of C2 endure. A commander should understand and determine the operational context, create their intent to determine the campaign design, provide timely direction and guidance to facilitate effective planning and then set the freedoms and constraints within which subordinates can operate. This may, however, need to be communicated to and negotiated with other stakeholders rather than being simply directed.

Command and control in the context of multi-domain operations

1.44 The complexity of multi-domain operations makes C2 challenging. C2 should facilitate increased data collection and information sharing. Commanders should consider the provision of multi-domain capabilities to subordinate commanders with the requisite, agile and adaptable posture, authorities and resilience. During multi-domain specific operations across domains, commanders and their staffs synchronize and orchestrate capabilities from across all domains to converge effects at decisive points to create the necessary effects.

Authorities of the NATO commander

1.45 Authority is the degree to which a commander is empowered to act and bounds the scope of power and forces available for utilization. It enables an individual to influence events and subordinates to implement decisions. The authority of NATO commanders originates from the *Resolution Implementing Section IV of the Final Act of the 1954 London Conference* and NATO policy on defining the functions of NATO commanders and the designation of forces.²⁹ C2 of Alliance forces is vested in Supreme Allied Commander Europe (SACEUR), who is the strategic-level commander for operations and is responsible for every stage of NATO operations. SACEUR has established command relationships with permanent forces (through NATO Command Structure), defined (memorandum of understanding based) relationships with supporting organizations and relationships with assigned forces based on NAC approved strategic plans.

1.46 **Conditional transfer of national authorities.** Central to NATO, as a political defence organization, is national ownership of military means and the conditional transfer of authority over these means to NATO. Alliance nations transfer authority to SACEUR in response to a NAC Execution Directive or a specific arrangement, under conditions such as function, time

²⁹ Promulgated in MC 57/3, *Overall Organization of the Integrated NATO Force*.

and location set by each nation for use at the operational or tactical level by a NATO commander. SACEUR confirms the C2 arrangements and designates those who exercise authority at the operational and tactical level. The Supreme Headquarters Allied Powers Europe Multi-Domain Strategic Operations Centre ensures that a specified degree of command authority is delegated to the receiving NATO commander. For planning their operations, the receiving NATO commander needs to be aware of any caveats or restrictions. Transferred personnel always remain under full command of their sending nations, including authority over administrative regulations and disciplinary affairs. In addition, restricted influence may apply to maintenance, supply, intra- and inter-theatre movement and some specific medical care. These national measures may have varying impact. Functional structures for national chains of command often exist alongside NATO C2.

1.47 Transfer and delegation of authorities. Appointment, delegation or transfer can confer authority. There is a clear distinction between "to transfer", moving from one chain of command to another, and "to delegate" from a commander to a subordinate commander within their chain of command. The national transfer of authority starts a sequence of delegations within NATO as commanders have to provide subordinate commanders with the required authority to act. Any C2 authority related to the employment of assets exercised by a commander always consists of a delegation, whether total or partial, of a similar or higher-level authority. The delegated authority can never exceed the one originally provided to the issuer. The issuing commander is always empowered to modify the original conditions.³⁰

1.48 Although much of the process can be delegated, the issuing commander alone determines how the formation operates and how the delegated authority is exercised. Therefore the commander needs to clearly state intentions and restrictions, designate the objectives to be achieved and provide sufficient forces, resources and required authority. Commanders should also identify those operational-level decisions which are retained, while offering necessary latitude to subordinates. Thus, the authority granted to a subordinate should be commensurate with the task given and the subordinate remains responsible to their superior for task execution. The higher commander can actively intervene to "regain" the authority whilst "to retain" expresses that the higher commander takes authority back after the subordinate commander has completed the assigned mission.

1.49 Degrees of authority terms. The C2 degrees of authority terms specify the mandate of the commander over the activities of the assigned forces in the accomplishment of the tasked mission.³¹ Each of those degrees of authority is specified by the scope of the mandate regarding the following activities:

- to task organize the force;
- to assign missions to the assigned element;
- to delegate C2 authority ;

³⁰ See also MCM-0169-2019 (INV), *Joint Command and Control Concept of Operations*, for detail.

³¹ As described in AJP-01, *Allied Joint Doctrine*.

- to coordinate movement, local defence and force protection; and
- to plan and coordinate.

1.50 The C2 terms provide clarity on the authority of the gaining commander to direct, coordinate and control the forces to achieve objectives. The difference between operational command (OPCOM) and operational control (OPCON) addressing the commander's authority regarding the employment of the transferred forces for operations is very distinct. Under OPCOM, the commander, in most cases SACEUR, can use the forces throughout their assigned area of operations (AOO). Under OPCON the use of the forces is restricted to the NAC approved strategic plan. The structure of the composing elements has to stay intact (unless otherwise agreed upon). Underlying are practical reasons such as sustainment or the multinational composition of a JTF contribution with reciprocal dependencies for the functioning as a whole, often based on affiliation.

1.51 The reach of a commander's mandate is further defined in the coordinating authority and direct liaison authority terms which cover the coordination and consultation activities during operations.

- Coordinating authority** is the authority granted to a commander, or other individual with assigned responsibility, to coordinate specific functions or activities involving two or more forces, commands, services or organizations. The commander has the authority to require consultation among the organizations involved or their representatives, but does not have the authority to compel agreement. In case of disagreement among the agencies involved, the commander should attempt to obtain essential agreement by discussion. A commander who is unable to obtain essential agreement, shall refer the matter to the appropriate authority.
- Direct liaison authorized** is the authorization to maintain direct contact or intercommunication between elements of military forces or non-military actors to ensure mutual understanding and unity of purpose and action.

Supported/supporting interrelationships

1.52 Supported/supporting interrelationships (SSI) are specific relations between equal commanders established, defined, and if necessary arbitrated, by a common superior commander. This enables them to cooperate and interact directly, in an organized manner and with a clear definition of their respective responsibilities, duties and scope of potential for support, available means and effects. The main characteristic of SSI is the equal relationship between two or more commanders involved in reciprocal activities and the presence of an overarching, commander directing them. Relationships may be applied within and/or between NATO Command Structure or NATO force structure HQ, irrespective of the level of the supported/supporting commanders.

- Establishing commander.** SACEUR or an appointed operational commander initiates SSI when appropriate. It is contingency or mission specific. The establishing

directive specifies the purpose of the SSI, the effect desired and the scope of the action (geographical area, available means and timeframe) to be taken. The establishing commander also states specific, often permanent SACEUR/domain tasks which sit outside of the specific SSI association. Standing and potential supporting tasks are prioritized and phased. Defined priorities, geography and limited asset availability add complexity to SSI and therefore have to be well understood by the commanders involved. Finally, the establishing commander has to resolve any conflict of interest between the supported and supporting commanders.

b. **Supported commander.** The supported commander is the commander assigned by SACEUR, or by the operational commander, with responsibility for achieving the primary objectives in line with their higher commander's direction and guidance. They may be designated for the entire operation, a specific phase of an operation, a particular function, or a combination of phases, stages, events and functions. They have the vested authority to request support from designated supporting commanders. The supported commander has the primary responsibility for the planning and execution of military tasks assigned to them and has the authority for the general direction of the supporting effort. The supported commander has to ensure that the supporting commander is fully aware of the support required by clearly articulating their intent and the requirements to create the desired effects. These requests for support can take the form of stated objectives or guidance, or may be specific requests for assistance in accomplishing certain tactical tasks. The supported commander has to coordinate the offered support and achieve mutual understanding of the capabilities and limitations to define their use to create the best effect. It may be appropriate for the initially assigned supported commander to designate different supported commanders within their force for different missions, areas or for specific phases of an operation.

c. **Supporting commander.** The supporting commander is responsible for responding to the requests of the supported commander. They may be allowed considerable latitude in the planning and execution of their operation (forces and means, tactics, methods, procedures and communications). The supporting commander advises and coordinates with the supported commander on matters concerning the employment and limitations of such support, assists in planning for the integration into the supported commander's effort as a whole, and ensures that support requirements are appropriately communicated throughout the supporting commander's organization.

1.53 **Implementing supported/supporting interrelationships.** The implementation of a SSI-construct is part of the planning process cycles. Depending on the scope of the specific relationship, this impacts both the short-, mid- and long-term coordination efforts of the involved staffs. The synchronization areas are covered by a series of planning boards and working groups which adhere to a battle rhythm.

1.54 Well prepared and equipped reciprocal liaison elements play a central role in planning for and executing SSI. The composition of the representation depends upon the scope of the relationship at hand. The supported commander should send liaison staff to supporting commanders to communicate their perspective. The supporting command provides expertise and advice regarding the organization of the integration elements at the supported HQ. They also suggest any rearrangement deemed appropriate to more efficiently meet the needs of the supported command. SSI are a two-way street. As actions might well be executed by means outside the supported commander's AOO, both commands need to check relevant operational aspects related to engagement space management and deconflict them. Depending on the scope of the SSI (duration), the number of details might result in the need to record them in technical arrangements, signed by the supported, supporting and establishing commander.

1.55 **Resolving conflicts.** When SSI disagreements cannot be resolved by discussion, the establishing authority resolves or arbitrates issues, often via prioritization of assets and additional direction and guidance. It is incumbent upon supporting commanders to inform the establishing commander and supported commander of any shortfalls in capabilities or conflicts between the objectives of the supported commander and the establishing commander's directive. SACEUR, as the ultimate authority, prioritizes between different operations.

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Chapter 2 – Preparation, sustaining, transition and termination

Section 1 – Introduction

2.1 Before conducting operations, NATO should carry out preparatory activities. Both NATO and troop-contributing nations (TCNs) should work closely together to ensure assigned troops are prepared for the operation. NATO, in parallel, conducts shaping activities focused on the operating environment (OE).³²

2.2 It is essential to prepare the OE to support the conduct of operations. Although not their direct responsibility, the operational-level commander should be aware of strategic activity and contribute accordingly. NATO establishes the legitimacy of its intended actions and should obtain the general support of the international community. Achieving this depends upon diplomatic activity, and direction issued through the North Atlantic Council (NAC) from the nations supporting the operation. Preparing the OE includes developing an information strategy that identifies objectives both inside and outside the boundaries of the joint operations area (JOA). Strategic communications and civil-military cooperation 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.

2.3 Alliance operations orient on strategic objectives. While every operation is directed towards a goal, at some point military action is no longer the main effort. The commander focuses on what happens when the objectives have been achieved, how to preserve what has been gained, and how to ensure it endures. After the objectives are achieved, a follow-on force or adjusted mission may be required to secure and protect the gains..

Section 2 – Forming the joint task force

NATO forces generation, activation and deployment procedure

2.4 The Alliance has consultation procedures, crisis management arrangements, military capabilities, as well as civil emergency planning structures and tools.³³ These ensure appropriate political-military control over Alliance operations, missions, and 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 pertaining to each situation but, in any event, is dependent upon NAC decisions. The force generation process is continuous and cyclical. It continues throughout the duration of an operation to

³² Shaping activity is likely to be, but not restricted to, strategic communications or strategic diplomacy or reconnaissance and the commander might be involved.

³³ For detail, see Annex D to MC 0133/5, *NATO's Operations Planning*, the Deterrence and Defence of the Euro-Atlantic Area family of plans and the Force Structure Requirement.

fulfil the requirements of the force as it adapts to the operational circumstances, as long as the combined joint statement of requirements is not fully filled. Supreme Allied Commander Europe (SACEUR) is responsible for the force generation process and force activation.

2.5 SACEUR initiates pre-deploying authorized enabling forces and allocates common funds. If pre-deploying enabling forces has not been authorized, force pre-positioning is carried out under national authority. In any event, pre-deploying or deploying forces is conducted in accordance with SACEUR's multinational detailed deployment plan. On arrival of forces in the JOA, nations then authorize transfer of authority (TOA) of forces to SACEUR.

2.6 **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 is a pre-requisite for the involvement of any non-NATO nation in a NATO-led operation.

2.7 The NAC determines the participation by partners and non-NATO nations as a result of political consultations. Partners and non-NATO nations are kept informed through the Euro-Atlantic Partnership Council. The NAC authorizes participation of NNCNs in the NAC initiating directive, and SACEUR identifies 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 certification of the NNCN contribution prior to the force generation conference.

2.8 A NATO command or TCN 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, workforce, 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 external communications in the English language; and
- recommendations to SACEUR on employment.

2.9 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 nations, who perform the assessment, forward a report to

SACEUR to identify any capability shortfalls and make appropriate recommendations regarding suitability for employment.

Establishing the joint task force headquarters

2.10 NATO can rapidly deploy robust forces and sustain them where and when required for the full range of the Alliance's missions for prolonged operations, at strategic distance in austere environments. To meet this requirement and to utilize capabilities from nations, NATO forces should be developed and operated jointly, with a high degree of interoperability. High readiness forces are capable of rapid deployment, 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 and NATO force structure.³⁴ NATO's *Force Model*, with more forces at higher readiness, and specific forces pre-assigned to the defence of specific Allies, provides NATO with rapid deployable capability, based on the Long Term Commitment Plan.

2.11 Command and control (C2) structures 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 broad understanding of the levels is required. In particular, in-theatre commanders at the operational level frequently deal with the local national strategic level in their areas of responsibility.

2.12 Both the NATO Command Structure and NATO force structure may be supported as required, for certain agreed tasks, by other headquarters (HQ) and forces, national or multinational entities and national specialists and staff officers.

Establishing command and control

2.13 To exercise C2 the assigned commander ensures that a number of essential functions in their force are accomplished. The commander:

- establishes communications;
- expresses the context and their intent;
- determines roles, responsibilities, relationships and authorities;
- establishes rules and constraints;
- monitors and assesses the situation and progress;
- inspires, motivates and builds trust;
- provides training and education; and
- allocates sufficient resources and sustains these over time.

³⁴ See Annex B for more information on the joint headquarters.

2.14 Relationships and authorities. The delegation of commander's authorities and the design of the relationships within the force require important decisions. Responsibilities should be delegated to a level as low as possible to aid operational tempo and agility. Commanders use their judgement to decide what to delegate and to whom. While commanders may delegate their authority, they always retain responsibility. Commanders require a clear understanding of the forces available to them, in both quantitative and qualitative terms, if they are to define command relationships. They should consider:

- what sort of tempo subordinate organizations are capable of, and what sort of tempo they need to be capable of;
- subordinate commanders' strengths and weaknesses,
- supported/supporting interrelationships;
- their 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 a challenge 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.

2.15 Locating the command. How best to command a force, and from where, is an important consideration. 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 where they can best lead and make decisions, but consideration should be given to physical security and threats, as it is likely the commander relies on host nation (HN) security provision. Communication and information systems (CIS) provide the means for commanders and their staff to access information, which in turn supports decision-making and issuing direction and guidance.³⁵ CIS may also enable a commander's choice of location (alongside considering the requirements of the operation and the prevailing situation), and it may enable them to be physically separated from their main HQ. However, a commander's location should enable them to:

- assess the situation and impose their will upon it;
- communicate intent, direction and guidance;

³⁵ See AJP-6, *Allied Joint Doctrine for Communication and Information System*, for detail.

- 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 electromagnetic attack as conditions allow.

Furthermore, in line with law of armed conflict obligations, commanders should to the maximum extent feasible avoid locating the command within or near densely populated areas.

2.16 Communication and information systems. The CIS of the JTF HQ should be mobile, deployable, roll-on roll-off air, road, rail and sea transportable, secure, resilient and have a scalable architecture. To meet these requirements, all required CIS should match appropriate readiness requirements, be flexible, sustainable, separate and separable. Any CIS architecture should be resilient, modern, and interoperable in accordance with appropriate NATO standardization agreements. Early identification of the information exchange requirements ensures timely CIS planning, deployment and activation.

Integrating the components

2.17 Theatre components/component commands are warfighting HQ in command of specific activities, missions, and operations including those that span across theatre and include subordinate commanders operating areas. While their expertise may be domain-centric, these HQ conduct multi-domain operations for their appropriate area of responsibility.³⁶ Additionally, they serve as advisors to the higher NATO commander. While a commander of a joint task force (COM JTF) has a relationship with both theatre component commands, in the context of synchronizing and integrating forces to conduct multi-domain operations the focus is on tactical level component commands.³⁷

2.18 Optimum coordination between 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 with appropriate authorized direct liaison. Each component has developed its particular methodology and these differences are accentuated cross-nation.

2.19 Location of the component commands. Each component commander should have equal access to the COM JTF. In their turn the component commander balances the advantages of personal contact with their command responsibilities. As the joint force air component (JFAC) normally has no specific area of operations but operates within the whole JOA, the JFAC HQ may be collocated with the JTF HQ as close liaison between the two

³⁶ Components are groupings of force elements normally organized by service or function, but the force is organized to reflect each specific operational requirement. The maritime, land, air, special operations, Joint Logistic Support Group and the cyberspace operations commands are the normal component commands.

³⁷ See MCM-0169-2019, *Joint Command and Control Concept of Operations*, for detail.

needs to be established. CIS may mitigate the disadvantages of separation but does not replace the quality of understanding that arises through personal contact.

2.20 Components' representation in the joint task force headquarters. In a joint task force headquarters (JTF HQ) each component command's senior representative is vested with authority to make recommendations and facilitate decision-making at the main joint operations planning 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 collocated with JTF HQ, this requirement may be reduced. However, the maritime, air and special operations component commands generally require high quality liaison officers permanently placed within the JTF HQ.

2.21 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 JTF. They also have an essential role in the supported 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.

2.22 Interagency coordination. Military operations are coordinated with those of other agencies and regional authorities. The JTF HQ develops agreed cross-agency procedures although many agencies resist any encroachment on their own freedom of action. The commander establishes close relationships with these agencies and establishes what the JTF is able to provide.

2.23 Linkage to national headquarters. Linkages between NATO and national HQ are to be established where mutually beneficial and permitted within Military Committee/NAC established guidance. This facilitates closer cooperation regarding planning, exercises and situational awareness (SA). National HQ can also facilitate the national force transitions into a NATO force. The details of the relationship between NATO and national HQ are delineated in the *NATO Bi-Strategic Commands Conceptual Framework for Alliance Operations*.

Training

2.24 Training. Ideally, forces should be fully trained prior to deployment, but operation-specific training within the JOA may be required. Training is a continuing requirement during protracted multi-phase operations as forces require replacement or rotation and respond to political redirection or lessons from the current or other operations. Training under these circumstances should include the lessons and may be developed by an outgoing staff for execution by an incoming staff.

2.25 Character of training. JTF training, which is a responsibility of the JTF HQ and the component commands, should involve the HN and others if appropriate. Training should familiarize the forces with the OE notably the mission-specific cultural, legal and contextual patterns with regard to the behaviour of civilians, since this familiarization is essential to ensure their protection. The JTF's training also demonstrates to adversaries and others the force capabilities. Operations security measures may limit the scale and realism of the training programme; however, training should be closely related to the CONOPS.

2.26 Joint task force headquarters. The JTF HQ directs and guides the training programme to be implemented in the JOA if time and opportunity permit. The JTF HQ promulgates the directives for the training programme after consultation with the component commands and SACEUR. These directives include standardization requirements to ensure equal standards for TCNs and promote interoperability. The JTF HQ, together with its component commands, oversees the training programme to verify the readiness of its forces.

2.27 Troop-contributing nations. TCNs are to provide trained and equipped 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), particularly utilizing local commercial contracts, may simplify it. Survey parties can validate information on these aspects and report to COM JTF and TCNs.

Section 3 – Pre-execution activities

2.28 Pre-execution activities present COM 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.

2.29 Assessment of sustainment infrastructure capabilities. An early assessment of the physical elements within the JOA, including infrastructure capability and capacity, is vital to the operation.³⁸ Liaising with 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 infrastructure 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 contracted resources.

2.30 Establishing, enabling and protecting lines of communications.³⁹ In a military sense LOC are the land, water and air routes that connect an operating military force with one or more bases of operations, and along which supplies and personnel move. LOC within

³⁸ See AD 084-002, *Infrastructure Assessment*, for detail.

³⁹ See AJP-3.13, *Allied Joint Doctrine for the Deployment and Redeployment of Forces*, for detail.

the JOA are the responsibility of the COM JTF and should be established as early as possible. Operational LOC are rarely only available to NATO forces. The population, civilian organizations and local forces also rely on the same routes. Early clarity concerning responsibility and authority for the coordination of their use and for their maintenance and development is required. The important nodes along the LOC are listed below.

- a. **Port of debarkation.** A seaport, airport or railhead through which the JTF and stocks are unloaded from a means of transport and can be deployed into/close to the JOA.
- b. **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. The FMB should have the capacity for a 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 COM JTF.
- c. **Theatre reception centre.** A theatre reception centre is a location established to receive forces into a theatre of operations, conduct essential administrative tasks and establish the personnel tracking process.
- d. **Staging area.** The staging area is an area located between the port of debarkation and the area of operations through which all or part of the forces pass 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.
- e. **Transit nation.** The deployment of JTF elements from their respective home bases to the JOA may depend on the use of the infrastructure of NATO or 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.

2.31 Before deploying a force, or staging forces in or through another state, it is necessary to obtain clearance from the HN. Once this has been granted, more detailed coordination of relations with the HN starts in earnest. The provision of HNS involves 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, organic and commercial, into the force's sustainment alongside the component command sustainment.

