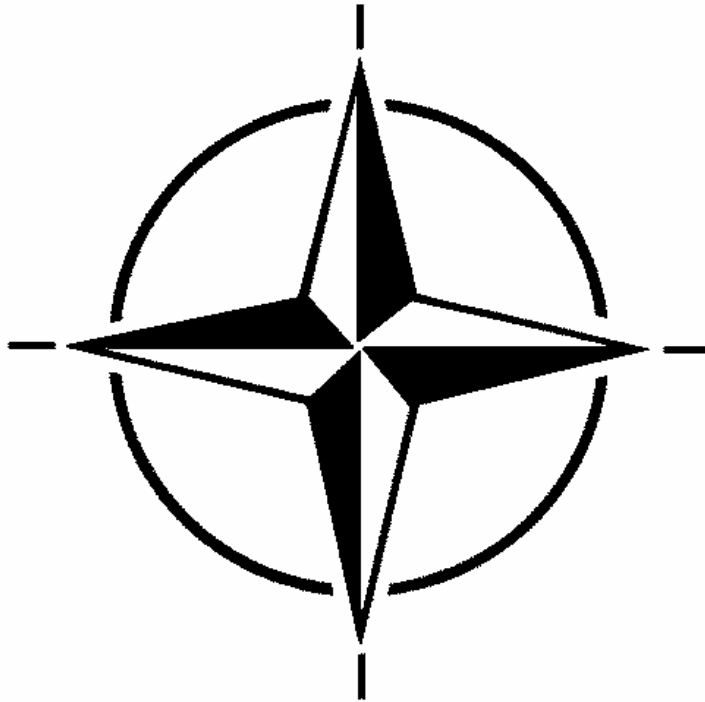


**ALLIED JOINT DOCTRINE
FOR
JOINT TARGETING**

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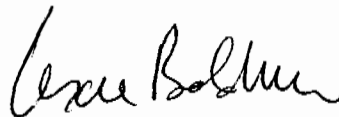
MAY 2008

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

22 May 2008

1. AJP-3.9 – ALLIED JOINT DOCTRINE FOR JOINT TARGETING is a NATO/PfP UNCLASSIFIED publication. The agreement of NATO nations to use this publication is recorded in STANAG 2524.
2. AJP-3.9 is effective on receipt.



Juan A. MORENO
Vice Admiral, ESP(N)
Director, NATO Standardization Agency



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NATIONAL LETTER OF PROMULGATION

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RECORD OF CHANGES

Change Date	Date Entered	Effective Date	By Whom Entered

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RECORD OF RESERVATIONS BY NATIONS

CHAPTER	RECORD OF RESERVATIONS BY NATIONS
1	USA
4	ESP
5	DEU

RECORD OF SPECIFIC RESERVATIONS

NATION	SPECIFIC RESERVATIONS
DEU	<p>1. DEU applies paragraph 0501 d only in the following version: "Naval vessels, military or other making an effective contribution to a military action, posing a threat and demand an immediate action to neutralize". Rationale: Civilian ships flying foreign flags -especially on the high seas- do not become legitimate military targets merely because they pose a non-specified danger.</p> <p>2. DEU applies paragraph 0501 j only in the following version: "Leadership of the adversary or of ROE defined forces". Rationale: "Counter terrorist operations" are definitely not part of all NATO led operations. At present only the armed forces employed in the framework of Operation Enduring Freedom operate on a legal basis (right of self-defense) which implicitly allows the use of means and methods of the laws of warfare to fight terrorist leaders as adversaries. In operation ISAF the use of military force against "terrorists" as adversaries is allowed only under the conditions and within the definition of ROE 429 a and b. In this regard the OPLAN ISAF talks about "ROE defined forces" (ROF).</p>
ESP	<p>Spain makes a reserve on which is stated at paragraph 0410 (supported and supporting relationships) in the sense that the authority for designation of target priority, effects and theatre?JOA priorities should be directed by the JFC, IAW AJP-1(C) paragraph 0514 page 5-6</p>
USA	<p>a. In the context of conventional targeting, the United States recognizes the NAC, throughout this document, to refer to the North Atlantic Council or the Defense Planning Committee in accordance with the MC 133/3.</p> <p>b. The United States is concerned with the inference within paragraph 0115 that suggests that multiple collateral damage estimate (CDE) methodologies and tools must be used in the targeting process. The position of the United States is that, for any given operation, there must be agreement on a single methodology and policy for collateral damage and CDE, including standardization of tools and methodologies, in order to maintain unity of effort and operational effectiveness.</p> <p>c. The United States does not accept the language in paragraph 0108 that states "Targets that are prohibited from attack by relevant international law and various other protocols and treaties," and suggest the language be changed to reflect MC 471/1. The paragraph should read, "Targets that are prohibited from attack by relevant international law or for policy reasons as determined by the NAC".</p>