Organizing the joint operations area

2.32 The JOA is organized and labelled in such a way that the JTF has a common understanding of its boundaries. It is recognized that changes in the OE may influence NATO commanders to modify the geographic dimensions of the relevant operating areas to account for the changes. In the NATO structure, boundaries are flexible and mission-dependent. Additionally, boundaries may be temporary or enduring.

Deployment

2.33 Distinction is made between strategic deployment from the home base to the JOA and deployment within the JOA (see Figure 2-1). The former is considered as inter-theatre deployment and the latter as intra-theatre deployment. Reception, staging, onward movement and integration is the transition from inter- to intra-theatre movement.

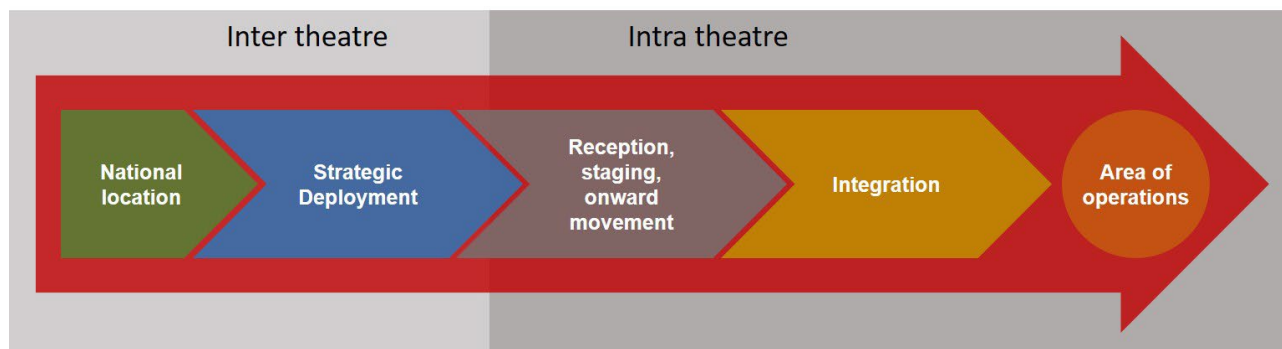


Figure 2-1: Deployment process

2.34 Commanders consider different options for deployment due to the varied nature of military operations. 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 is highlighted in the deployment timeline.

2.35 The whole deployment process transforms deploying forces into forces capable of meeting the commander's requirements. This is a task that requires operational level oversight. Deployment of forces is fundamental to a 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 prioritizes and exercises coordinating authority and, where granted, command and control over the deployment process.

Planning and executing deployment

2.36 Planning and executing deployment is a command-led, whole-force activity. During the build-up of forces, the JTF may expand rapidly in size and the level of burden on the HN by the force may increase significantly. The COM JTF should endeavour to maintain relations with the HN and maintain support for the JTF 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 to such a degree that support is weakened or lost, or adversely affecting local resilience mechanisms and capacities previously in place. This may require restraint and flexibility of conduct, and requires consideration for local customs and traditions by members of the JTF.

2.37 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 SA. The build-up of forces is not solely a logistic operation; it should also be considered in terms of information activities.

Transfer of authority⁴⁰

2.38 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 and operationally feasible. Nations transfer their declared forces to SACEUR after approval of the OPLAN, release of the NAC Execution Directive and Activation Order in their 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 COM JTF integration is the process of conducting the synchronized transfer of 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 SA. Nations control their own forces, until released to NATO through the TOA mechanism. It is nations' responsibility to provide their deployed force with the required training before TOA.

Section 4 – Sustaining fighting power

2.39 Sustaining fighting power comprises those activities which might not be viewed as being part of execution, but are vital to attain the end state. These activities require additional efforts from both the NATO Command Structure and TCNs.

Fighting spirit

2.40 Fighting spirit plays a major role in achieving strategic outcomes. Commanders should know that this intangible human element is decisive, and understanding and fostering it is a major effort when sustaining fighting power. Will to fight isn't static. It can be cultivated within formations and units by leveraging contributing factors. Leaders that understand individual motivations, hone individual competency, and promote a positive organizational culture have a force more disposed to fight. Fighting spirit might be characterized as motivations, capabilities and culture.

2.41 Of the three characterizing factors, motivations have the greatest impact on individual will to fight. Motivations are a soldier's *raison d'être* and range from being as basic as food and shelter or abstract as self-fulfilment. This is also fuelled by the commitment to enhance human security. The next largest contributing factor is capabilities, which can be thought of in terms of quality and competence. Quality is the basic mental and physical traits of incoming

⁴⁰ See MC 0133/5, *NATO's Operations Planning*, for detail.

recruits derived from education, societal influences, and physical fitness. Competence is the military education that results in skilled and lethal service members. Enforcing minimum eligibility requirements and engaging in tough and realistic training produces formations that are more likely to fight and persevere when called upon. Unlike motivations and capabilities, culture is wholly maintained at the organizational level. Positive cultures promote person-to-person bonding through shared experience and commitment to a common cause. Organizations with good cultures provide their personnel the expectation of support; that the unit cares for them, is competent, and risks their lives only when necessary.

Host-nation support

2.42 HNS is civil and military assistance rendered in peace, crisis or war by a HN to NATO and/or other forces and NATO organizations that are located on, operating on/from or in transit through the HN's territory.⁴¹ As HNS may not be limited to military assistance, the appointed HN authority remains responsible for the internal HN coordination to ensure that HNS agreements are endorsed at the required level.

Strategic mobility

2.43 Strategic mobility is the capability to move forces and their associated logistics in a timely and effective manner over long distances.⁴² In Alliance operations, national strategic mobility capabilities may be augmented through multinational cooperation and agreements, support from multinational military agencies and local commercial contracts in the JOA. A successful response across continuum of competition depends on port of debarkation/port of embarkation capacity in the theatre of operations coupled with the availability of transportation assets. Deployment and redeployment operations normally involve a combination of surface (road, rail and inland waterway), sea, and air movement augmented, as necessary by pre-positioned assets.

Joint approach to sustainment

2.44 All Alliance operations are intrinsically joint, particularly regarding sustainment functions. Consequently, it is key that a common approach including processes and standards is used by the components. Operational-level operations typically employ assigned national, HN or local vendor support options to deliver multinational/collective sustainment through optimal use of resources while leveraging economies of scale. The use of multinational/collective sustainment is a means by which, depending on operational requirements and the specific situation, the Alliance can enhance its efficiency and effectiveness. Although multinational/collective sustainment functions should not be an end in themselves, the benefits of reduced national support elements and efficient use of local commercial resources could be significant. Nations contributing to the force should consider

⁴¹ See AJP-4.3, *Allied Joint Doctrine for Host-Nation Support*, for detail.

⁴² See AJP-4.4, *Allied Joint Doctrine for Movement*, for detail.

whether multinational/collective arrangements provide benefit or whether they conflict with their national interest.

Force rotation

2.45 A plan for rotations provides the long term identification of which capabilities, forces and HQs provide initial response or sustain deployed forces. In order to allow preparatory training, build cohesion, and maintain operational effectiveness, nations are encouraged to use the same rotation method within units and HQs, taking into account the specifics of each service. Procedures should be in place to ensure that the readiness status for capabilities, forces and HQs can be upgraded as necessary to meet rotation/sustainment requirements. Final authority regarding rotation rests with the TCNs, in co-ordination with the responsible NATO commander.

Lessons learned

2.46 A mature and fully functional lessons learned (LL) capability is crucial to the success of ongoing and future NATO operations and exercises and to the transformation of NATO bodies. In an uncertain and continuously changing security environment, learning is an essential part of being credible, capable and adaptive. Some lessons are spontaneously discovered while others are collected based on a guided plan made in advance.

2.47 The NATO LL process does not replace, but supports the normal staffing of lessons through the chain of command.⁴³ The NATO Lessons Learned Portal (NLLP) is the single NATO tool for collection, managing, tracking, monitoring and sharing of lessons. If considered relevant to be staffed and shared in accordance with the LL process to become a lesson learned or best practice, observations related with the conduct of operations should be inserted in the NLLP.

Section 5 – Transition

Transition

2.48 Transitioning is a conditions-based activity. Transition can take several forms, some of which are:

- transition from one NATO force to another;
- transition from NATO to non-NATO military forces (or vice versa);

⁴³ MC 0133/5, *NATO's Operation Planning*, refers the importance of capturing lessons learned in operations planning and the conduct of operations. Bi-SC Command Directive 080-006, *Lessons Learned* describes the lessons learned structure, process, tools and training to be used within NATO. Allied Command Operations Directive 080-001, *Lessons Learned* provides direction and guidance for SHAPE and subordinate commands concerning lessons learned.

- transition from NATO to a United Nations non-military force (or vice versa); or
- transition from NATO to HN forces or civilian control (or vice versa).

2.49 Transition activities comprise the progressive transfer of functions, supporting institutions, infrastructures and responsibilities 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 the functions performed by the JTF 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 transition are complete, the Alliance force can depart or remain, but under a new or revised mandate.

2.50 The COM 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.

2.51 Transitions are often a period of uncertainty in which gains made by the Alliance and others can be reversed if the correct structures are not in place to underpin a long-term sustainable solution. Poorly timed and ill-conceived transitions 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 should be based on realistic, accurate and shared understanding of the capabilities, responsibilities and resources of the participants.

2.52 Security transition strategies contribute to sustaining security in the post-transition environment. The transition process is part of a longer-term reform and transformation process that is managed by others. The Alliance should be prepared to provide security capabilities until Alliance forces can be relieved by local forces or others.

2.53 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.

2.54 Transition activities take place in a multilateral, inter-agency setting. No single person can manage transition activities as a whole, or define its outcomes. In particular, NATO cooperates with those agencies involved in activities that outlast any significant military presence. There are three key aspects that shape any approach to transition activities.

- a. **Transitions are a multinational and inter-agency process** and occur with multiple agencies working within a HN on security, governance and rule of law. This environment creates dependencies between agencies and the JTF.

b. **Transitions are a negotiated process.** All, including the wider population, 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 should develop a flexible, sustainable, technically-sound and politically-sensitive transition approach. Simple, flexible plans 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 Alliance's objectives or to adjust their activities as necessary. As a result, initial transition terms may be re-evaluated.

Assessing transition activities

2.55 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 assists 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.

2.56 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 should 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.

Transition activities

2.57 Transition 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 should 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.

b. **Flexibility.** Transition plans should 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.

- c. **Identifying and understanding motivations.** Transitions may involve numerous organizations: NATO, HN, non-military actors. Transition initiatives should be considered in the context of their impact on the motivations and interests of these different actors.
- d. **Balancing international and indigenous knowledge.** NATO and other international organizations can offer specific capabilities and technical knowledge while HNs have a more nuanced understanding of social structures, and appropriate local solutions. Locally influenced solutions may be more durable than those designed solely by international actors.
- e. **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 is therefore be less likely to endure.
- f. **Sustainability.** Longer-term success relies 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 should 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 developmental activities.⁴⁴
- g. **Communications.** Transition activities should be supported by communications that create an accurate understanding of Alliance's actions and intentions among audiences in line with the Alliance's narrative.

Transition risks

2.58 Transition activities comprise an element of risk. Impact may extend beyond the tactical and operational levels. Commanders should consider the following as part of establishing the risk context when initiating planning and assessing transition activities. The following aspects set a firm base for identifying and understanding risk related to transition.

- a. **Timing.** Transitions may occur before the HN feels fully confident and capable. The time required for capability and legitimacy to develop needs 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.

⁴⁴ See AJP-3.16, *Allied Joint Doctrine for Security Force Assistance* and AJP-3.22, *Allied Joint Doctrine for Stability Policing*, for detail.

- b. **State instability.** The political settlement and elements of the state may remain vulnerable for some time both during and after transition activities.
- c. **Retributive violence.** Where parties to the conflict have been responsible for abuses and violations of the law of armed conflict and human rights law, the risk of retributive violence should 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 should be carefully negotiated and managed.
- e. **Legitimacy.** If transition activities are not seen as legitimate, the desired end state 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.** Actors may seek to use the transition to further their own or their group's political purposes. This may 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 collapses.

Section 6 – Termination and post-termination activities

Termination

2.59 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. The strategic commander determines 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 JTF may need to conduct, to include disengagement, force protection, transition to post-conflict operations, reconstitution and redeployment.
- c. Approved termination 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.

Redeployment

2.60 The redeployment of forces 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 and should be planned as such.⁴⁵ Redeployment may be directed when operations have terminated or higher authority directs movement of the assigned force. The JTF HQ should give the same considerations to redeployment as for deployment in regard to phasing of C2 and the desired order of departure. While ideally, redeployment should normally take place in a permissive environment, COM JTF should plan for the possibility of redeploying in an uncertain or even hostile environment. Specific enablers may deploy to the 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.

2.61 Withdrawing capabilities from the JOA is a function of, and needs to be synchronized with, the departure of:

- forces;
- materiel; and
- deployed external contractors.

2.62 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 (see Figure 2-2). 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.

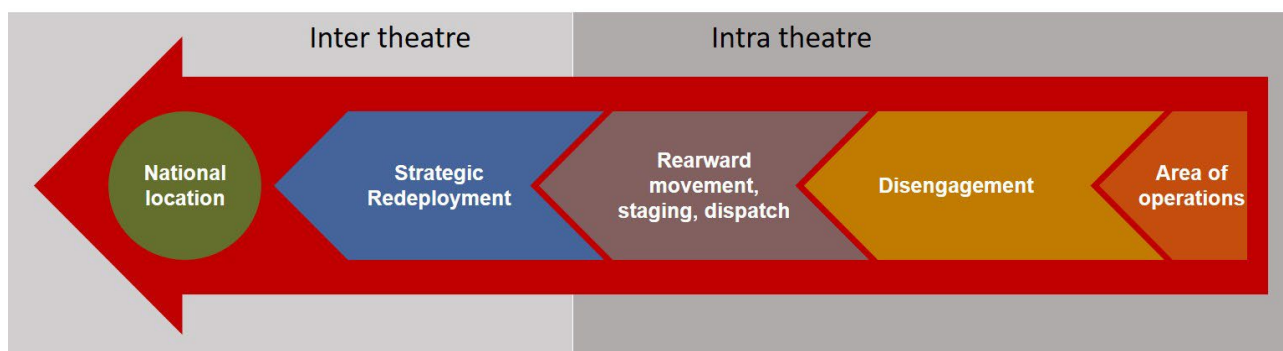


Figure 2-2: Redeployment processes

⁴⁵ See AJP-3.13, *Allied Joint Doctrine for the Deployment and Redeployment of Forces*, for detail.

2.63 Disengagement is the first stage of redeployment, in which a unit ceases operations, prepares its infrastructure for divestment (handover or remediation) and prepares its personnel and materiel for rearward movement.

2.64 Rearward movement, staging, dispatch and strategic redeployment should preferably be conducted in a permissive environment, with adequate force protection measures in place.⁴⁶

Planning and executing redeployment

2.65 One of the most important factors in planning the redeployment is timing. It is difficult to formulate a conditions based redeployment plan before the end state has either been attained or subsequent operations have been determined. Equally, it reflects badly upon the conduct of the operation if the redeployment is seen to be a rushed, poorly planned affair. Therefore, redeployment should be considered from the beginning of the operation, in the same thorough manner as the deployment, and with adequate time given to its planning and execution.

2.66 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. SACEUR retains operational command of assigned forces (except for nations non-delegating operational command due to specific restricted agreements) until transfer of authority to the different contributing nations. The COM JTF should retain operational control of assigned forces deployed in the JOA throughout the operation.

⁴⁶ See AJP-4.4, *Allied Joint Doctrine for Movement*, for detail.

Chapter 3 – Execution

Section 1 – Introduction

Fighting power

3.1 The conduct of operations marks the main phase where fighting power is put in action to achieve strategic, operational and tactical objectives. While fighting power is being described using three components (conceptual, moral and physical), in practice fighting power is represented by the combination of combat power, fighting spirit and operational art (see Figure 3-1). Combat power reflects the physical component of fighting power while fighting spirit reflects the moral component and operational art reflects the conceptual component of fighting power. Combat power provides the means to act and operational art provides the ways to act. The will to act is provided by fighting spirit.

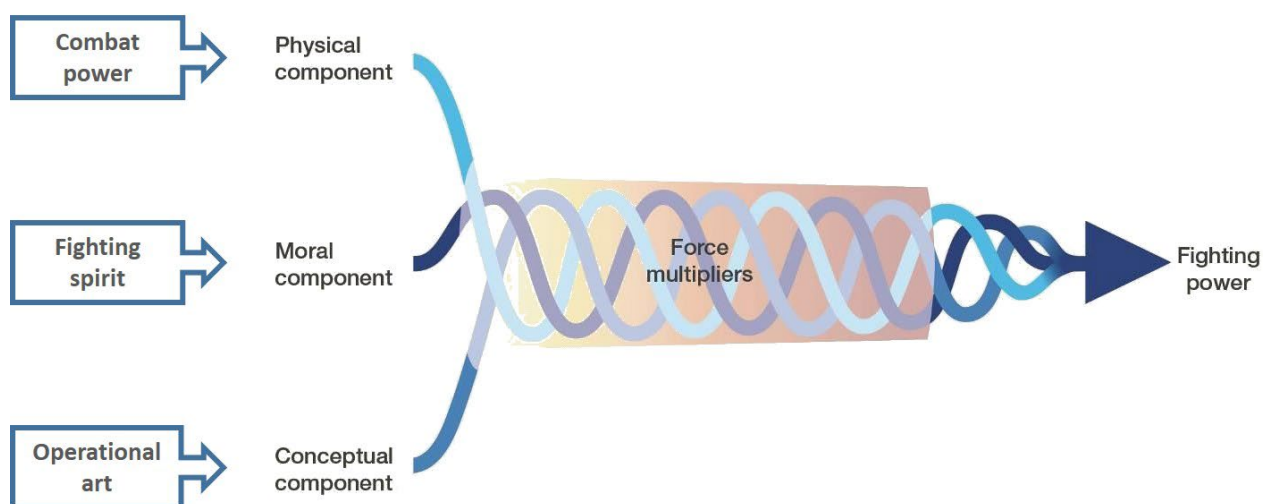


Figure 3-1: Fighting power reflected by combat power, fighting spirit and operational art

Operational art

3.2 Operations are orchestrated through the application of operational art. Operational art is 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. It is the critical link between strategy and tactics.

3.3 Operational art is often regarded as only an aspect of command at the operational level. However, its understanding and application are also implicit to commanders with strategic or tactical level responsibilities. It informs the design of the campaign or operation

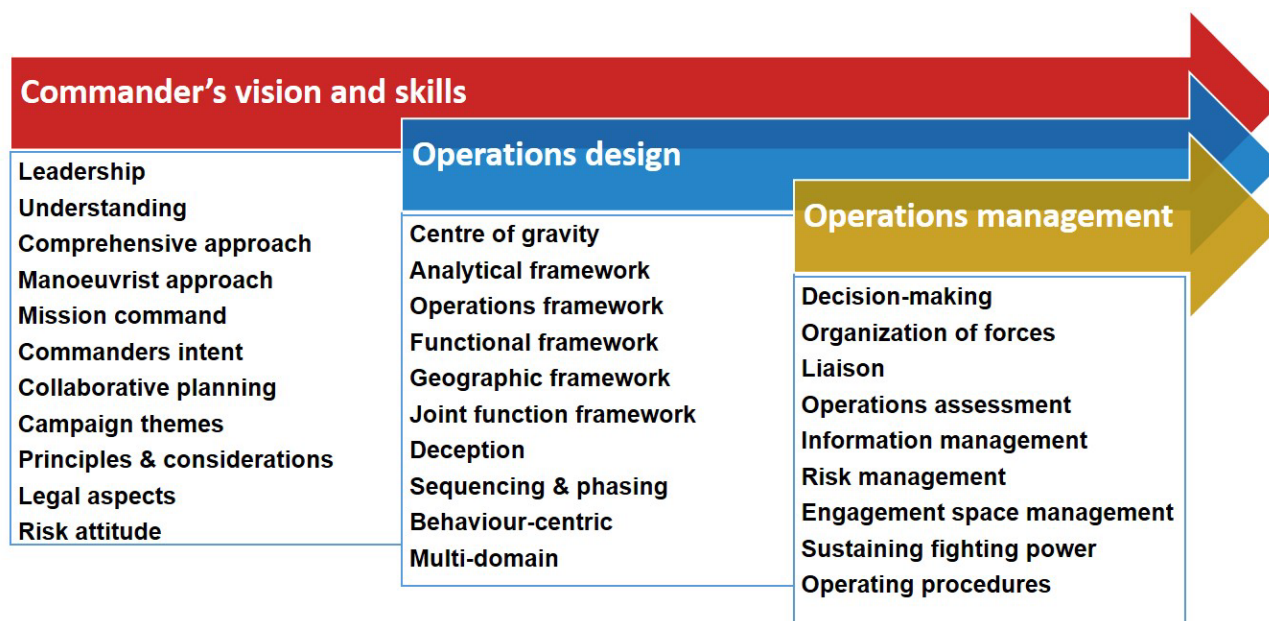


Figure 3-2: The three elements of operational art

to which they contribute. The three elements of operational art include the commander's vision and skills, operations design, and operations management, as shown in Figure 3-2.