PREFACE

0001. Doctrine is a framework of principles, practices, and procedures, the clear understanding and acceptance of which is prerequisite for operations to be conducted by an allied joint force. It evolves as its political and strategic foundation changes and in the light of new technology, the lessons of experience, and the insights of operational analysis. North Atlantic Treaty Organization (NATO) policy and doctrine forms the fundamental principles by which NATO military forces guide their actions in support of objectives. It is authoritative, but requires judgment in application.
0002. Although NATO targeting doctrine is primarily intended for NATO forces, it could be applied multinationally within the framework of an Allied joint force. NATO doctrine could also be utilized, with adaptations where necessary, and agreed by participating nations, for operations under the umbrella of the European Union, or a coalition of NATO and non-NATO nations, when such utilisation would not be against NATO's interests. Interoperability between NATO nations is based upon NATO standardizations agreements, other policy documents and publications.
0003. The purpose of Allied Joint Publication (AJP)-3.9 "*Allied Joint Doctrine for Joint Targeting*" is to explain how joint targeting is planned, conducted and assessed. The document is focused on the operational level. It defines and discusses principles of joint targeting, and highlights those particular joint targeting considerations relevant to the conduct of operations. It reflects the evolution of joint targeting to incorporate aspects of Information Operations (Info Ops). Thus joint targeting as written in this manual, attempts to connect the use of lethal and non-lethal capabilities to create the desired effects from a broader spectrum than the traditional lethal methods alone. These means to create effects are described as actions in this manual.
0004. AJP-3.9 is intended principally for use by a joint force commander (JFC), combined joint task force commander, deployable joint task force-commander and those of their staff with targeting responsibilities, but also addresses the roles, links, responsibilities and required products from the strategic, operational and tactical commands and the political guidance and oversight inherent in this process.
0005. Within the overall NATO publication hierarchy, AJP-3.9 is directly subordinate to AJP-3 "*Allied Joint Doctrine for Joint Operations*" and AJP-5 "*Allied Joint Doctrine for Operational Planning*", which are NATO's keystone publications focused on staff functions and joint planning. AJP-3 describes the fundamental operational aspects of joint operations and provides guidance on the conduct of joint operations. Furthermore AJP-3.9 links directly to AJP-01 and the available policy documents containing targeting input.

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ALLIED JOINT DOCTRINE FOR JOINT TARGETING

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CHAPTER 1 - FUNDAMENTALS OF TARGETING

Section I – Introduction

0101. As the international security situation continues to evolve, different responses from security alliances are required. While military operations utilizing acts of force or threat thereof to deter or coerce an adversary remain necessary, military forces may also be used to support humanitarian goals. NATO forces must therefore be able to employ and coordinate a complex integration of lethal and non-lethal actions in the midst of a variety of threat environments in a wide range of operations.
0102. A well-developed, flexible targeting process is required so that NATO joint forces can successfully carry out actions authorised by the North Atlantic Council (NAC), as directed by the strategic commander (SC) and executed by the JFC. At the operational level, targeting focuses on determining specific actions to take, lethal and non-lethal, to create the desired effects and realize the JFC's operational objectives. While carrying out an action on a target remains a tactical event, the effect must be relevant to the JFC's operational objectives.

Section II – Definitions

0103. **Target.** A target is a selected geographic area, object, capability, person, or organization (including their will, understanding, and behaviour); which can be influenced as part of the military contribution to a political end-state. A target is normally not critical in and of itself but rather its importance is derived from its potential contribution to achieving the commander's military objective(s).
0104. **Joint Targeting.** Joint targeting is the process of determining the effects necessary to achieve the commander's objectives, identifying the actions necessary to create the desired effects based on means available, selecting and prioritizing targets, and the synchronization of fires with other military capabilities and then assessing their cumulative effectiveness and taking remedial action if necessary. It is both an operational level and component level command function.
0105. **Targeteer.** A targeteer is a person qualified to advise commanders on the validity of targets, the means to affect such targets and the appropriate means of measuring achieved affects.

Deliberate Targets		Dynamic Targets	
Scheduled	On-Call	Anticipated Targets	Unanticipated Targets

Figure 1.1 - Target Classification

0106. Targeting falls into two general classes: deliberate and dynamic.

- a. **Deliberate Targeting.** Prosecutes targets known to exist in an operational area with actions scheduled. Examples range from targets on joint target lists in the applicable campaign plan, to targets detected in sufficient time that can be listed in the air tasking order (ATO), mission-type orders, or fire support plans. Deliberate targets have two subcategories: scheduled or on-call.
 - (1) **Scheduled.** Targeting where actions are to be taken at a specific time; and
 - (2) **On-call.** Targeting where actions have not been specified by time.
- b. **Dynamic Targeting.** Prosecutes targets that have been identified too late, or not selected for action in time to be included in the deliberate targeting cycle¹, and therefore have not been scheduled. Dynamic targets have two sub-classifications: anticipated and unanticipated.
 - (1) **Anticipated.** Prosecutes targets known to exist in an operational area but are not detected, located, or selected for action in sufficient time to be included in the deliberate targeting cycle; and

¹ Therefore the F2T2EA process described in Chapter 5 is used.

- (2) **Unanticipated.** Prosecutes targets that are unknown or unexpected to exist in an operational area but, when detected or located, meet criteria specific to operational objectives.

0107. **Time-Sensitive Targets (TSTs).** TSTs are defined as those targets requiring immediate response because they pose (or will soon pose) a danger to friendly operations or are highly lucrative, fleeting targets of opportunity. The time available does not allow for the standard targeting timeline to be followed. The JFC provides specific guidance and prioritisation for TSTs within the operational area. See chapter 5 for more detail.
0108. **Target Lists.** The JFC will normally task the joint targeting coordination board (JTCB) to produce a joint target list (JTL) derived from the campaign targets database that has been initially derived from the integrated database (IDB). The JTL has to be reviewed against strategic targeting guidance and national limitations and caveats. All further joint targeting activities are based upon the JTL, which is updated, as new information becomes available. Subordinate commanders will keep the JTL under constant review, and forward their own nominations and/or restrictions of targets to the JFC staff through the JTCB via the target nomination process/lists (TNL) and proposal of restricted targets list (RTL). Integration of proposed TNL(s) and RTL(s) with the JTL results in the production of the joint prioritized target list (JPTL)². Targets that are prohibited from attack by relevant international law or for policy reasons as determined by the NAC are listed in the No-Strike target list (NSL), which forms part of the JTL³. The JTL/JPTL and all target folders will be maintained in a collaborative environment and updated by inputs from the JTCB, the JFC's assessment process any other authorised source with relevant data that requires inclusion. It is essential that an integrated command and control – joint targeting system (ICC-JTS) database manager and staff be assigned the responsibility of managing the records of the JTL, the target folders and any related target lists. The lists are explained in further detail in Chapter 4.