Section 2 – Commander's vision and skills

Commander's role

3.4 Operational art embraces a commander's ability to take a complex and often unstructured problem and provide enough clarity, analysis and logic to judge situations and to enable detailed planning and practical orders. A commander's approach is as much art as science. They gain an understanding of the context through analysis of the situation, including both the overt symptoms and underlying causes of conflict. Thereafter, awareness of a situation, and a feel for how it is being changed by military activity and other influences, is cultivated and maintained by continual assessment. Command requires a balanced mix of physical, cognitive, intelligence, emotional and intuitive competencies like intellect, moral and physical courage, trust, diplomacy, intuition and practical ability. Operational art is therefore realized through combining a commander's skill and the staff-assisted processes of operations design and operations management.

3.5 A commander's vision and skills are derived from a mixture of experience, intuition and ability, combined with established principles, practices and procedures. With staff-assisted processes being an important part of operational art, commanders should foster four major critical skills for all their personnel:

- comprehensive and critical thinking;
- communication;
- collaboration; and
- creativity.

These skills support the ability to deal with complexity thus simplifying execution and aiding the formulation and the transfer of decisions into appropriate actions which maintain the initiative.

3.6 Operational art is not a purely mechanistic process. Commanders' leadership can have great influence across the theatre of operations. Operations design and management draws extensively from the commander's intent to guide and focus staff effort. A commander must balance the time it may take to develop understanding of the range, scope, and depth of the problem with the requirement to produce clear direction and plans in time for effective execution while promoting interaction with military and non-military partners within a comprehensive approach. Commanders on enduring operations must accept that their time periods in command cover only a limited part of a longer campaign. This requires a high degree of humility in command, respecting the role of other partners and awareness of the context for individual contributions.

Application of mission command

3.7 Mission command is NATO's philosophy for the command of military operations.⁴⁷ It is more than a leadership technique or command and control (C2) procedure. As the basic principle, it has a major bearing both on the attitude and leadership style of commanders and the conduct of their subordinates. Based on empowered leadership, it enables decisions to be made by those best placed to make them, promoting initiative and exploiting opportunities that emerge from competition.

3.8 Mission command offers a philosophy of command advocating centralized planning that includes provision of clear guidance and intent combined with decentralized execution based on mission-type orders and disciplined initiative; describing the 'what', without necessarily prescribing the 'how'. The doctrine of mission command stresses the importance of understanding what effects are to be created rather than specifying the ways in which it should be done.

3.9 Mission command requires mutual trust between superiors, peers and subordinates and is based on a common culture within the force. Trust develops through shared experience. Subordinates are willing and able to assume responsibilities and develop initiative, whilst superiors are willing to accept mistakes, and provide the required freedom of action. Whilst the commander provides their intention regarding the mission, with achievable

⁴⁷ See AJP-01, *Allied Joint Doctrine*, for detail.

objectives and the required resources and authority, the subordinate assumes the responsibility for execution.

3.10 Commanders have a responsibility to communicate their intent clearly and to ensure that it is well understood, especially when addressing the main effort. Commanders also enable mission command by training their subordinates and commands, promoting mutual understanding and building trust.

3.11 Mission command requires subordinate commanders to be willing to assume responsibility within the granted freedom of action and to act independently and creatively at their echelon. Especially in a rapidly changing operating environment (OE), subordinates should decide and act within the scope of the commander's intent to establish the best way to accomplish their assigned mission.

3.12 Founded on the principles of mission command and the absolute responsibility to act on the superior commander's clearly expressed intent, there are practical, sequential actions that guide the effective application of mission command:

- commanders ensure that their subordinates understand the intent, their own contributions and the context within which they are to act;
- commanders exercise minimum control over their subordinates, consistent with the context and nature of mission, and the subordinates' experience and ability, while retaining responsibility for their actions;
- subordinates are told what outcome they are contributing to, the effect they are to create and why;
- subordinates are allocated sufficient resources to carry out their missions; and
- subordinates decide, based on the level of delegated authority for execution, how to best act on their superior intent.

Collaborative planning

3.13 A critical responsibility of the commander joint task force is to manage the joint operations area (JOA) to assist in coordinating and synchronizing JTF 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.

3.14 **Coordination.** When two or more force elements operate in the same engagement space 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 (SA) across the JTF. Coordination and control may be based on interaction between organizations and are procedural in nature.

3.15 Synchronization. Synchronized actions, within the overall construct of orchestrated actions, is standard practice at the operational level. Synchronizing action often requires force elements to agree and commit, in advance, to coordinating courses of action (COAs). 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 engagement space nor provide a commander with maximum agility.

3.16 Dynamic coordination and synchronization of actions enable 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 efficiently conducted operations; and the opportunity to introduce confusion amongst the adversary. The attendant risks should be considered, such as that of autonomous action, for example in the absence of full SA, leading to friendly fire. Synchronizing actions requires significant staff planning and rehearsal, but has the benefit of treating risks. Dynamic synchronization possibly offers greater rewards but relies heavily on the ability of force elements, and commanders, to respond effectively to changes in the operational situation. At every level of command, dynamic coordination and synchronization requires communication and information systems (CIS) to enable both SA and effective C2. Thus, operations management is facilitated through a combination of engagement space management and shared SA.

Commander's intent

3.17 The commander's intent is the foundation of the operations design. It is a clear, concise statement of what the force should do and the conditions the force should meet to succeed; it includes relevant factors relating to the opponent, terrain and to the objectives. The commander's intent should respect applicable law and provide a clear statement with regard to the protection of the civilian population. The commander communicates 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 favourably 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 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. Objectives describe what the commander is tasked to achieve in regard to the 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 their actions contribute to those objectives.

Section 3 – Operations design

3.18 Operations design is a process of iterative understanding and problem framing that supports commanders and staffs in their application of operational art. Operations design, guided by the behaviour-centric approach, establishes the sequence and purpose of critical actions, assigning missions and priorities to subordinates and supporting commands. These actions are nested within, and contribute to, the Alliance's objectives - a requirement that may cause tension in a multinational environment when balancing national and operational command requirements, but which should not be overlooked. Operations design leads to the concept of operations and provides the basis for control of the operation.

3.19 Operations design, through review, wargaming and refinement,⁴⁸ is continuous; the situation changes, so the operation and the force adapts in response to actions, reactions and the unavoidable consequences of chance and friction. It does not routinely require a redesign of a campaign, operation or even tactical activities every time commanders and staffs change over, or forces are relieved. The key tenets of the behaviour-centric, manoeuvrist and comprehensive approaches form the foundation of orchestration by understanding the ends, ways and means to be applied to attain the end state. This basis is supported by narrative-led execution and mission command to maintain focus on the strategic end state and achieve agility in the often chaotic, demanding, and contested OE. The supporting doctrine, concepts and frameworks provide the conceptual support while applying operational art.⁴⁹

3.20 The operational use of joint action requires operations design that aligns actions, effects and objectives with desired behavioural outcomes. Human behaviour is based on the choices that people make. These choices are largely context driven. This is reflected conceptually in the "observe, orient, decide and act (OODA) loop" model.⁵⁰ The OODA-loop can be influenced at every segment of the loop by creating effects on the elements in the different layers in the engagement space (see Figure 3-3). Identifying the physical, virtual and cognitive effects to influence the OODA-loop of targeted audiences drives the orchestration

⁴⁸ See AJP-5, *Allied Joint Doctrine for the Planning of Operations*, for detail.

⁴⁹ See AJP-01, *Allied Joint Doctrine*, for detail.

⁵⁰ The observe, orient, decide and act loop was developed by Colonel John R. Boyd (US Air Force). See his book *The Essence of Winning and Losing*, (1995).

of activities across operational domains and environments, through multi-domain operations, against elements in the engagement space.

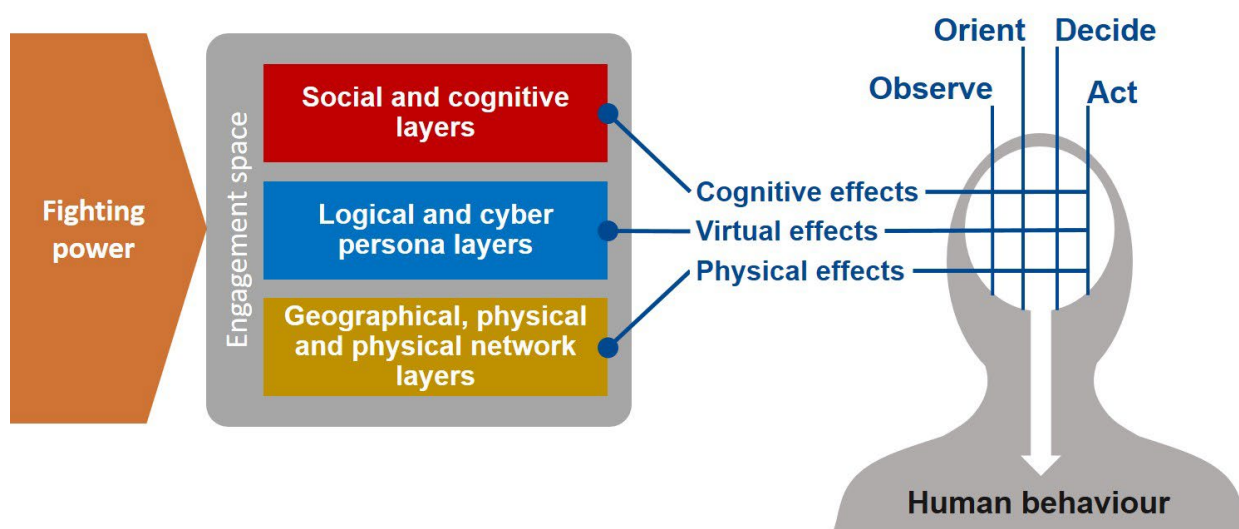


Figure 3-3: Influencing the observe, orient, decide and act loop.

3.21 Each level of the JTF nests its activity under the superior level. The main aspects of operations design include:

- using sequencing and phasing;
- using the conceptual frameworks;
- using centre of gravity analysis;
- applying joint action through the joint functions; and
- effectively combining tactical operations.

Joint effects and targeting

3.22 The joint effects function is a staff function to integrate, coordinate, synchronize and prioritize actions and activities to create effects in the engagement space. The joint effects function manages the joint targeting cycle, joint fires, and the synchronization of effects-generating capabilities.

3.23 Joint targeting involves the process of selecting and prioritising targets (which are classified as being either facility, individual, virtual entity, equipment or organization) and matching the appropriate capabilities to them, taking account of operational requirements and capabilities, with a view to creating desired effects in accordance with the commander's objectives. It links the tactical actions to the operational objectives by engagement of

prioritized targets. Targeting at the strategic level focuses on the coordination oversight of the operational and tactical targeting function.

3.24 The strategic level, through guidance, planning, execution and assessments, can focus targeting to apply limited assets to achieve the objectives while adhering to frameworks presented in operation plans. At the operational level, targeting focuses on determining specific actions to create the desired effects to achieve operational objectives.

Joint functions

3.25 The joint functions describe the detailed capabilities of the force. In any operation these joint functions are to be considered, although the individual functions' contributions, significance and demands vary.

3.26 Effective CIS support is fundamental to enabling the joint functions and the success of any operation. Timely deployment and establishment of robust CIS capability is a decisive factor for successful deployed operations. It is imperative that secure and interoperable CIS assets are available at every level of command inside and outside the JOA.⁵¹

3.27 **Command and control.** C2 encompasses the exercise of authority and direction by a commander over assigned and attached forces to accomplish the mission.

3.28 The joint C2 should include forces contributing to the operation and take into account coordination and cooperation with non-military 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 is fully understood, and facilitates the clear, timely and secure passage of guidance and orders, situation reports and coordinating information.

3.29 The joint C2 system enables efficient staff time management and information flow and provides commanders with the environment in which to make their decisions. Furthermore, the joint C2 structure and command relationships should have built-in redundancy, be robust, flexible and capable of development and adaptation throughout the course of the operation.

3.30 **Intelligence.** Focused intelligence supports decision-making related to operational-level planning, preparation and execution. Intelligence as a joint function has a unique role in the comprehensive analysis and understanding of the OE, which is the starting point of the operations planning process.⁵² Commanders should build and foster an understanding of the

⁵¹ 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 defines its own information requirements to ensure communication and information systems capabilities are provided in order to meet the commander's requirements.

⁵² See AJP-2, *Allied Joint Doctrine for Intelligence, Counter-Intelligence and Security*, for detail.

OE throughout every phase of the joint operation. Intelligence staff are also engaged in the planning process by identifying operational requirements with regard to intelligence and capabilities as part of crisis response measures and combined joint statement of requirements.

3.31 Intelligence contributes to a continuous and coordinated understanding of the OE by:

- identifying conditions required to achieve desired objectives;
- avoiding undesired effects; and
- assessing the impact of adversary, friendly and neutral actors on commanders' concept of operations.

3.32 Intelligence is an aid to provide SA, develop understanding and is a critical tool for decision-making. To ensure operations are intelligence-driven, intelligence staff should provide the commander with timely and accurate intelligence that supports their particular needs. The provision of intelligence is supported by a series of specific responsibilities of the intelligence staff, including:

- inform commanders;
- describe the OE (including identification, description and assessment of adversary, neutral and friendly actors);
- identify, define, and nominate objectives;
- support planning and execution of operations;
- counter adversary deception and surprise; and
- assess the effectiveness of operations.

3.33 Intelligence is a key component for planning and conducting operations. It provides timely and accurate information, describes the OE, contributes to preparing operations design concept, and is important in every stage of planning activities. The changing character of conflict emphasizes the need to place intelligence within the wider concept of understanding, where commanders need a holistic view of the OE, with a particular emphasis on the human environment in which adversaries and other actors compete with and confront each other. Intelligence is not only for assessing the OE and the adversaries' forces; intelligence is a critical enabling capability.

3.34 **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 by shattering their cohesion rather than destroying each of their 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.

3.35 Fires. Fires refers to the use of weapon systems to create a specific lethal or non-lethal effect on a target. 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 applied directly or indirectly to create a wide range of physical and psychological effects by degrading capability and shattering cohesion. Fires may be used in isolation, but it is preferable to integrate them with manoeuvre, information and civil-military cooperation (CIMIC) 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.

3.36 Information. The use of information is critical to decision-making processes. Audiences' perceptions within the OE are dependent on the information available to them. Agility and proactive action in the information environment is critical to operational success.

3.37 The information function helps commanders and staff applying (or using) information, while integrating with other functions, to influence perceptions, behaviour, and decision-making. Key enablers are strategic communications, including information operations, psychological operations and military public affairs.⁵³ In keeping with narrative-led execution, these key enablers are 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 JTF do not undermine activities in the information environment and vice versa.

3.38 Commanders should assure an efficient information flow across the levels of command which may require prioritizing resources. Additionally, commanders should enable a culture of information sharing throughout the JTF and with other non-military actors, finding a balance between security - the need to protect information - and effective civil-military cooperation. To this end, commanders and their staff should ensure security classifications, foreign disclosure policy, and information sharing systems lend themselves to coordination with non-military entities.

3.39 Civil-military cooperation. NATO activities and operations are influenced by and have effects on civil factors of the OE. Forces frequently depend on non-military resources and information and often rely on non-military actors to provide security, defence, and dual-use capabilities. It may even be impossible to gain full freedom of action and movement without the cooperation of non-military actors in the JOA. The joint function CIMIC comprises two core activities: civil factors integration and civil-military interaction. The joint function CIMIC integrates analysis and assessment of the civil factors of the OE, including protection

⁵³ See AJP-10, *Allied Joint Doctrine for Strategic Communications*, for detail.

of civilians and other aspects relating to human security, into planning and execution of operations and activities. Further CIMIC entails civil-military interaction supporting synchronization of military with non-military activities to create converging effects.⁵⁴

3.40 Sustainment. Sustainment is a joint function and its activities are critical enablers; they influence the tempo, duration and intensity of actions, operations and campaigns. Moreover, the available sustainment capacity often determines the commander's freedom of action. Sustainment is the comprehensive provision of: personnel, logistics, medical support, military engineering support, finance and contracting support required to maintain combat power throughout every phase of the operation.

3.41 Force protection. Force protection is a joint 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.⁵⁵ Force protection is founded on elements such as security, military engineering support to force protection, air and missile defence, medical force protection and force health protection, consequence management, resilience, tactical area of responsibility control, and chemical, biological, radiological and nuclear defence. These elements contribute to overall force protection which is both the commander's responsibility as well as the responsibility of personnel. By providing security intelligence and education 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.

Joint function framework

3.42 The joint function framework uses a combination of manoeuvre, fires, information and CIMIC to affect the audience's attitude and behaviour. It is "informed and directed" by the joint functions of C2 and intelligence, and "supported" by the joint functions sustainment and force protection, as shown in Figure 3-4. The application of the joint functions is called joint action and is how the JTF contributes to achieving operational objectives.

⁵⁴ NATO military interaction with non-military actors will be based upon specific guidance from the North Atlantic Council and the Military Committee (MC). For further information see: MC 411, *NATO Civil-Military Cooperation Policy* and AJP-3.19, *Allied Joint Doctrine for Civil-Military Cooperation*.

⁵⁵ See AJP 3.14, *Allied Joint Doctrine for Force Protection*, for detail.

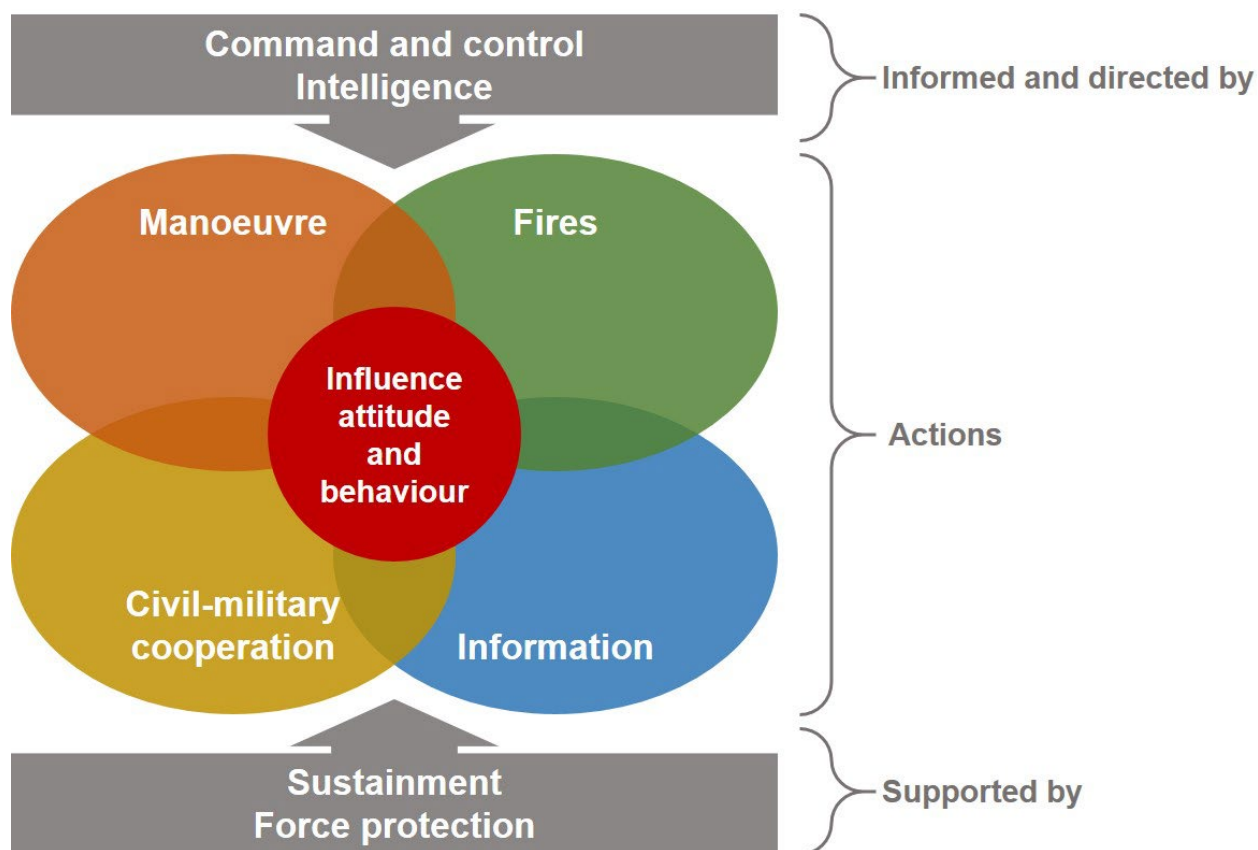


Figure 3-4: The joint functions framework

Section 4 – Operations management

Introduction

3.43 Operations management integrates, coordinates, synchronizes and prioritizes the execution of activities within operations, allocates forces, and assesses progress towards achieving objectives. Adversary actions and adversary responses inevitably affect the course of a campaign or operation. Assessing the course of the operation, then evaluating the plan to see if it needs to be modified to meet objectives, is the essence of successful operations management. The main elements of operations management include:

- assessment informed decision-making;
- organizing forces to ensure the appropriate mix of forces and groupings;
- situational awareness;
- engagement space management;
- information management (IM);
- risk management (RM);

- liaison with military and non-military actors;
- operating procedures; and
- sustaining fighting power.

Decision-making

3.44 During the conduct of operations, commanders can assess the OE which helps in deciding when to make decisions and in the making of those decisions. The following elements are essential to decision-making.

3.45 **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 OE, evaluation of actors and factor analysis help commanders in this respect. An understanding of the intangible and wider factors surrounding an issue can be made by drawing on previous experience, as well as research, study, visits and discussions with key personnel.

3.46 **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.

3.47 **Consultation.** Early engagement 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 occurs 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 specialist advisors and senior staff; and
- lower to subordinate commanders to ensure they understand the decision and context, have the opportunity to contribute, and feel a sense of ownership.

3.48 **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. **Red teams, wargaming 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 wargaming and may lead to generating contingency plans. Operational analysis specialists can provide additional objectivity and technical rigour to operations planning and decision-making.
- b. **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 (HQ) 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.
- c. **Green team.** Commanders may form a "green team" representing audiences not covered by the red and blue team, such as partners and non-military actors, to ensure comprehensiveness. The green team should include "high level" expertise of partnered non-NATO and non-military actors to ensure critical thinking and avoid bias.
- 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 (e.g. coming to premature conclusions that affirm prevailing assumptions; failing to be a supportive member of the team) may be offset by employing an external dissenter. They question internal assumptions and perspectives, and ensure that agreement is not simply achieved on the basis of conformity and acquiescence within the planning team.

3.49 **Decision and execution.** Commanders make decisions and should express them clearly and succinctly; this is the cornerstone of effective command. 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.

Decision-making in practice

3.50 Warfare is becoming more complex and NATO may find itself fighting across multiple operating domains and the electromagnetic spectrum and acoustic spectrum, across multiple JOAs and against a range of adversaries simultaneously. Commanders therefore have an ever-greater need to prioritize the availability of timely and accurate information so they can make effective decisions. It is the main effort of a staff to provide the information to assist the commander's decision-making process. The decision-making process is frequently 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 results in paralysis. Commanders have to accept that they cannot influence every element in their environment remain realistic about the predicted outcomes of plans. Assessment of risk is important and possible if critical information requirements are identified early in planning. The commander should regularly refine these.

Organizing forces

3.51 The concept of operations provides a description of how the operation should be conducted, supported by an illustrative combined joint statement of requirements that outlines the force requirements. Planning development refines the employment of operational forces with subordinate and supporting commands within the constraints of the expected or actual force package for the operation, adding the required level of detail regarding C2 of joint forces and appreciating the impact of any critical force shortfalls. Supported/supporting interrelationships should be established and a clear view on the support required for each phase of the operation and/or line of operation. Missions to supporting commanders should be specified in the operation plan.

Situational awareness

3.52 The SA needs of commanders and staffs varies at each level and within and between HQ, although many of the systems and displays are common. Interpreting and using data is a key consideration. Shared SA enables friendly forces knowledge of each other's locations, intentions, freedoms and constraints, as well as where adversary forces are, and the location of neutral agencies, protected sites, and civilians. In broad terms, the joint common operational picture (COP) may comprise different geo-referenced layers, consisting of status, location and capabilities of own and adversary (as well as of other groups of interest such as non-military actors and the civilian audiences) posture and sustainability, important locations, critical infrastructure and actions within the JOA.

3.53 Information on the physical environment (geography, meteorology, oceanography, hydrography and conditions in space) as well as the human information and electromagnetic environments are also important for planning purposes.⁵⁶

3.54 A gender perspective should always be applied when analyzing the OE, as it improves SA across campaign themes by considering information about the entire population and gendered experiences of women, men, girls and boys. A variety of tools can be used to enable understanding, aid de-confliction, and enhance synchronization but commanders and

⁵⁶ 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.

planners need to understand how those tools support the processes and any potential biases they introduce.

3.55 Commanders make decisions based on their understanding of the OE. IM processes provide timely and relevant information requirements in support of the comprehensive approach to planning, decision-making and execution, to include activities involved in identifying, collecting, filtering, fusing, processing, focusing, disseminating and using information.

- a. CIS enable the sharing of SA. Efficient joint COP management, including exploitation of information, is essential for maintaining SA. If ineffectively managed, the volume of information available can restrict a commander's SA rather than enhance it. The CIS architecture needs to be integrated with the joint functions and comply with legal restraints and security regulations.
- b. The joint COP is a representation of the engagement space that provides an integrated view of data and information from multiple component commands and subordinate units' recognized pictures in a single picture, completed with functional areas enhancements within the JTF HQ. These functional areas enhancements include recognized intelligence, logistic, medical, engineering, CIS, cyberspace, environmental, and civil factor integration.
- c. Synchronization matrices, derived as output from the estimate process, are useful tools in showing the broad order activities and joint actions to be synchronized. The synchronization matrix in conjunction with a decision support matrix is the key tool used to direct and monitor the delivery of the operation. In complex OEs 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.

Engagement space management

3.56 Engagement space management describes the necessary means, measures and procedures to enable synchronization of activities in the engagement space. It combines and integrates the elements of a JTF to accomplish the commander's intent and mission and is thus a key enabler to joint operations. Integrating force elements through engagement space management procedures enables coordination and synchronization according to the commander's priorities. Engagement space 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 managing the risk of fratricide. A detailed discussion on engagement space management is at Annex C; however, the main elements of engagement space management are:

- coordinating and synchronizing the activities of force elements, including non-NATO and – where appropriate – non-military actors;

- contributing to SA and freedom of action; and
- mitigating friction caused by the existence of boundaries and seams between force elements and between the JTF and others.

3.57 Engagement space management should involve components and national contingents operating in the JOA. Efforts should be made to synchronize with non-military actors. Commanders should create a sense of unity of purpose and establish arrangements to coordinate or, as a minimum, deconflict military and non-military efforts during planning and execution.

3.58 Engagement space management applies at every level of command. While different means and measures are relevant at the different levels, activities require a degree of integration, coordination, synchronization and prioritization. Strategic engagement space management considerations include diplomatic agreements for access and overflight. At the operational level, engagement space management also has to consider the coordination and allocation of host-nation support. At the tactical level, boundaries may be drawn between areas of operations to integrate or deconflict different force elements.

3.59 The extent to which inter-agency engagement space management measures are practicable, or can be formalized, vary according to the situation. Friendly actors may be amenable to collaboration and to some integration if they understand that it manages risk to them. Measures should be adopted to at least deconflict or synchronize military and non-military activities and actors should be encouraged to consider cooperating in any process while respecting the mandate and modalities of work of neutral and independent humanitarian organizations.

Information management

3.60 IM processes information to gain understanding in support of decision-making. It is therefore a command-led activity requiring dedicated specialist support to manage an organization's information management resources for handling data and information acquired from multiple sources in a way that optimizes security and access. IM provides a timely flow of relevant information that supports every aspect of planning, decision-making, and execution.

3.61 It is important that IM supports 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 OE 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. As the key JTF staff integrator, the chief of staff should 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. All HQ should have an IM officer and an IM plan, and form a joint IM board to serve as a focal point for information oversight and coordination.

3.62 Any operational 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. **Delivered at the 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. **Reliable and secure.** The flow of information must be commensurate with the mobility and operating tempo of a HQ. Information flow must support vertical and horizontal data sharing (e.g. collaborative planning).
- c. **Accessible.** Every level of command who have a need to know should 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.
- 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.

3.63 **Commander's critical information requirement.** 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 creating commander's critical information requirements (CCIRs); these CCIRs change over time as the OE 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. CCIRs cover information concerning areas that are either critical to the success of the mission or represent a critical threat and covers every aspect of the commander's concern including friendly forces information requirement and the priority intelligence requirements. The commander identifies those information requirements, which are important to them to maintain SA and understanding and to plan future activities. Therefore CCIRs are limited since they are linked to the critical decisions the commander anticipates making, to focus subordinate commanders' planning and collection efforts.

3.64 Commanders use CCIRs to help them confirm their understanding of the area of operations, assess desired effects and to support decision-making to accomplish their mission or to identify significant deviations from the plan due to, for example, adversary actions. CCIRs help the commander to tailor their C2 organization. They are central to effective IM, which directs the processing, flow, and use of information throughout the force. While the staff can recommend CCIRs, only the commander approves them. CCIRs are continually reviewed and updated to reflect the commander's concerns and the changing situation.

3.65 **Knowledge sharing, understanding and collaboration.** To achieve a comprehensive understanding of the OE, it is important to exchange relevant information across non-military partners. For planning aspects in which non-military influence has high importance or is not well understood, input from these sources is critical to refine understanding and thereby reduce risk. Knowledge sharing is characterized as an activity within a learning environment, rather than defined as a purely systematic process with inputs and outputs.

a. **Sharing.** 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. **Understanding.** 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 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. **Collaboration.** Another aspect of knowledge sharing and understanding is collaboration, which enhances C2 by sharing knowledge and aiding the creation of shared understanding. Although face-to-face interaction is 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 non-military partners, since their objectives and perceptions of the desired end state not always coincide with the military's.

Collaboration requires sharing of information with relevant agencies and partners.⁵⁷ Commanders should determine and provide guidance on what information needs to be shared with whom and when.

Risk management

3.66 RM is activities coordinated to direct and control an organization's actions to balance risk with benefits. RM is linked to the desired end-state and objectives and continuously optimizes the plan by managing threats before they occur and exploiting opportunities.

3.67 RM monitors triggers and indicators via a risk monitoring plan to assess how risks to the desired end-state and objectives are influenced by internal and external factors. The influence may be both positive and negative. Risk is quantified by establishing the likelihood of the risk event to take place and the impact of the effect. Where appropriate, the additional factor of exposure can be added as well. Where quantifying risk is not possible due to the nature of the risk and/or insufficient data or time, a qualifying method might be used based on experience and comparing different risks. Figure 3-5 depicts RM both on treating the likelihood of a risk source (likelihood management) and treating the effects (consequence management).



Figure 3-5: Likelihood and consequence management

3.68 RM is embedded in the NATO crisis response process and supports the commander in assessing risk to the objectives and end-state as well as advising the staff in addressing their functional risks. Commanders categorize their own level 1 risks, whereas lower level are referred to as level 2 risks. This enables an organization a more agile approach to risk focussing on commanders' relevant risks without flooding the commander with concerns that

⁵⁷ In accordance with the relevant NATO policies and procedures (Reference C-M(2002)49-REV1, and C-M(2002)60, as well as security agreements (AC/35-N(2013)0011-REV2-COR1), as appropriate.

should be addressed at lower level. The risk management working group is the venue for cross-functional discussions based on the collected data for the risk monitoring plan. The risk management working group compares the status of identified risks with the commander's attitude to risk and develops proposals for risk treatment presented at the assessment board.

3.69 The purpose of RM is to provide a commander with an understanding of which events may prevent or slow down mission accomplishment and which opportunities may enable an earlier mission success if exploited. The recommendations are articulated as proposed risk controls to treat the risk towards the most favourable outcome. See Annex D for more information on RM.

Liaison with military and non-military actors

3.70 All operations require significant coordination and liaison. Liaison personnel should be exchanged between: the JTF, higher command, adjacent units, host nation, NATO contributing nation, non-NATO contributing nation (NNCN), non-military actors involved in or influencing the operation and supporting forces assigned to the commander. Within the JTF, exchange of liaison elements between the functional components is critical to facilitate coordination.

3.71 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, enhances interoperability and contribute significantly to mission accomplishment.

3.72 Establishing, developing and maintaining a liaison network throughout the JTF, population and non-military actors is a major "enabler". During initial force generation planning, the appropriate operational requirement should be quantified in terms of personnel, communications and transport, and then included in initial force generation planning. The commander needs 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 force.

3.73 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 HQ. 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.

3.74 The receiving commanders are responsible for ensuring that liaison personnel have sufficient communications equipment at their disposal to permit effective communications

between the commands. This communication is especially important during the early stages of JTF formation and planning. The receiving commander is responsible for providing the required equipment when liaison elements have to communicate from within the receiving command.

Section 5 – Operations assessment

Purpose

3.75 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 should be continually reviewed against achievement of objectives so that plans can be adjusted as necessary. As an important element of operational art, operations assessment has to be considered at the outset and then continuously throughout an operation, continuously throughout an operation. It should be done formally to support the preparation of the periodic mission report and at an operation's conclusion.

3.76 The operations assessment provides evidence for decision-making as to the progress and results of an operation or to make adjustment to the plan as necessary. Results of assessment may also inform the lessons learned process, deliver input to RM and inform NATO senior leader decisions. The operations assessment requires sound military judgement and cannot become mechanistic and should maintain the differentiation between performance and effectiveness. Commanders prioritize indicators for monitoring and evaluation to reduce the overall burden on staffs and resources. Furthermore the 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;
- provides 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;
- enables the military to keep track of and share information with non-military actors resulting in a better understanding of the interconnections and interdependencies between military and non-military activities and how they should be coordinated and synchronized and/or de-conflicted; and
- includes the effects of operations in relation to the protection of civilians and human security, to be integrated in the Periodic Mission Report.

Stages of operations assessment

3.77 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.

3.78 Assessment design and support to planning and development of a data collection plan is conducted during operations planning, while data collection and treatment, and analysis, interpretation and recommendations is conducted continuously during execution. The operations assessment requires cross-HQ coordination but the analysis and interpretation of data and the development of recommendations, especially, requires the contribution of subject matter expertise from staff functions, special advisors and supporting HQ. The inclusion of an operations assessment working group in the battle rhythm facilitates this contribution.

3.79 Operations assessment is embedded in the NATO crisis response process and supports the staff in articulating measureable effects and actions. The assessment working group is the venue for cross-functional discussions based on the collected data. The assessment working group produces recommendations for how the current operation may be adapted to remain on track. These recommendations are presented to the commander at the assessment board.

3.80 Each component channels its assessment up the chain to the commander joint task force who develops guidance on the conduct of operations assessment. Even though the output of the operational level assessment feeds the strategic commander's operations assessment process, the operations assessment at the military strategic level is much more than a simple aggregation of lower level operations assessments. Operations assessment is conducted at a timetable that best meets a commander's needs, based on the scale, complexity and tempo of operations.

Operations assessment at the strategic, operational and tactical level

3.81 Operations assessment occurs at the strategic, operational, and tactical levels, where assessments at each level inform and are informed by one another. For example, commanders at the operational level, through their assessment enable strategic decision making by providing NATO senior leaders (political and military) with information, options, and advice on how to achieve strategic objectives through the employment of military forces.

3.82 At the strategic level, operations assessment continually measures the state of identified systems. Assessment can begin as soon as senior leaders identify key indicators for monitoring, even before a plan is developed. Senior leaders establish baselines and/or

targets for indicators that are sufficient for creating effects that contribute to the achievement and make progress towards the strategic objectives. The results of monitoring inform the subsequent development of conclusions and recommendations. The operations assessment supports military strategic decision-making for the Supreme Allied Commander Europe, and informs decision-making within the North Atlantic Council.

3.83 At the operational level, operations assessment focuses on relevant tasks/activities that create desired effects. Commanders align the operations assessment with 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.

3.84 At the tactical level operations assessment considers assigned tasks/activities that contribute to the achievement of planned decisive conditions and/or desired effects that a particular component has responsibility for.

Relationship between operations assessment and risk management

3.85 During execution of the plan both operations assessment and RM uses the assessment board as the vehicle to provide the commander with a cross-functional analysis of the situation seen in the perspective of the progress toward objectives. At the assessment board the commander is presented with a number of conclusions and recommendations to adapt the plan to stay on track, avoid threats or speed up the progress (see Figure 3-6).

3.86 At the end of the assessment board the commander tasks relevant staff and/or subordinate entities on the desired adaptation of the plan. The effect of the adaptation is monitored via the data collection plan in terms of operations assessment and the risk monitoring plan in terms of RM. In accordance with the battle rhythm, the operations assessment team and RM team convene in the assessment working group and the risk management working group to prepare for the next assessment board.

3.87 If risk controls are implemented to treat a risk, both operations assessment and RM assess the outcome of these. RM re-evaluates the likelihood and/or the impact of the risk and operations assessment assesses if there has been any consequence for desired operational effects and/or decisive conditions.

3.88 **Similarities.** Both operations assessment and RM work as a cross-functional hub utilizing every part of the HQ. Additionally both tend to look further and maintain a view of the strategic objectives. The assessment board is used for both as the venue to present the

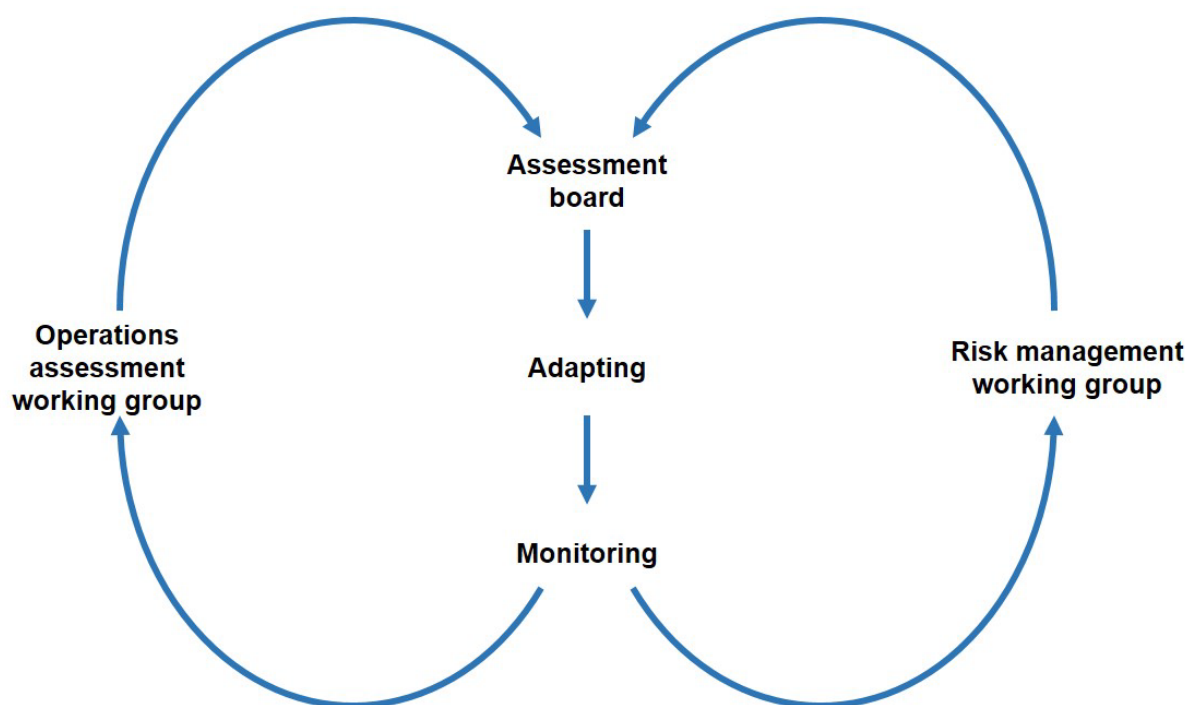


Figure 3-6: Relationship between operations assessment and risk management

commander with a cross-functional agreed analyses and provide recommendations for how the plan may be adapted.

3.89 Differences. Operations assessment focuses on the entire operations design with the main focus on the progress and keeping the plan on track towards the strategic objectives whereas RM focuses on the minor adaptations of the plan to constantly adapt to the current situation and either avoid threats or exploit opportunities. Hence, RM may sometimes require a faster battle rhythm than operations assessment.

Section 6 – The operations process

Framework

3.90 The operations process is an established framework for organizing operations and command and control activities, i.e., putting operational art into practice: plan, prepare, execute, and assess. Commanders use the operations process to:

- drive the conceptual and detailed planning necessary to understand their OE;
- visualize and describe the strategic, operational and tactical objectives and course of action;
- make and articulate decisions; and
- direct, lead, and assess operations.

3.91 The operations process, while simple in concept, is dynamic in nature. Commanders should organize and train their staffs and subordinates as an integrated team to simultaneously plan, prepare, execute and assess operations.

3.92 Commanders, staffs, and subordinate HQ employ the operations process to organize efforts, integrate the joint functions across multiple domains, and synchronize forces to accomplish missions. This includes integrating numerous processes and activities such as information collection and joint targeting within the HQ and with higher, subordinate, supporting, and supported units. The unit's battle rhythm helps to integrate and synchronize the various processes and activities that occur concurrent with the operations process.

3.93 The commander's role is to drive the operations process through the activities of understanding, visualizing, describing, directing, leading, and assessing operations. The staff's role is to assist commanders with understanding situations, making and implementing decisions, controlling operations, and assessing progress. In addition, the staff assists subordinate units (commanders and staffs), and keeps units and organizations outside the HQ informed throughout the conduct of operations.

Activities

3.94 The activities of the operations process are not discrete. They overlap and recur as circumstances demand. While planning may start an iteration of the operations process, planning does not stop with the production of an order. After the completion of the initial order, the commander and staff continuously revise the plan based on changes in the OE. Preparation for a specific mission begins early in planning and continues for some subordinate units during execution. Execution puts a plan into action and involves adjusting the plan based on changes in the situation and the assessment of progress. Assessing is continuous and influences the other three activities.

- a. **Planning** is the process of deciding beforehand the manner and order of applying actions to reach a desired goal.⁵⁸ Planning is both conceptual and detailed and reliant on accurate information and intelligence. Conceptual planning includes developing an understanding of an OE, framing the problem, defining a desired end state, and developing an operational approach to achieve the desired end state. Conceptual planning generally corresponds to operations design and is commander led. Detailed planning translates the operational approach into a complete and practical plan. Detailed planning generally corresponds to operations management and encompasses the specifics of implementation. Detailed planning works out the scheduling, coordination, or technical issues involved with moving, sustaining, administering, and directing forces.
- b. **Preparing** consists of activities that units and individuals perform to improve their abilities to execute an operation. Preparation creates conditions that improve friendly forces' opportunities for success. Preparation activities help develop a shared understanding of the situation and requirements for execution. These activities (such as briefs, rehearsals, training, and inspections) help units, staffs, and individuals better understand their roles in upcoming operations, gain proficiency on complicated tasks, and ensure their equipment and weapons function properly.
- c. **Executing.** Planning and preparation enable effective execution. Execution is putting a plan into action while using situational understanding to assess progress and adjust operations as the situation changes. Execution focuses on concerted action to seize and retain the initiative, build and maintain momentum, and exploit success.
- d. **Assessing** precedes and guides the other activities of the operations process and concludes each operation or phase of an operation. The focus of assessment differs during planning, preparation, and execution. During planning, assessment focuses on gathering information to understand the current situation and developing an assessment plan. During preparation, assessment focuses on monitoring changes in the situation and on evaluating the progress of readiness to execute the operation. Assessment during execution involves a deliberate comparison of forecasted

⁵⁸ See AJP-5, *Allied Joint Doctrine for the Planning for Operations*, for detail.

outcomes to actual events, using criteria to judge progress toward success. Assessment during execution helps commanders adjust plans based on changes in the situation.

3.95 Commanders and staffs integrate the joint functions and synchronize the force to adapt to changing circumstances throughout the operations process. They use several integrating processes to do this. An integrating process consists of a series of steps that incorporate multiple disciplines to achieve a specific end. For example, during planning, the comprehensive operations planning directive integrates the commander and staff in a series of steps to produce a plan or order.⁵⁹ Key integrating processes that occur concurrent with the operations process include, but are not limited to (see Figure 3-7):

- intelligence cycle;
- joint targeting cycle;
- IM;
- RM; and
- engagement space management.

⁵⁹ See Allied Command Operations *Comprehensive Operations Planning Directive* for detail.

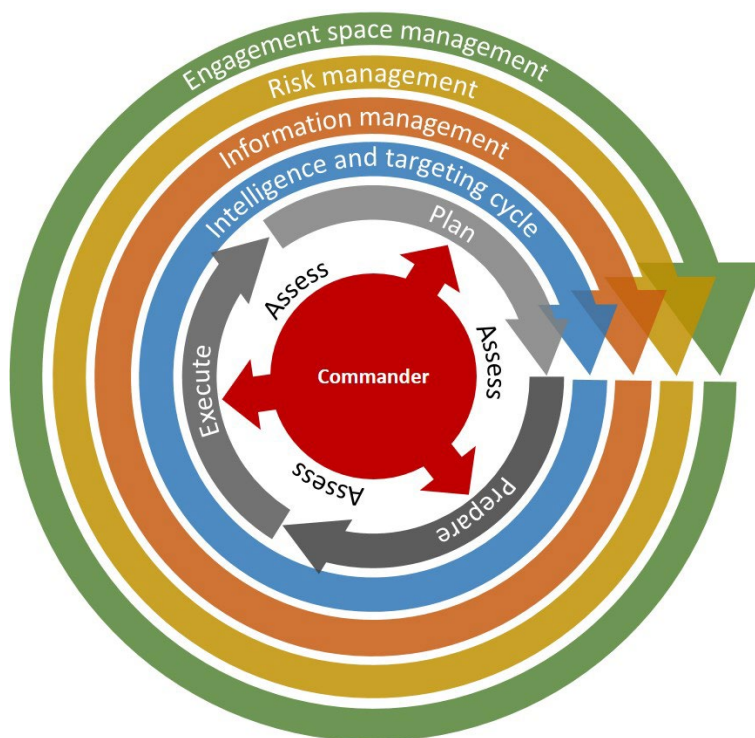


Figure 3-7: The operations process and concurrent processes

Driving the operations process

3.96 Commanders are the most important participants in the operations process. While staffs amplify the effectiveness of operations, commanders drive the operations process through understanding, visualizing, describing, deciding, directing, leading, and assessing operations. Accurate and relevant running estimates maintained by the staff, assist commanders in understanding situations and making timely decisions.

- a. **Understanding.** Commanders collaborate with their staffs, other commanders, and partners to build a shared understanding of their OEs and associated problems. The comprehensive understanding of the OE is the primary and continuous process through which the JTF staff manages the analysis and development of products that help the commander and key staff understand the OE. The methodology used fuses operational assessments from across the functions, for example, joint intelligence preparation of the OE and information environment assessment aimed to give a comprehensive understanding of the OE to the best extent possible in the time available. However, commanders should understand that uncertainty and time often preclude their achieving complete understanding before deciding and acting.
- b. **Visualizing.** As commanders build understanding about their OEs, they start to visualize solutions to solve the problems they identify. Collectively, this is known as commander's visualization: the mental process of developing situational

understanding, determining a range of possible outcomes, and envisioning an operational approach by which the force advances or protects a valued objective. Part of developing an operational approach includes visualizing using doctrinal frameworks.⁶⁰ These frameworks provide an organizing construct for the "what, why, where and when" of employing actions. When establishing their conceptual frameworks, commanders consider the physical, virtual, and cognitive factors that impact on their operational area. Collectively, these considerations enable commanders and staffs to better account for the multi-domain capabilities of friendly and hostile forces.

c. **Describing.** Commanders describe their visualization to their staffs and subordinate commanders to facilitate shared understanding and purpose throughout the force. During planning, commanders ensure subordinates understand their visualization well enough to begin COA development. During execution, commanders describe modifications to their visualization in updated planning guidance and directives resulting in fragmentary orders that adjust the original operation order. Commanders describe their visualization in doctrinal terms, refining and clarifying it, as circumstances require. Commanders describe their visualization in terms of:

- commander's intent;
- planning guidance; and
- CCIRs.

d. **Deciding.** Decision-making gives clarity and intent, which are central activities of leadership and an essential aspect of command. Despite automation, responsibility and accountability for actions lies with the human who executes C2. Decision-making is strongly related to the personality of the assigned commanders. Effective decision-making combines judgement with available information; it requires knowing if to decide, when to decide, and what to decide. There are routine decisions that commanders already know when to take; decisions which are most likely but without a set time and unforeseen decisions, including those with an unknown impact. Incomplete information therefore implying risk the commander has to cope with and be prepared for during the execution.

e. **Directing is implicit in command.** Commanders direct action to achieve results and lead forces to mission accomplishment. Commanders make decisions and direct action based on their situational understanding maintained by continuous assessment. Throughout the operations process, commanders direct forces by:

- approving plans and orders;
- establishing command and support relationships;

⁶⁰ See AJP-01, *Allied Joint Doctrine*, for detail.

- assigning and adjusting tasks, control measures, and task organization;
- positioning units to maximize combat power;
- positioning key leaders at critical places and times to ensure supervision; and
- allocating resources to exploit opportunities and counter threats.

f. **Leading** is the activity of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization. Throughout the operations process, commanders make decisions and provide the purpose and motivation to follow through with the COA they chose, or modify the COA when situations change. Command occurs at the location of the commander. Where the commander should be located within the operational area is an important consideration for effective mission command. No standard pattern or simple prescription exists for the proper location of a commander in the engagement space; different commanders lead differently. Commanders balance their time among the command post and staff, subordinate commanders, forces, and other organizations to make the greatest contribution to success.

g. **Assessing.** Assessment involves deliberately comparing intended forecasted outcomes with actual events to determine the overall effectiveness of force employment. Assessment helps the commander determine progress toward attaining the desired end state, achieving objectives, and completing tasks. Commanders incorporate assessments by the staff, subordinate commanders, and partners into their personal assessment of the situation. Based on their assessment, commanders adjust their visualization and modify plans and orders to adapt the force to changing circumstances.

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Annex A – The operating environment

Section 1 – The operating environment

A.1 Operating environment. The operating environment (OE) can be seen as a global set of complex, dynamic and interrelated networks, comprising political, military, economic, social, infrastructure and information systems that affect the employment of capabilities and bear on the decisions of the commander. Understanding the nature and interaction of these systems as part of mission analysis helps the commander identify their engagement space and affects how they integrate actions within it. The description of the OE aids the commander and staff's ability to maintain a continuous and coordinated understanding of the OE. This understanding of the OE supports commanders in decision making by helping to identify conditions required to achieve desired objectives.

A.2 Characteristics of operating environments. Environments are used to describe the surroundings where an activity takes place. An OE can be broken down and analysed in different environments (such as information, maritime, urban, political and human) depending on the perspective and activity. Section two expands on environments. In the continuum of competition activities and actions are conducted in environments increasingly interconnected and permeable to each other. The complex OE of today is increasingly layered with restraints and constraints affecting freedom of action. Overall, an OE may be characterized by some or all of the factors listed below.

- a. **Congested.** Freedom to operate is reduced due to the number of persons, vehicles or items. The urban and coastal areas, in which most of the world's population lives, are often the areas where criminal elements, terrorists, insurgents and extremists hide, organize and operate with adaptive strategies and tactics. Within these congested areas, the risk of collateral damage increases, with unintended and unplanned consequences. In coastal environments, this situation is exacerbated by the number of vessels and infrastructures and related industrial facilities. The air and maritime environments are similarly congested. In parallel, space has an increase in its congestion, with the proliferation of space assets by an increasing number of non-state actors.
- b. **Cluttered.** Congested situations in relatively compressed human environments and uncertain systems of rules and boundaries result in chaotic and compartmentalized scenarios. This can result in opportunities for concealment for adversaries; uncertainty in the identification of physical targets; complexity of the rules of engagement; and difficulty in information flows.
- c. **Contested.** The opportunities for concealment, asymmetrical operations, availability of sophisticated and low-cost weapon systems, exploitation of commercial technology, co-opting of commercial capabilities to limit allied access, complexity of the legal framework and the quantitatively unfavourable relationship between the size of the military instrument and that of the human environment in which it operates (and

in which adversaries are found) make it increasingly difficult to clearly define both "who is actually controlling what and where," as well as what areas and human groups can actually be considered friendly, hostile or neutral, and to what extent.

d. **Connected.** Most military and civilian activities are increasingly interconnected in the physical and virtual layers. Examples of strategic nodes of interconnection can be identified in government headquarters, centres of intense commercial traffic, military commands, international organizations, as well as search engines, financial institutions, international courts, and news agencies.

e. **Constrained.** Traditional criteria such as distinguishing combatants and minimizing collateral damage remain, but with the additional considerations from the information environment (including both professional, traditional media organizations, and the instant access to social media available to individuals both friendly and hostile). Legal measures, especially from national perspectives, continue to affect what should not or cannot be done.

Section 2 – Environments

A.3 Environments play an important role in building fighting power as their characteristics dictate the way the three components of fighting power are developed to be effective in the selected environments. Each nation makes their own decisions regarding the environments for which their fighting power should be developed and maintained.

Natural environments

A.4 The natural environments are the main environments forming the major elements of NATO's OE. Four natural environments are recognized.

a. **Maritime environment.** The global interconnected bodies of water and underlying surfaces up to the high water mark and the entities and their interrelations present therein. These interconnected bodies include the oceans, seas, estuaries and coastal waterways. Entities include flora, fauna, humans, natural resources and artificial infrastructure.

b. **Land environment.** The global landmasses and the entities and their interrelations present therein. These landmasses include coastal areas, inland waterways, and lakes. Entities include flora, fauna, humans, natural resources and artificial infrastructure.

c. **Air environment.** The part of the earth's atmosphere in which aerodynamic flight is possible and meteorological phenomena occur, entities and their interrelations present therein.

d. **Space environment.** The part of aerospace in which aerodynamic flight is impossible and the entities and their interrelations present therein.

Specific environments

A.5 The character of a specific environment has significant influence on the conduct of operations. This subsection describes the eight most commonly encountered and significant environments, as defined by geospatial and meteorological factors, in which a joint task force (JTF) is employed.⁶¹ It is not uncommon that a specific environment contains elements of other specific environments.

- a. **Littoral environment.** In military operations, a coastal region consisting of a seaward area that can be directly affected from its bordering coastal area, and vice versa. It overlaps parts of both the maritime and land environments.
- b. **Urban environment.** In military operations, a complex human-made terrain of urban settlement. It includes sub-terrain, surface and super-surface elements. It is a dense and complex system of systems (physical, human and informational).
- c. **Wooded and forest environment.** In military operations, a region that consists mostly or completely of woods and forests and of which the obstacle value is such that dispersed mounted operations are barely possible.
- d. **Cold weather environment.** In military operations, a region where cold temperatures, unique terrain, and snowfall have a significant effect on military operations for one month or more of each year.
- e. **Desert environment.** In military operations, a region with annual rainfall of less than 250 mm and sparse vegetation. It can include areas with both high and low temperatures.
- f. **Mountain environment.** In military operations, a region with extremely uneven terrain characterized by high, steep-sided slopes and valleys, which may cover a large area.
- g. **Jungle environment.** In military operations, a region with vast tropical forest areas with thick vegetation, constantly high temperatures, heavy rainfall and high levels of humidity.
- h. **Riverine environment.** In military operations an inland, coastal or delta region comprising both land and water, often with limited or non-existent land lines of communications. The area is likely to have extensive water surface and/or inland waterways (including lakes) that provide natural routes for transportation and communications.

⁶¹ These listed specific environments are recognized within NATO, nations may recognize other specific environments, for example, Arctic.

Permeating environments

A.6 From a military point of view, the definition of environment, historically, has been closely linked to natural features. In more recent times, scientific developments and consequent evolution of social interactions resulted in the term environment to also be linked to unique features resulting in environments permeating other environments.

- a. **Electromagnetic environment.** The electromagnetic environment (EME) is the environment where electromagnetic effects are created. The EME enables the radiation, propagation and reception of electromagnetic energy across the entire electromagnetic spectrum.
- b. **Information environment.** An environment comprised 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.

Operating environment

A.7 As stated before, each OE can consist of parts of multiple environments, depending on the assigned mission. A maritime OE applies to a maritime commander but is in general not solely limited to the maritime environment. It most likely contains parts of other environments (see Figure A-1) and elements of other operational domains.

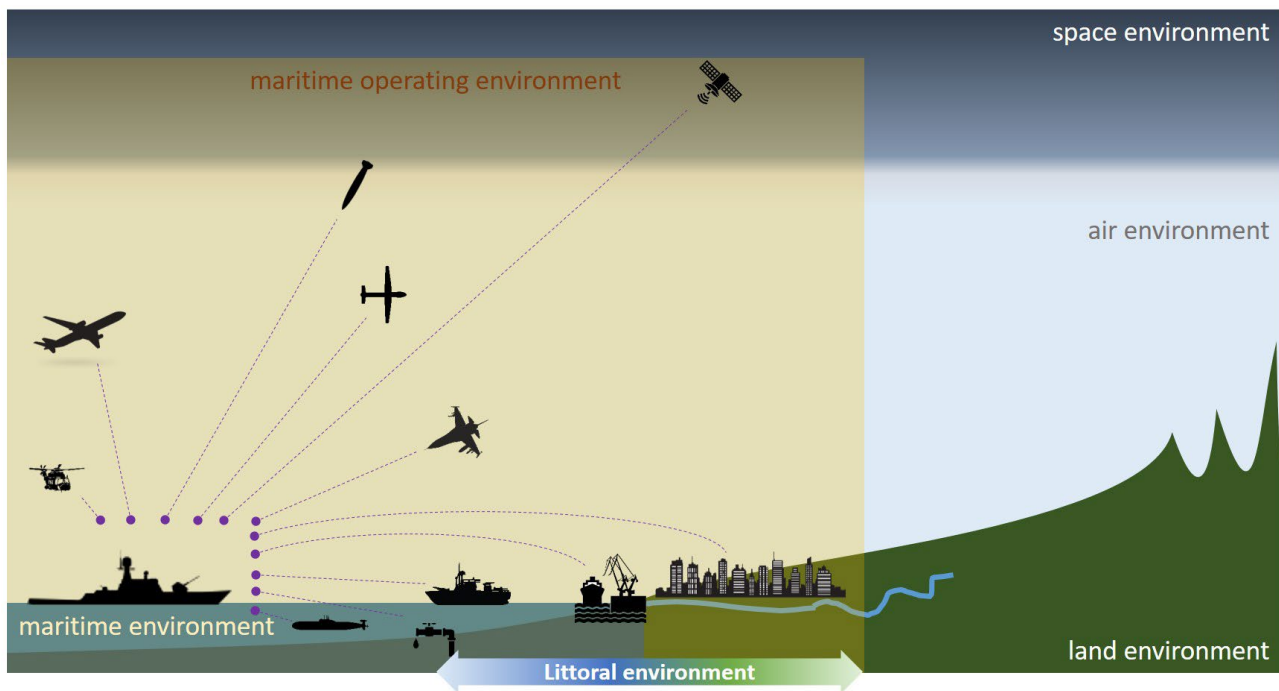


Figure A-1: A generic maritime operating environment.

Section 3 – Operational domains

A.8 Operational domains represent five specific spheres of military activity within the engagement space. Each operational domain represents a particular aspect, a section of military operations distinguished and unified by a particular characteristic. The five recognized domains are the maritime, land, air, space and cyberspace domain. The operational domains provide a framework for analysing capability (requirements) and organizing the military instrument, both in force development and force employment.

A.9 Each operational domain is generally associated with the environment of the same name, but not exclusively. Firstly, because domain capabilities frequently require installations in other environments (for example a harbour, airbase or aircraft carrier, ground control stations or server installations). Secondly, because employment of the capability frequently affect or serve to create effects in other environments (for example coastal and air defence or naval gunfire support and counter-surface force operations). This wider utility of domain capabilities enables synergy and requires planners to think across domains, irrespective of ownership, in the design and planning of military activity in the engagements space - which is the purpose of the domain construct and multi-domain operations.

A.10 Although the electromagnetic and acoustic spectra could be viewed as distinctive spheres of capabilities and activities, they do not constitute an operational domain. Both spectra are strongly interconnected with the five recognized operational domains. The ability to use these spectra is crucial to conducting activities effectively in operational domains. Both spectra permeate every environment within the physical limits associated with each spectrum. The comprehensive understanding of the OE should consider the factors associated to these spectra with respect to the JTF's activities in these spectra.

Section 4 – The engagement space

A.11 **Engagement space/battlespace.** The engagement space and battlespace are synonyms. The engagement space is part of the OE where actions and activities are planned and conducted. It is the area where military operations are conducted to achieve military objectives. It includes factors and conditions that should be understood to successfully apply combat power, protect the force, or complete the mission including enemy and friendly armed forces, infrastructure, weather, and terrain within the operational area and, when larger, the area of influence.

A.12 The commander's engagement space is often broader than their physical operational area due to increasing interconnectivity of the elements within the engagement space. Furthermore, the varying degrees of relevance that geography has in cyberspace and space, the acoustic and electromagnetic spectra and the human and information environment means that a geographically bounded engagement space is not always suitable.

A.13 Engagement spaces are also becoming increasingly cluttered. The need to harmonize with political and civilian actions, and the compression of the level of operations, means that the engagement space encompasses activities from every level of operations and from across the political, military and civilian spectrum.

A.14 Space and cyberspace as well as the electromagnetic spectrum and acoustic spectrum, although mostly unseen, are already part of the engagement space; more of the contest is virtual and involves information. Well-connected, and continually evolving, systems and networks are the key enablers in creating precision, timing and especially effects across the engagement space. The range, speed and improved technologies of the military and non-military capabilities blur the traditional boundaries between land, maritime and air forces.

Section 5 – Effects

A.15 Each domain and the electromagnetic spectrum and acoustic spectrum has specific characteristics which determine how effects are created and operations conducted. An effect is an outcome in the engagement space as a consequence of action. In conducting a significantly broad range of operations, NATO commanders employ forces and coordinate a complex integration of physical and non-physical actions designed to create lethal and non-lethal effects, in a broad spectrum of constantly evolving OEs. Derived from objectives, effects bridge the gap between objectives and actions by describing what changes are required.

A.16 There are three types of effects: physical, virtual and cognitive. Although physical and virtual effects lead to some form of cognitive effect, their primary purpose is to impact capabilities, actions and their immediate outcomes, while cognitive effects are directed towards changing or maintaining audiences' thoughts and decision-making. Effects should be qualitatively measurable, and it should be noted that achieving an objective often requires these three types of effects to be created in a supported/supporting interrelationship.

A.17 The interplay between action and effect is inherently uncertain in conflict. A first order effect is the direct consequence of an action. Second and third order effects are the consequential changes in the engagement space that occur from creating a first order effect. An action inside an operations area may create an effect outside it, and vice versa. Furthermore, an effect may be immediate, short-term or long-term, and it may be perceived and interpreted differently by different audiences. The unpredictability of the consequence of action means that planners cannot create or orchestrate effects, they can only intend to create them. In the execution of a mission, actions create:

- desired effects – those effects that have a positive impact on achieving objectives; and
- undesired effects – those effects that disrupt or jeopardize achieving objectives.

A.18 Therefore, commanders constantly assess and re-assess the consequences of their actions, as seen by audiences, and adjust accordingly. There are many different ways to conduct assessment and selecting the most appropriate assessment criteria is critical.

A.19 **Effect dimensions.** Effect dimensions provide a framework for the political, military and civilian partners to coordinate and synchronize their forces' activities in time and space to create mutually supporting desired effects. Effect dimensions highlight the interdependencies of the engagement space, thereby gaining a better understanding of the consequences of actions. A better understanding of potential second and third order effects supports deliberate exploitation and maintenance of the initiative. The elements that constitute dimensions are as follows (see Figure A-2).

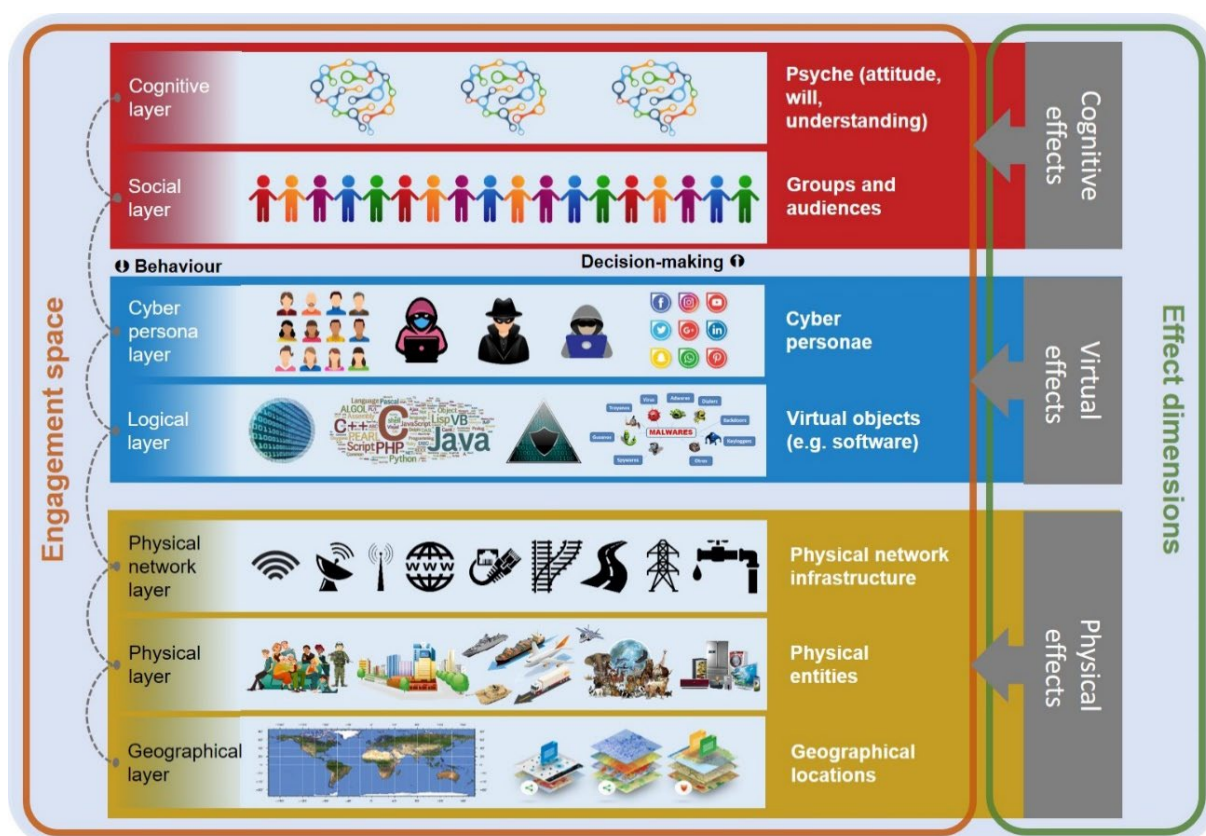


Figure A-2: Engagement space, effects and effect dimensions

- The physical dimension relates to the impact on the audiences, the sub-surface, surface, airspace and space areas where physical activities take place, and where audiences live, including physical objects and infrastructure that support them.
- The cognitive dimension relates to the impact on the audiences' perceptions, beliefs, interests, aims, decisions and behaviours. It encompasses every form of interaction between them (such as economic, legal and political).

c. The virtual dimension relates to the impact on the storage, content and transmission of analogue and digital data and information, and supporting communication and information systems and processes.

Annex B – Joint headquarters

Section 1 – Staff advisors, structure and functions

B.1 The circumstances surrounding the establishment of a joint task force headquarters (JTF HQ), its relationship with any existing NATO headquarters in the joint operations area (JOA), the assigned forces' mission and the environment in which the mission is to be accomplished dictate the staff requirements and functions. The commander should organize the staff, as deemed necessary to optimize the ability to plan, conduct and support the operation successfully. Whilst this section, and indeed the publication, focuses on a joint task force (JTF) the structures and procedures outlined can be applied to or adapted to any other headquarters.

Principal advisors

B.2 The commander usually has three principal advisors: the chief of staff (COS), the political advisor and the legal advisor.

- 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. The COS should also coordinate and fuse the work of the wider headquarters (HQ). It is their role to ensure the staff pulls together as a team and has good esprit de corps.
- b. **Political advisor.** The political advisor is a civilian or military personnel selected to advise the commander. Principally they advise on NATO policy; local, national, regional and international political issues affecting Alliance security; and relationships with international organizations, non-governmental organizations, and others.
- c. **Legal advisor.** The legal advisor is a civil servant or military lawyer selected to advise the commander. Principally they advise on international law and mandates; NATO policy; rules of engagement (ROE); operational law issues specifically related to Allies, partners, non-NATO contributing nations and host nation; and other legal matters as required by the commander.

Functional advisors

B.3 Beside principal advisors the commander might also have additional functional advisors as required for the specific operation. Depending on the situation the commander might add one or more functional advisors to the group of principal advisors. 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 COS are appointed, who also advise the commander. The most common functional advisors are listed below.

- a. **Gender advisor.** The gender advisor advises, assists and supports 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 planning for an operation or mission and thereby enhancing effectiveness.
- b. **Cultural advisor.** The cultural advisor has detailed knowledge of and field experience with people, cultures, religions and concerns in the area in which an operation is taking place. The cultural advisor provides the commander and their staff 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.
- c. **Strategic communications advisor.** The strategic communications advisor is responsible for ensuring effective planning, coordination and synchronizing of information and communication activities that are designed to amplify Alliance activities.
- d. **Public affairs advisor.** The chief public affairs officer advises the commander on public affairs matters and accordingly has direct access to the commander in an independent advisory role.
- e. **Military engineering advisor.** The military engineering (MILENG) advisor, or chief military engineering, advises the commander and their staff on aspects of the military engineering function and may exercise coordination authority on behalf of the commander over the allocation of military engineering resources to ensure that capabilities and resources are used most effectively.⁶²
- f. **Provost marshal.** The provost marshal is the senior military police officer responsible for coordinating all police activities and provision of specialist advice to the commander and staff. The provost marshal should in addition be afforded a command function.⁶³
- g. **Medical advisor.** The medical advisor advises the commander and their staff on the health and medical implications of their potential courses of action and any health-related issues that may impact an operation or the JTF.⁶⁴

Staff structure

B.4 The basic organization of the JTF HQ is the staff directorate. The commander organizes the staff as desired. Often, the staff is organized using the J-structure, but the numbering may vary from commander to commander. Typically, the staff directorates are:

⁶² See AJP-3.12, *Allied Joint Doctrine for Military Engineering*, for detail.

⁶³ See AJP-3.21, *Allied Joint Doctrine for Military Police*, for detail.

⁶⁴ See AJP-4.10, *Allied Joint Doctrine for Medical Support*, for detail.

personnel and administration (J1), intelligence (J2), operations (J3), logistics (J4), plans (J5), and communications systems (J6). Staffs likely have additional staff directorates, e.g. training (J7), budget and finance (J8), civil-military cooperation (J9), strategic communications (J10), medical (JMED) and military engineering (JMILENG). In some headquarters J3 and J5 may be combined. 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.

B.5 The staff structure may comprise sections/cells that cover maritime, land, and air operations. Also included should be sections/cells covering:

- special operations;
- force protection;
- military police functions;
- countering improvised explosive devices;
- personnel recovery;
- space operations;
- cyberspace operations;
- electromagnetic operations;
- information activities;
- psychological operations;
- countering weapons of mass destruction activities; and
- targeting coordination.

B.6 The following staff functions, mentioned below, are usually established and reflect the classical J1 to J10 staff structure.

B.7 **Personnel and administration.** The J1 directorate principal role is to advise the commander and staff on the personnel policies and workforce management systems and procedures established by national authorities for their force components.⁶⁵ Personnel and administration staff responsibilities include personnel management, entitlements and benefits, morale, welfare, recreation, postal services, safety, prisoners of war administration

⁶⁵ See AJP-4, *Allied Joint Doctrine for Sustainment of Operations*, for detail.

and casualty reporting. Personnel and administration staff should also coordinate personnel matters with the personnel staffs of the national contingents.

B.8 Intelligence. The role of the J2 directorate 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.⁶⁶ 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 develops 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 cataloging adversary's military forces and assessing their capability. It is about the description of the operating environment (OE), the evaluation of the relevant actors inside the OE and the determination of the actors' course of action (COA). It is also about understanding the actors' culture, motivation, perspective and objectives. The intelligence staff should consider not only the actors, but also assess, in coordination with J9, the population to determine on the one hand the degree of support that segments of the population provide to the adversary or to friendly forces and on the other hand the need to minimize harm to civilians and civilian objects during the preparation and execution of operations. Geospatial staff are often organized within J2 and provide geospatial information, analysis and advice to staff branches in support of both understanding the OE and planning for friendly forces.

B.9 J2 directorate also provides a target development cell, with trained intermediate target developers and ensure access to imagery analysts for target graphics creation. The cell takes command guidance and objectives to generate target folders for validation and eventual engagement according to command priorities outlined in the approved plan. When the capability is organic to NATO, J2 directorates with the capability also provide developers trained to complete advanced target development, including weaponeering, collateral damage estimation, and point mensuration.

B.10 Operations. The J3 directorate is 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).⁶⁷

⁶⁶ See AJP-2, *Allied Joint Doctrine for Intelligence, Counterintelligence and Security*, and subordinate documents for detail.

⁶⁷ Allied Command Operations is transforming joint operations centres into multi-domain operations centres.

B.11 The operations staff:

- coordinates and synchronizes the execution of an operation;
- ensures activities during the conduct of operations remain in accordance with the requirements of human security;
- ensures that operational considerations are applied during the conduct of operations;
- monitors component commands plans and operations supporting JTF's operation within the JOA as well as the organization of the JOC;
- assesses 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);
- specifies the tasks for component commands, based on the commander's CONOPS;
- produces and distributes operation orders (branch and sequel plans), joint coordination orders and fragmentary orders;
- assembles the JTF HQ and, if necessary, deploys a HQ to an approved site;
- recommends force organizations for planned operations;
- advises commanders on applicable ROE and suggesting changes/additions they may wish to consider;
- organizes a joint coordination board;
- coordinates across the staff, updates and disseminates the commander's critical information requirements;
- coordinates the conduct of subordinate operations, military activities, and joint functions in support of the JTF within the JOA; and
- coordinates joint fires and targeting, as well as the organization of the targeting cell.⁶⁸

B.12 Logistics. The J4 directorate assesses the logistics required to achieve the operational objectives, integrates logistic planning into the operations planning process, and ensures the support requirements are met throughout the operation.⁶⁹ Based on the assessment, J4 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

⁶⁸ See AJP-3.9, *Allied Joint Doctrine for Joint Targeting*, for detail.

⁶⁹ See AJP-4.1, *Allied Joint Doctrine for Logistics*, for detail.

specific logistic coordinating activities. This includes operational contract support for the planning, procurement, and delivery/management of essential supplies, equipment, materials, and services necessary to support military operations and maintain readiness of forces (e.g. fuel, ammunition, spare parts, food, medical supplies/services, transportation services, and other logistical support).

B.13 Plans. The J5 directorate assists the commander joint task force in preparing the operation plan and the planning for future operations.⁷⁰ It coordinates these planning efforts within the JTF HQ and with higher, subordinate and adjacent commands and civil authorities. 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 OE, the military conditions for successfully achieving the objectives, including action to be directed against the opponents' centres of gravity and that required to protect friendly centres of gravity and the civilian population;
- 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
- transition future plans to the J3 to support their future operations plans.

B.14 Communication systems. The J6 directorate ensures that adequate communication and information systems (CIS) support is provided for operations, and that interoperable CIS procedures are used in the JTF.⁷¹ 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.

⁷⁰ See AJP-5, *Allied Joint Doctrine for the Planning of Operations*, for detail.

⁷¹ See AJP-6, *Allied Joint Doctrine for Communication and Information Systems*, for detail.

B.15 Training. The J7 directorate advises and manages in-JOA training during the JTF work-up period prior to starting the operation, and conducts training for augmentation forces added to an ongoing operation. The J7 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 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. J7 collects and disseminates within the staff, good practices and solutions to identified problems through a lessons learned process. It may form a working group with other commands, if necessary.

B.16 Budget and finance. The J8 directorate, under the lead of an appointed JOA financial controller, would prepare and execute the common funded mission budget for the operation on behalf of the commander.⁷² This includes the functional supervision of component commands. The budget and finance staff, responsible for procurement and fiscal issues, usually needs to be first in and last out of the JOA and needs 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

B.17 Civil-military cooperation. The J9 directorate supports the commander in achieving objectives through synchronizing military and non-military activities.⁷³ J-9 takes a leading role in the civil factor integration – collecting, collating, analysing, and assessing information regarding the civil factors of the OE – in cooperation with the other directorates. The J-9 directorate enables and facilitates civil-military interaction.

B.18 Strategic communications. The *NATO Military Policy on Strategic Communications* (MC 0628) directed the establishment of an organizational structure that coordinates and synchronizes information activities to enable and maximize their utility across the continuum of competition in every campaign theme.⁷⁴ This structure is focused on the vertical alignment of strategic communications (StratCom) in the NATO command structure. The communications directorate (J10, or similar title) should not be seen as a rival to existing structures nor a compartmentalized staffing process, but as an opportunity to optimize the interaction and integration provided by StratCom staff across the HQ. It is organized to fulfil three primary staff functions: understand and assess; plan and integrate; and communicate.

B.19 Medical. The JMED staff support the medical director / medical advisor in the planning and execution of all required medical functions, including medical support for the forces under command. JMED planners participate in the operational planning process, produce appropriate medical plans (e.g. medical Annex QQ), coherent with the overall operational

⁷² See AJP-4, *Allied Joint Doctrine for Sustainment of Operations*, for detail.

⁷³ See AJP-3.19, *Allied Joint Doctrine for Civil-Military Cooperation*, for detail.

⁷⁴ See AJP-10, *Allied Joint Doctrine for Strategic Communications*, for detail.

plan, JMED is responsible for a wide variety of functions including patient flow management and appropriate medical treatment, medical logistics and force health protection.

B.20 Military engineering. The JMILENG supports the (chief) military engineering advisor in synchronising MILENG efforts and advising on the appropriate employment of subordinate MILENG units. It gathers critical MILENG information to support the JTF HQ's current operations planning and execution efforts. As needed, and in accordance with NATO security policies, it shares information with key non-NATO actors in theatre to optimize MILENG support. This includes support to infrastructure and coordinating project management executed at the tactical level.

Section 2 – Joint task force headquarters management processes

B.21 General. The commander and staff use a number of processes and procedures, such as joint planning and joint targeting, to support numerous JTF HQ requirements, activities, and products. Information management, the operations process, and battle rhythm are especially important for the efficient management of everyday JTF HQ operations. The information management 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.

B.22 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 operations process.

- a. A battle rhythm sequences actions and events within a JTF HQ that are regulated by the flow and sharing of information to support 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 efforts of the staff should 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 the 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 link 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. The process should be a well-understood and sufficiently abbreviated to enhance the responsiveness of the rhythm. 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 used as appropriate.

B.23 The higher level headquarters battle rhythm and reporting requirements. The battle rhythm should balance the requirement to inform Supreme Allied Commander Europe's (SACEUR's) battle rhythm with the daily battle rhythm of the components. This is particularly complicated during multinational operations where the sometimes widely varying time zones cause significant dislocation, particularly as the lead nation's requirements always come first.

- a. **Political considerations.** Because military activity is conducted under political authority, the flow of information 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 can allow politicians to be aware of incidents before the formal chain of command can provide 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.
- b. **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, have significant influence on the commander's personal schedule, to the extent that it can become their principal activity.
- c. **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 (SA).

B.24 Battle rhythm development. Battle rhythm should be designed to ensure there are sufficient periods of unscheduled time to enable commanders and staff the time 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, then developing a logical arrangement of events around the operations process by adding key internal events requiring commander participation. These

also relate to the JTF HQ staff and the components and should show decision boards as culminating events.

B.25 Battle rhythm considerations. Inputs and outputs should be identified and synchronized, providing a rationale and linkage to other battle rhythm events. 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 SA then it most likely should not be part of the battle rhythm. Once established, discipline of the battle rhythm is necessary.

B.26 Harmonization with component commands' battle rhythms. The operational tempo of each component varies, for example 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 thus coordination and synchronization by the JTF HQ contributes 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.

B.27 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 enable for the management of current operations, future operations, and future plans. These can be both physical venues or virtual collaboration and

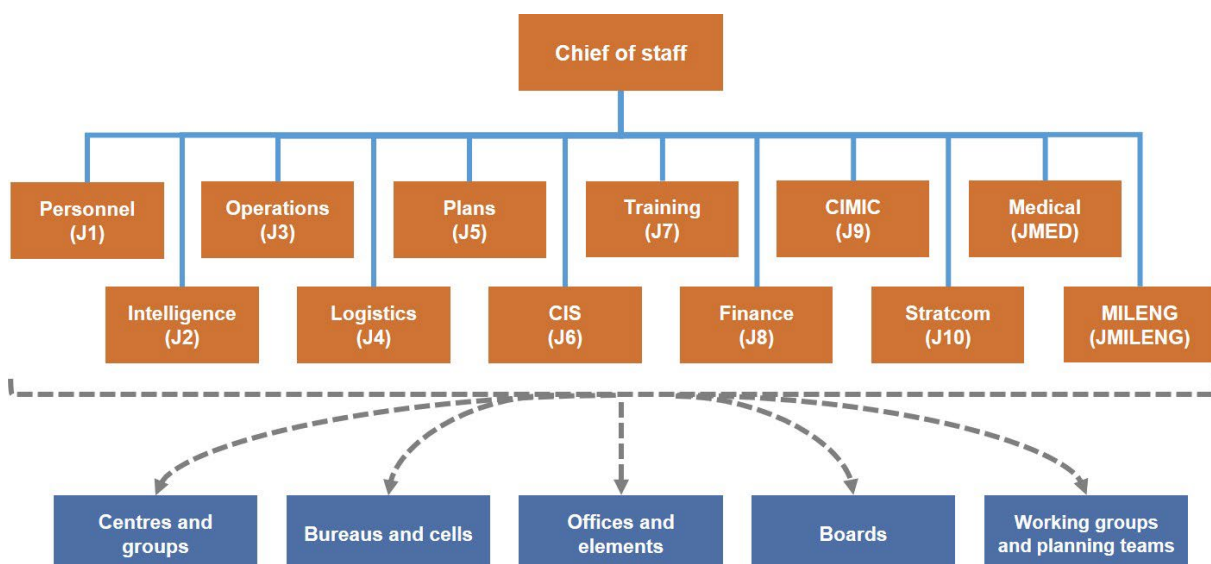


Figure B-1: Example of cross-functional staff

participation with other stakeholders and HQ. 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 should facilitate the planning and decision-making processes that are crucial to the JTF HQ success. Figure B-1 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 COS. 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. commander's critical information requirements, 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. Centres can also be established for interacting with civilian audiences. 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 workforce 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 decisions. 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 decisions 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.

B.28 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 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 operations diary.

b. **Joint coordination board.** The joint coordination board (JCB) 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, chief JOC, the strategic communications advisor, chief public affairs officer, 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;
- implementing 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.** The JOPG is the principal working level planning group for the 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. 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 HQ may form OPTs to staff discrete aspects of the operation. They report to the COS with recommendations within an established deadline.

f. **Joint targeting coordination board.** The commander establishes a joint targeting coordination board (JTCB) with representatives from the JTF HQ and components and, if required, national liaison representatives. Typically the JTCB reviews target information, develops targeting guidance and priorities while preparing and refining the different lists on the database (joint target list, restricted target list, joint prioritized target list, no-strike list) as well as the time sensitive target matrix. The JTCB

is the primary agency for synchronizing and managing joint targeting efforts. It:

- prepares target lists for JCB review and, if necessary, commander's approval;
- validates changes in the targeting database; and
- coordinates target material production, as developed through the targeting process.

The JTCB is supported by the joint fires and effects working group and other supporting working groups may be established.⁷⁵

g. **Strategic communications coordination board.** The strategic communications coordination board (SCCB) is chaired by the COS, but most often delegated to the director communications division or chief Info Ops to direct the cognitive line of effort to support the strategic and/or operational objectives. SCCB provides StratCom direction and guidance to the HQ and specifically to the Info Ops staff to prioritise target audience analysis, approve and guide the planning, integration and assessment of information activities. The SCCB approves what can be submitted to the JTCB as cognitive effect targets. SCCB also provides advice on possible effects in the information environment created by other military actions. The SCCB liaises with functional areas (especially with J2, J3, J5, and J9), the legal advisor and subordinate commands, as well as coordinating with outside agencies. The SCCB prepares and approves the submissions to the JTCB, assessment board and the JCB. It normally meets weekly during operations and when required during peacetime to prepare information for the JCB.

h. **Joint collection management board.** The head of the J2 directorate chairs the joint collection management board (JCMB) to coordinate collection activities between components, contributing nations, and complementary national agency activity. The overall purpose of the JCMB is to review, validate, de-conflict and prioritize joint intelligence, surveillance and reconnaissance (JISR) collection requirements and assigned capabilities. The JCMB 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 JCMB. The JCMB may include representation from joint targeting, current operations, current plans, future plans, electromagnetic operations, psychological operations, Info Ops, military engineering and civil-military cooperation. At the joint level, key intelligence requirements management and collection management elements inside the intelligence staff and supporting/supported components should attend.

⁷⁵ See AJP-3.9, *Allied Joint Doctrine for Joint Targeting*, for detail.

Annex C – Engagement space management

Section 1 – Engagement space management and enabling functions

Engagement space management

C.1 Engagement space management is the use of necessary adaptive means and measures by commanders and staffs that enable the planned and dynamic coordination, synchronization and prioritization of activities across the engagement space.

- a. **Coordination.** Coordination brings together different capabilities and activities into an efficient and effective relationship. Complementary aspects are united, to promote mutual support, whilst potentially incompatible aspects are deconflicted, to preserve and make best use of available combat power.
- b. **Synchronization.** Coordination is enhanced by synchronization, which sequences capabilities and activities, at appropriate tempo, in time and space. The dependency between events, and the availability of necessary resources, determine the degree of concurrent, sequential or independent activity that is possible or necessary.
- c. **Prioritization.** Coordination and synchronization highlight competing demands for time, space and limited resources. Prioritization determines their allocation, in accordance with the concept of operation. As circumstances change, a commander should keep priorities under review to ensure that risks are analysed and treated appropriately, and that opportunities are exploited as they arise.

C.2 Commanders must determine the degree to which engagement space 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, should coordinate or synchronize their activities and may require extensive enabling engagement space management measures. As military forces create effects across an expanding volume of engagement space the potential for interference between NATO forces and other actors increases. Hence, engagement space management also comprises means to manage own behaviour in order to minimize chances for, or impact of, such interference.

C.3 Engagement space management should be included in training for operations. At the operational level, this should address in particular the complexity of the joint engagement space, including de-conflicting multinational, multi-agency, and host nation aspects of operations, across every environment.

Combat identification

C.4 Combat identification is the means by which military units distinguish friend from adversary during operations, with the aim of reducing fratricide and increasing the operational effectiveness of forces and weapon systems. This is achieved through the process of combining situational awareness (SA), positive identification and specific tactics, techniques and procedures.

C.5 Combat identification solutions which are designed to prevent friendly fire between force elements are usually tailored to the mission. Nevertheless, a degradation in SA may occur. This is particularly relevant when operating identification friend or foe and tactical data link (TDL) equipment, or when forces operate under national (differing) identification criteria. Operational commanders should consider the impact on operations when forming a joint task force (JTF), and should test the outcome on common operational picture compilation and assess the risk of fratricide.

C.6 Engagement space management and combat identification are interrelated; both enable increased operational effectiveness and the avoidance of fratricide. Combat identification and SA are critical to effective command and control (C2). Combat identification contributes to SA and so enables more effective engagement space management. Equally, engagement space management contributes to SA and thereby enhances combat identification.

Operational areas

C.7 Operational areas provide a framework that support C2 and engagement space management. These areas are assigned to a commander at different levels of operations.

- a. **Theatre of operations.** A designated area, which may include one or more joint operations areas (JOAs). A theatre of operations may include land, air, space and sea outside a JOA. Typically assigned to a commander at the military-strategic level.
- b. **Joint operations area.** An area within a theatre of operations defined by the Supreme Allied Commander Europe, in which a designated joint force commander plans and executes a specific mission at the operational level. Typically assigned to a commander at the operational level.
- c. **Area of operations.** An area within a JOA defined by the commander joint task force (COM JTF) for conducting tactical level operations. Typically assigned to a commander at the higher tactical level.
- d. **Area of responsibility.** For a given level of command, an area assigned to a commander to plan and conduct operations. Typically assigned to a commander at the tactical level.

C.8 Based on mission analysis, the commander identifies their area of interest and area of influence. In general, the engagement space geographically equals the operational area and, when larger, the area of influence. By default, however, the part of the area of influence outside the operational area is 'off-limits', but may (temporarily) be made available following coordination with the (higher and/or adjacent) command that the subject area is assigned to. For instance, to exploit opportunity, counter a threat or reinforce an adjacent command.

Operational area boundaries

C.9 COM JTF conducts operations within an assigned JOA. The commander may receive guidance on any necessary conditions regarding movement into and out of it, relationships with adjacent JOAs, and pertinent agreements with others. The COM JTF assigns areas of operations and issues guidance based on political, diplomatic and legal, physical and operational considerations.

C.10 Boundaries define operational areas between force elements, such as formations of units, vessels or aircraft. Assigned areas should not be larger than that force element's area of influence. Additionally, operational areas should be exclusive and boundaries should not overlap. Operational areas may be contiguous (where there is a common boundary) or non-contiguous (without a common boundary) (see Figure C-1).

C.11 Operational areas may also be linear or non-linear. Many campaigns and operations present significant geographic challenges. Often, friendly engagement space architectures do not match. In these cases, operational areas are referred to as linear (oriented along a

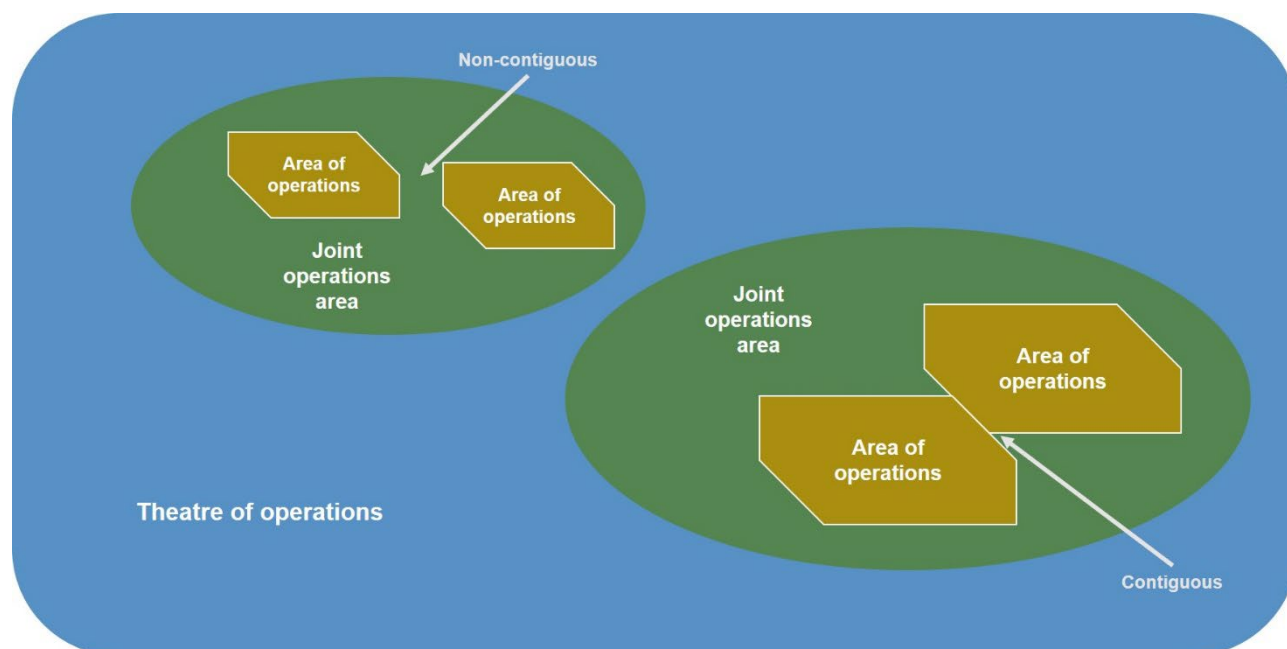


Figure C-1: Operational areas

common axis towards the opponent) versus non-linear (no common orientation towards the opponent), the latter increasing the challenge for coordination, cooperation and mutual support between relevant actors.

C.12 A permanent or temporary boundary change between components is the most common amendment to operational areas and an important facet of engagement space 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 fratricide. Where boundary changes are required, the following should be considered:

- 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, adversary and neutral parties; and
- speed and assurance of communication across the force to promulgate the changes.

C.13 A seam is the physical space where assets in one operational area interact with, or impact assets or activities in another operational area. As the size and the geographic diversity of the seam increases, operations are likely to become more complex and the requirements for cross-component dialogue and planning become more important.

Virtual operational areas and boundaries

C.14 The engagement space exceeds the mere physical operational area. Therefore, engagement space management in the physical operational area needs to be complemented by means to manage engagement in artificial and human environments and the creation of virtual and cognitive effects. This includes means to manage behaviour in order to minimize the chances for, or impact of, interference as an undesired second or third order effect. Like in the physical area, virtual operational areas are linked to objectives and effects, roles and responsibilities, and associated constraints and restraints. Examples are:

- guidance & direction on presence, posture & profile, including - as applicable - guidance & direction on cross-cutting topics as outlined in Chapter 1;
- rules of engagement and the use of force, including - as applicable - weapon release authority (matrix), guidance & direction on collateral damage estimates and/or an approval chain (e.g. for psychological operations products);
- key leader engagement and liaison matrices with associated authorizations (mandates); and
- general rules and specific authorizations for commanders and spokespersons for dealings with media outlets, the use of phones and social media.

Technology

C.15 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 operational area, NATO forces may be required to operate at high tempo and with great agility. Multiple actors (military and non-military) operating in the same operational area present additional technological engagement space management challenges.

C.16 The implications of emerging technology for engagement space management vary from one functional area to another. Information management and functional area systems are key enablers for SA 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 engagement space management becomes increasingly dependent 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 SA increases.

C.17 Commanders should guard against complete reliance on technology to underpin engagement space management. Where possible, an independent backup solution, capable of a minimum engagement space management function, should be maintained. Engagement space management enabling networks should be designed to degrade with sufficient resilience to provide an opportunity to fall-back on alternative systems, if available, in a controlled manner. Examples of alternative systems in the air domain are:

- positive control, a method of regulation of identified air traffic within a designated airspace, conducted with electronic means by an air traffic control agency having the authority and responsibility therein; and
- procedural control, a method of airspace control which relies on a combination of previously agreed and promulgated orders and procedures.

C.18 The communication and information systems (CIS) architecture is integrated with C2, intelligence and operational capabilities and complies with national and NATO legal limitations and security regulations. The design, establishment and management of CIS architectures for 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.19 The exchange of tactical data via data link systems has been a fundamental aspect of operations for many years, particularly in the maritime and air environments. TDL information is a key enabler for aspects of engagement space management through its contribution to a common operational picture. On multinational operations, however, individual nation security restrictions, update or modernization priorities and other limitations of interoperability may

restrict access to services such as TDLs, C2 networks and near real-time intelligence broadcasts, thereby degrading shared SA.

Electromagnetic and acoustic spectrum management

C.20 To deliver an operational advantage, it is necessary to create the ability to manoeuvre freely within the electromagnetic spectrum and acoustic spectrum and hence manage the electromagnetic and acoustic environment. This is accomplished by efficient and effective engagement space management processes that coordinate and deconflict use of both spectra. Without effective engagement space management, it is likely that emissions within the electromagnetic environment or acoustic environment interfere with one other. Engagement space management also includes the practical coordination and, where necessary and possible, deconfliction of spectra usage within the OE. Electromagnetic and acoustic spectrum coordination and deconfliction plays an integral part of managing the overall OE.

C.21 Comprehensive management of the electromagnetic and acoustic spectrum is critical to ensure the most effective use of limited assets within a JTF and between adjacent and higher authorities. It enables military systems to perform their functions within intended environments without causing or suffering harmful interference. Such harmful interference may result in a degradation or complete loss of receptibility that, in turn, could severely hamper the ability to maintain SA and to create effects in the engagement space.

C.22 In the engagement space, the concurrent use of the spectra by NATO and non-NATO actors implies that these spectra cannot be controlled by any one user. However, it can be managed to minimize conflict between users. Therefore, spectrum managers exercise authority over operational users to effectively coordinate friendly use of the spectra, within constraints applied from non-military usage and spectrum availability.⁷⁶

Section 2 – Engagement space management planning and execution

General

C.23 Effective engagement space management requires an iterative engagement space management planning process that begins at the outset of an operation, continues throughout the execution of an operation alongside the execution of the extant engagement space management plan, concluding only at the end of the operation.

C.24 Engagement space management is an active process, as the continual evolution of the engagement space, including its shaping by other actor actions, influences commander priorities and corresponding rules of engagement. Commanders require an effective method for proactive, as well as reactive engagement space management.

⁷⁶ See AEMP-1, *Spectrum Management in Military Operations*, for detail.

Command and control

C.25 Effective C2 is essential to the success of NATO joint operations. It relies on cohesion and interoperability within and between every command levels. Operations and activities in the same space should be harmonized and sequenced horizontally and vertically to enhance combat effectiveness. Where activities are concurrent and cannot be separated, they should be subject to some form of control.

C.26 The C2 arrangements required depend on a range of factors, such as the extent to which the force elements are required to align their actions and 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.27 One of the most challenging environments for engagement space 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 engagement space management arrangements and robust C2 are required to maximize combat effectiveness while minimizing the risk of fratricide.

Planning

C.28 Engagement space management should be considered early in any planning, and appropriate engagement space management arrangements developed to suit the situation. Engagement space management plans, which should be as simple as possible but retain a degree of flexibility, should be communicated clearly and agreed to by every actor. Successful engagement space management planning is underpinned by a presumption of free, rather than constrained, use of the engagement space, unless and until coordination and control measures are deemed necessary to facilitate interaction between force elements.

C.29 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 OE should provide the commander with an appreciation of the factors (specific to each dimension of the engagement space and each joint function) that are likely to require engagement space management measures. Subsequent engagement space management planning includes, but is not limited to the following:

- centralized engagement space 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 engagement space.

Structures and relationships

C.30 Engagement space management should be embedded in existing staff structures and battle rhythm and comprise expertise across staff functional areas, with optionally a dedicated engagement space management cell. Engagement space management should be trained across component, joint and coalition functions and require expertise and levels of collective performance to employ not only traditional process-driven methods of engagement space management, but also the increasingly important dynamic methods to facilitate synchronized and coordinated actions. While engagement space management and the engagement space are ostensibly military, consideration should be given to extending its composition to include non-military actors whose activities within the operational area may impact the force and/or mission. Commanders should establish appropriate liaison elements to non-military actors.

C.31 Dependent upon the size and function of a headquarters (HQ) on a specific mission, there are numerous options of how engagement space management functionality could be delivered.

a. **Use existing procedures.** The commander may be unwilling or unable to allocate specific engagement space management resources (human and material) to generate and activate an engagement space management cell. The commander would therefore rely on existing cross-functional procedures to solve engagement space management issues while accepting the high risk of engagement space management shortfalls that would need to be addressed dynamically.

b. **Use of engagement space management structure.** The commander generates and activates a specific engagement space management cell tailored to the mission and resources (human and material). Management can be modelled in two different ways.

(1) **Centralized engagement space management.** Engagement space management is planned and conducted via specific engagement space management meetings, working groups and boards led by the HQ within the existing battle rhythm, accepting the risk of redundancy with other battle rhythm events but ensuring the maximum coverage of engagement space management issues.

(2) **De-centralized engagement space management.** Engagement space management is planned and conducted through specific meetings, boards and working groups when the situations dictates. Clear delegation and collaborative cross-functional engagement space management understanding, planning, and execution are key requirements.

C.32 If an engagement space management cell is established, its prioritized tasks should include setting the initial conditions for use of the engagement space, without being overly prescriptive as to management. The engagement space management cell, in conjunction with components and sub-units, should fuse its detailed knowledge of environment-specific

considerations and potential frictions and formulate engagement space management plans and procedures to suit the operation. Subordinate unit staff can then address tactical engagement space management issues, at increasing levels of resolution, pertaining to their respective component or sub-unit.

C.33 An engagement space management cell is likely to be engaged continuously during high-tempo operations. However, if initial engagement space management conditions endure and force capabilities and activities can be successfully coordinated and synchronized using in-place measures, then engagement space management may require little more than routine supervision. In practice the timing and frequency of engagement space management activities should reflect changes in the planning and/or operational tempo and be responsive to new or evolving operational risks.

C.34 The composition of an engagement space management cell, although based upon a core membership structure, is likely to be adjusted and/or augmented to meet operational requirements and the chosen engagement space management option. Liaison officers or elements fulfil a significant role in identifying areas of potential inter-component / inter-agency friction and consequent requirements for engagement space management.

C.35 Liaison depends upon effective communication between co-located staffs or via CIS across separate HQ or other organizations. Robust voice communications and networked CIS that enable collaborative planning software, for example, greatly assist near real-time engagement space 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.36 Commanders are responsible for engagement space management within their assigned operational area; however, they may delegate authority providing roles, responsibilities and limitations are clearly articulated.

C.37 To maximize combat effectiveness, engagement space management authority and function should be delegated to the lowest possible level. However, overall engagement space management responsibility is retained at the delegating level, therefore it is essential that the delegating authority maintains oversight.

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Annex D – Military risk management

Section 1 – Military risk

D.1 Allied forces face internal and external factors and influences which make it uncertain whether, and when, they are able to achieve their objectives. The effect of uncertainty is a deviation from the expected. It can be positive, negative, or both, and can address, create, or result in opportunities and threats. Force protection deals with threats only, and not every threat it deals with is a risk. A threat turns into a negative risk only when the consequences impact on the achievement of the objective(s).

D.2 Risk can be understood via its elements: source, cause and consequences. The risk arises from one or more sources and causes and leads to several consequences, some of these influence the achievement of strategic objectives. Risk may be expressed in terms of its likelihood and impact. It is important to identify risks associated with not pursuing an opportunity. It is important however that risk decisions are made at the appropriate level.

Risk considerations

D.3 Risk has different implications at different levels of operations.

a. **Strategic level.** Events may have strategic implications, in the worst case jeopardizing achieving strategic objectives. 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 initiating or 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 or unforeseen activities and events. 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 and precaution measures, 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. Risks are addressed through timely and proactive treatments.

Risk attitude

D.4 **Military activity is inherently risky;** the commander's risk attitude - too timid or too bold, can ruin the operation, or perhaps even lose the war - determines the acceptable level of risk. The risk attitude also guides the headquarters staff engaged in RM. The risk attitude is divided into the attitude towards risks with negative and positive outcome and measured against likelihood and impact. It is paramount to have the likelihood and impact levels defined ensuring uniformity across the organization.

D.5 **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. 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 Article 5, different national interests, domestic politics - including changes of government - and interpretations of international propriety and obligation, are likely to have an impact. In such a strategic context, perhaps lacking an agreed strategy, the commander should understand and account for national interests.

b. **Variance in risk attitude.** 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 attitude also changes 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.6 **Non-military actors.** While nations' government departments, international organizations, private sector enterprises, and other civilian partners work in hazardous situations, they may withdraw their personnel if they judge that a lack of security constitutes

an unacceptable risk for health and life. Accordingly, and as part of the contribution to a comprehensive approach, a commander should consider the risk attitude 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

General

D.7 Managing risk is iterative and assists organizations in setting strategy, achieving objectives and making informed decisions.⁷⁷ Managing risk is part of governance and leadership, and is fundamental to how the organization is managed. It contributes to the improvement of management systems. Managing risk is part of activities associated with an organization and includes interaction with stakeholders. Managing risk considers the external and internal context of the organization, including human behaviour and cultural factors.

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 (RM) can be applied to the whole JTF, 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 which it occurs and the RM process described in this annex are shown in Figure D-1.

Principles

D.9 For RM to be effective, the JTF should comply with the principles below.

- a. **Integrated.** RM is an integral part of organizational activities.
- b. **Structured and comprehensive.** A structured and comprehensive approach to RM contributes to consistent and comparable risk treatment.
- c. **Customized.** The RM framework and process are customized and proportionate to the organization's external and internal context related to its objectives.
- d. **Inclusive.** Appropriate and timely involvement of stakeholders enables their knowledge, views and perceptions to be considered.⁷⁸ This results in improved awareness and informed RM.

⁷⁷ This annex provides risk considerations inspired from civilian international risk standards as given in ISO 31000:2018(E). It also provides different models and schematics to use during presentation of risk. For risk management conducted during planning of operations refer to AJP-5.

⁷⁸ Stakeholders include senior leaders, commanders, civil authorities and subject-matter experts.

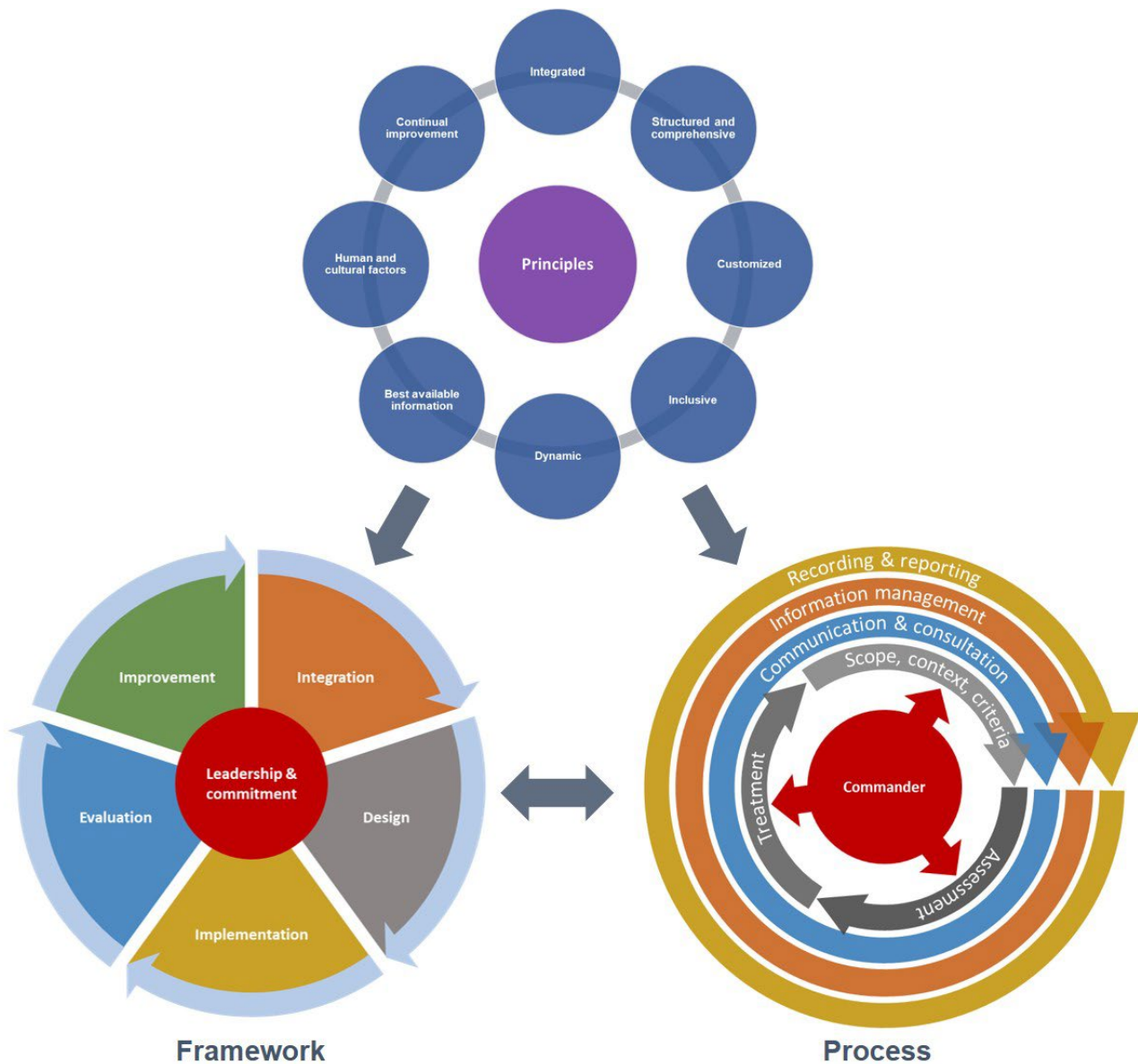


Figure D-1: Relationship between risk management principles, framework and process

e. **Dynamic.** Risks can emerge, change or disappear as an organization's external and internal context changes. RM anticipates, detects, acknowledges and responds to those changes and events in an appropriate and timely manner.

f. **Best available information.** The inputs to RM are based on historical and current information, as well as on future expectations. RM explicitly takes into account any limitations and uncertainties associated with such information and expectations. Information should be timely, clear and available to relevant stakeholders.

g. **Human and cultural factors.** Human behaviour and culture significantly influence aspects of RM at each level and stage.

h. **Continual improvement.** RM is continually improved through learning and experience.

Framework

D.10 The purpose of the RM framework is to assist the organization in integrating RM into significant activities and functions. The effectiveness of RM depends on its integration into the operations process, including decision-making. This requires support from stakeholders, particularly commanders. Framework development encompasses integrating, designing, implementing, evaluating and improving RM across the organization.

a. **Leadership and commitment.** The chain of command should ensure that RM is integrated into JTF's activities and should demonstrate leadership and commitment by:

- customizing and implementing every component of the framework;
- issuing a statement or policy that establishes a RM approach, plan or course of action;
- ensuring that the necessary resources are allocated to managing risk; and
- assigning authority, responsibility and accountability at appropriate levels within the organization.

b. **Integration.** Integrating RM relies on an understanding of organizational structures and context. Structures differ depending on the organization's purpose, goals and complexity. Risk is managed across the organization. Everyone in an organization has responsibility to manage risk. Integrating RM into an organization is a holistic, dynamic and iterative process, and should be customized to the organization's needs and culture. RM should be a part of, and not separate from, the organizational purpose, governance, leadership and commitment, strategy, objectives and operations.

c. **Design.** When designing the framework for managing risk, the chain of command should examine and understand its external and internal context. Examining the organization's internal and external context may include, but is not limited to:

- understanding the JTF and its context;
- articulating RM commitment;
- assigning organizational roles, authorities, responsibilities and accountabilities;

- applying resources; and
 - establishing communication and consultation.
- d. **Implementation.** The chain of command should implement the RM framework to:
- develop an appropriate plan including time and resources;
 - identify where, when and how different types of decisions are made across the organization, and by whom;
 - modify the applicable decision-making processes where necessary; and
 - ensure that the organization's arrangements for managing risk are clearly understood and practised.
- e. **Monitoring and review.** To evaluate the effectiveness of the RM framework, the chain of command should:
- periodically measure RM framework performance against its purpose, implementation plans, indicators and expected behaviour;
 - determine whether it remains suitable to support achieving the objectives of the organization.
- f. **Improvement.** The chain of command should continually monitor and adapt the RM framework to address external and internal changes. In doing so, the organization can improve its value. The chain of command should continually improve the suitability, adequacy and effectiveness of the RM framework and the way the RM process is integrated. As relevant gaps or improvement opportunities are identified, the chain of command should develop plans and tasks and assign them to those accountable for implementation. Once implemented, these improvements should contribute to the enhancement of RM.

Process

D.11 The RM process should be an integral part of management and decision-making and be integrated into the structure, operations and processes of the organization. It can be applied at strategic, operational, or tactical levels. There can be many applications of the RM process within an organization, customized to achieve objectives and to suit the external and internal context in which they are applied. The dynamic and variable nature of human behaviour and culture should be considered throughout the RM process. Although the RM process is often presented as sequential, in practice it is iterative.

D.12 **Communication and consultation.** The purpose of communication and consultation is to assist stakeholders in understanding risk, the basis on which decisions are made and the reasons why particular actions are required. Communication seeks to promote awareness

and a cross-functional understanding of risk, whereas consultation involves obtaining feedback and information to support decision-making. Close coordination between the two should facilitate factual, timely, relevant, accurate and understandable exchange of information, taking into account the confidentiality and integrity of information.

D.13 Communication and consultation with appropriate stakeholders should take place within and throughout every step of the RM process. Communication and consultation aims to:

- bring different areas of expertise together for each step of the RM process;
- ensure that different views are appropriately considered when defining risk criteria and when evaluating risks;
- provide sufficient information to facilitate risk oversight and decision-making; and
- build a sense of inclusiveness and ownership among those affected by risk.

D.14 **Scope, context and criteria.** The purpose of establishing the scope, the context and criteria is to customize the RM process, enable effective risk assessment and appropriate risk treatment. Scope, context and criteria involve defining the scope of the process, and understanding the external and internal context.

a. **Defining the scope.** The organization should define the scope of its RM activities. As the RM process may be applied at different levels (e.g. strategic, operational, tactical, or other activities), it is important to be clear about the scope under consideration, the relevant objectives to be considered and their alignment with strategic, operational and tactical objectives.

b. **External and internal context.** The external and internal context is the environment in which the organization seeks to define and achieve its objectives. The context of the RM process should be established from the understanding of the external and internal environment in which the organization operates and should reflect the specific environment of the activity to which the RM process is to be applied.

c. **Defining risk attitude.** The organization should specify the amount and type of risk that it may or may not take, relative to objectives. It should also define criteria to evaluate the significance of risk and to support decision-making processes. Risk criteria should be aligned with the RM framework and customized to the specific purpose and scope of the activity under consideration. While risk criteria should be established at the beginning of the risk assessment process, they are dynamic and should be continually reviewed and amended, if necessary.

D.15 Risk assessment. Risk assessment comprises risk identification, risk analyses and risk evaluation.

a. **Risk identification.** Commanders should identify sources of risk, how they impact operations and their causes and potential consequences. The aim is to generate a list of risks based on those events that might affect achieving the objectives. It is important to identify risks associated with not pursuing an opportunity. Commanders critical information requirements (CCIRs) can aid the risk identification step and the identification of risk may aid refinement of CCIRs. A risk not identified at this stage would not be included in further analysis.

b. **Risk analysis.** Risk analysis develops an understanding of the risk. Risk analysis considers the causes and sources of risk, their consequences, and the odds that those consequences can occur. Factors that affect consequences and odds 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. Risk analysis 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.

c. **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 is influenced by the risk attitude that has been established by commander JTF.

D.16 Risk treatment. The purpose of risk treatment is to select and implement options for addressing risk. Risk treatment involves an iterative process of:

- formulating and selecting risk treatment options;
- planning and implementing risk treatment;
- assessing the effectiveness of that treatment;
- deciding whether the remaining risk is acceptable; and
- if not acceptable, taking further treatment.

D.17 Prior to the possible occurrence of a risk, the primary aim of risk treatment is to influence the likelihood of the risk. The secondary aim is to prepare for the most favourable impact should the risk occur. After a risk has materialised the aim of the risk treatment is to treat the impact.

D.18 Selecting the most appropriate risk treatment option(s) involves balancing the potential benefits derived in relation to the achievement of the objectives against costs, effort or disadvantages of implementation. Risk treatment options are not necessarily mutually exclusive or appropriate in every circumstance. Regardless the chosen option the objectives of the treatment are to direct and control the risk towards the most favourable outcome. Options for treating risk may involve one or more of the following:

- avoiding the risk by deciding not to start the activity that gives rise to the risk or cancel it if in progress;
- 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.19 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. When selecting risk treatment options, the organization should consider the values, perceptions and potential involvement of stakeholders and the most appropriate ways to communicate and consult with them. Though equally effective, some risk treatments can be more acceptable to some stakeholders than to others.

D.20 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 pro-active, timely and 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.21 The purpose of risk treatment plans is to document how the chosen treatment options are implemented. The information provided in treatment plans should include:

- the rationale 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;
- the proposed actions;
- the resource required, including contingencies;
- the performance measures, constraints and restraints;
- the required reporting and monitoring; and
- when actions are expected to be undertaken and completed.

D.22 Treatment plans should be integrated with the staff processes of the JTF and discussed with appropriate stakeholders. Commanders should be aware of the nature and extent of the current risk state after treatment. The current risk state should be documented and subjected to monitoring, review and, where appropriate, further treatment.

D.23 **Monitoring and review.** The purpose of monitoring and review is to assure and improve the quality and effectiveness of process design, implementation and outcomes. Ongoing monitoring and periodic review of the RM process and its outcomes should be a planned part of the RM process, with responsibilities clearly defined. Monitoring and review should take place in every stage of the process. Monitoring and review includes planning, gathering and analysing information, recording results and providing feedback.

D.24 **Recording and reporting.** The RM process and its outcomes should be documented and reported through appropriate mechanisms. Recording and reporting aims to:

- communicate RM activities and outcomes across the organization;
- provide information for decision-making;
- improve RM activities;
- assist interaction with stakeholders, including those with responsibility and accountability for RM activities.

Lexicon

Part 1 – Acronyms and abbreviations

AJP	Allied joint publication
ACO	Allied Command Operations
AOO	area of operations
C2	command and control
CCIR	commander's critical information requirement
CIS	communication and information systems
CIMIC	civil-military cooperation
COA	course of action
COM JTF	commander joint task force
CONOPS	concept of operations
COP	common operational picture
COS	chief of staff
DDA	Concept for Deterrence and Defence of the Euro-Atlantic Area
EME	electromagnetic environment
FMB	forward mounting base
HN	host nation
HNS	host-nation support
HQ	headquarters
IHRL	international human rights law
IM	information management
Info Ops	information operations
JCB	joint coordination board
JCMB	joint collection management board
JFAC	joint force air component
JISR	joint intelligence, surveillance and reconnaissance
JOA	joint operations area
JOC	joint operations centre
JOPG	Joint Operations Planning Group
JTF	joint task force
JTCB	joint targeting coordination board
LL	lessons learned
LOAC	law of armed conflict
LOC	lines of communications

MC	Military Committee
MCM	Military Committee memorandum
MDO	multi-domain operations
MILENG	military engineering
NAC	North Atlantic Council
NATO	North Atlantic Treaty Organization
NLLP	NATO Lessons Learned Portal
NNCN	non-NATO contributing nation
OODA	observe, orient, decide and act
OE	operating environment
OPCOM	operational command
OPCON	operational control
OPLAN	operation plan
OPT	operational planning team
RBIO	rules-based international order
RM	risk management
ROE	rules of engagement
SA	situational awareness
SACEUR	Supreme Allied Commander Europe
SCCB	strategic communications coordination board
SOFA	status of forces agreement
SSI	supported/supporting interrelationships
StratCom	strategic communications
TCN	troop-contributing nation
TDL	tactical data link
TOA	transfer of authority
WG	working group

Part 2 – Terms and definitions

area of influence

The area in which a commander can directly affect operations.

Notes: This may be achieved by manoeuvre , fires and/or information activities.

(NATO Agreed)

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.

(NATO Agreed)

campaign

A set of military operations planned and conducted to achieve a strategic objective.

(NATO Agreed)

caveat

In NATO operations, any limitation, restriction or constraint by a nation on its military forces or civilian elements under NATO command and control or otherwise available to NATO, that does not permit NATO commanders to deploy and employ these assets fully in line with the approved operation plan.

Notes: A caveat may apply inter alia to freedom of movement within the joint operations area and/or to compliance with the approved rules of engagement.

(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)

civil-military cooperation

A military joint function that integrates the understanding of the civil factors of the operating environment and that enables, facilitates and conducts civil-military interaction to support the accomplishment of missions and military strategic objectives in peacetime, crisis and conflict.
(NATO Agreed)

civil-military interaction

Activities between NATO military bodies and non-military actors to foster mutual understanding that enhance effectiveness and efficiency in crisis management and conflict prevention and resolution.
(NATO Agreed)

combat power

The measurable means that a unit or formation can apply to direct or influence the opponent and other audiences or the course of events at a given time.

(This term and definition modifies an existing NATO Agreed term and/or definition and has been processed for NATO Agreed status via terminology tracking file 2021-0026)

command

The authority vested in a member of the armed forces for the direction, coordination, and control of military forces.

(NATO Agreed)

command and control

The authority, responsibilities and activities of military commanders in the direction and coordination of military forces as well as the implementation of orders related to the execution of operations.

(NATO Agreed)

control

The authority exercised by a commander over part of the activities of subordinate organizations, or other organizations not normally under their command, encompassing the responsibility for implementing orders or directives.

cyberspace

The global domain consisting of all interconnected communication, information technology and other electronic systems, networks and their data, including those which are separated or independent, which process, store or transmit data.

(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 state

The political-strategic statement of conditions that defines an acceptable concluding situation to be attained at the end of a strategic engagement.

(NATO Agreed)

engagement space

The part of the operating environment where actions and activities are planned and conducted.

(NATO Agreed)

environmental protection

The prevention or mitigation of adverse environmental impacts.

(NATO Agreed)

fighting power

The ability of the armed forces to shape, contest, and fight.

Note: It represents three interrelated components: the moral, conceptual and physical.

(NATO Agreed)

fires

The use of weapon systems to create a specific lethal or non-lethal effect on a target.

Note: Fires include the use of systems employing electromagnetic energy.

(NATO Agreed)

force protection

All measures and means to minimize the vulnerability of personnel, facilities, materiel, operations, and activities from threats and hazards to preserve freedom of action and operational effectiveness of the force, thereby contributing to mission success.

(NATO Agreed)

full command

The military authority and responsibility of a commander to issue orders to subordinates.

Notes:

1. Full command covers every aspect of military operations and administration and exists only within national services.
2. The term "command" as used internationally, implies a lesser degree of authority than when it is used in a purely national sense.
3. NATO and coalition commanders do not have full command over their forces assigned to them since nations will delegate only operational command or operational control.

(NATO Agreed)

gender analysis

The systematic gathering and examination of information on gender differences and on social relations between men and women in order to identify and understand inequities based on gender.

(NATO Agreed)

gender perspective

The ability to detect if and when men, women, boys and girls are being affected differently by a situation due to their gender.

Notes: Gender perspective takes into consideration how a particular situation impacts the needs of men, women, boys and girls, and if and how activities affect them differently.

(NATO Agreed)

host-nation support

Civil and military assistance rendered in peace, crisis or war by a host nation to NATO and/or other forces and NATO organizations that are located on, operating on/from, or in transit through the host nation's territory.

(NATO Agreed)

indicator

A metric used to measure a current system state.

(NATO Operations Assessment Handbook, 2015, not NATO Agreed)

information activities

Activities performed by any capability or means, focused on creating cognitive effects. (NATO Agreed)

information environment

An environment comprised 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.

(NATO Agreed)

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 in support of mission objectives.

(NATO Agreed)

intelligence

The product resulting from the directed collection and processing of information regarding the environment and the capabilities and intentions of actors, in order to identify threats and offer opportunities for exploitation by decision-makers.

(NATO Agreed)

joint action

The use of a combination of manoeuvre, fires, information and civil-military cooperation to create physical, virtual and cognitive effects.

Note: Joint action is directed by command and control, informed by intelligence and supported by force protection and sustainment.

(NATO Agreed)

joint effects function

A staff function to integrate, coordinate, synchronize and prioritize actions and activities to create effects in the engagement space.

(NATO Agreed)

joint operations area

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

(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)

lines of communications

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.

(NATO Agreed)

line of operation

A path linking decisive conditions to achieve an objective.

(NATO Agreed)

logistics

The planning, preparation, coordination and execution of the supply, movement, maintenance and services to support the full spectrum of operations, using military, civil and commercial resources.

(NATO Agreed)

manoeuvre

Employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect to the enemy in order to accomplish the mission.

(NATO Agreed)

multi-domain operations

The orchestration of military activities across all operational domains and environments, synchronized with non-military activities to enable the Alliance to create converging effects at the speed of relevance.

(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)

operating environment

A composite of the conditions, circumstances and influences that affect the employment of capabilities and bear on the decisions of the commander.

(NATO Agreed)

operation

A sequence of coordinated actions with a defined purpose.

(NATO Agreed)

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 into effect at a prescribed time, or on signal, and then becomes the operation order.

(NATO Agreed)

operational art

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.

(NATO Agreed)

operational command

The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational and/or tactical command and/or tactical control as the commander deems necessary.

Notes: Operational command does not include responsibility for administration.

(NATO Agreed)

operational control

The authority delegated to a commander to direct assigned forces to accomplish specific missions or tasks that are usually limited by function, time, or location; to deploy units concerned, and to retain or assign tactical command or control of those units.

Notes: Operational control does not include authority to assign separate employment of components of the units concerned and does not include administrative or logistic control.

(NATO Agreed)

operational domain

A specified sphere of capabilities and activities that can be applied within an engagement space.

Notes: There are five operational domains: maritime, land, air, space and cyberspace, each conditioned by the characteristics of its operating environment.

(NATO Agreed)

operations assessment

The activity that enables the measurement of progress and results of operations in a military context, and the subsequent development of conclusions and recommendations that support decision-making.

(NATO Operations Assessment Handbook, 2015, not 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)

port of embarkation

A seaport, airport or railhead where personnel, equipment and/or stocks are loaded onto a means of transport.

(NATO Agreed)

risk

The effect of uncertainty on objectives.

(This term and definition modifies an existing NATO Agreed definition and has been processed for NATO Agreed status via terminology tracking file 2016-0321).

risk attitude

The specified amount and type of risk that the organization may or may not take, relative to objectives.

(This term is a new term and definition and has been processed for NATO Agreed status via terminology tracking file 2022-0155)

risk management

Coordinated activities to direct and control an organization to balance risk controls with mission benefits.

(This term and definition modifies an existing NATO Agreed term and/or definition and has been processed for NATO Agreed status via terminology tracking file 2011-1602)

stability policing

Police related activities intended to reinforce or temporarily replace the indigenous police in order to contribute to the restoration and/or upholding of the public order and security, rule of law, and the protection of human rights.

(NATO Agreed)

supported commander

A commander having primary responsibility for all aspects of a task assigned by a higher NATO military authority and who receives forces or other support from one or more supporting commanders.

(NATO Agreed)

supporting commander

A commander who provides a supported commander with forces or other support and/or who develops a supporting plan.

(NATO Agreed)

sustainment

The provision of personnel, logistics, medical support, military engineering support, finance and contract support necessary for Alliance operations and missions.

(NATO Agreed)

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