Section III - The Purpose of the Joint Targeting Cycle

0109. The joint targeting cycle (JTC) has a logical progression that aids decision-making and provides the JFC with a methodology linking objectives with effects throughout the battlespace. It is flexible enough to be adapted to any military operation desired and across diverse functional areas, such as air interdiction and information operations. This process enables the JFC to most effectively employ allocated resources to achieve the assigned objectives.

² Some nations use the term joint prioritized target list (JPTL)

³ Currently this is called the prohibited target list in AD 80-70, 13 Oct 2005. To distinguish this list from the prioritized target list (PTL) it is called the No-Strike target list (NSL)

0110. Joint forces require a common joint targeting process in order to minimize the likelihood of conflicting or duplicative actions during military operations, as well as to mitigate potentially undesirable consequences resulting from the outcome of those operations. Consequently, components must understand the joint targeting process if they are to create the effects necessary to accomplish the JFC's objectives. A common understanding of the joint targeting process and adherence to its principles among joint force staff and subordinate component staffs ability to:
- a. Ensure JFC compliance with NAC, MC and SC guidance and instructions;
 - b. Comply with JFC objectives, guidance, and intent;
 - c. Focus on adversary's centres of gravity (COG) and related decisive points (DPs);
 - d. Coordinate, synchronize, and de-conflict actions;
 - e. Rapidly respond to targets that present limited opportunities for action;
 - f. As resources permit, assign the most appropriate means to the proposed target;
 - g. Minimize duplication of effort;
 - h. Expedite assessment of executed operations;
 - i. Provide a common perspective on all targeting efforts performed in support of the commander; and
 - j. Fully integrate all capabilities.

Section IV – Targeting Principles

0111. The joint targeting principles are:

- a. **Focused.** The targeting process is focused on achieving the JFC's objectives efficiently and effectively within the parameters set by the NAC, Military Committee (MC), and SC, as limited by applicable rules of engagement (ROE) and relevant international law, and strives to minimize collateral damage (CD) and fratricide;

- b. **Effects.** Targeting is concerned with supporting the creation of effects to achieve the JFC's objectives;
- c. **Interdisciplinary.** Targeting requires the integrated efforts of many functional experts/disciplines and capabilities;
- d. **Systematic.** In supporting the JFC's campaign objectives, the targeting process seeks to create effects in a systematic manner;
- e. **Timeliness.** Targeting is often time critical. It is, therefore, fundamental that the transfer of information from source to user be as direct and as fast as possible. The timely initial reporting assessment is also critical;
- f. **Control and Coordination.** Due to its importance, complexity, and potential political sensitivity, targeting policy and direction is normally retained at the highest practical joint level whilst the authority for the execution of that policy is delegated to the lowest practicable level. In order to avoid duplication, fratricide and confusion from the inability to coordinate, it is important that a system of centralised control is maintained on the targeting process. Proper use of the command structure and the management and coordinating functions of the joint target coordination board (JTCCB) and the joint coordination board (JCB) should be utilised to ensure that the targeting process is fully coordinated both across, and up and down the command levels;
- g. **Exploitation and Objectivity.** Time permitting, all available information sources should be utilised and exploited methodically to ensure that the complete picture is obtained and that vital information is not overlooked. The sampling of information, to obtain only that which fits a pre-conceived idea, must be avoided;
- h. **Accessibility and Security.** All the information produced to support the targeting process should, wherever possible, be held on shared databases. However, sensitive information may need to be stored and disseminated on a 'need to know' basis in order to preserve Operations Security (OPSEC). The need for OPSEC must be balanced with the need for timely access; and
- i. **Reliability and Responsiveness.** It is important that the information produced is as accurate as possible. It must be factually correct and portray the situation as it actually is, and not how the analyst (or the commander) might like it to be. Assessment products must be tailored to answer the commander's questions accurately and concisely.

Section V – Legal Considerations

0112. The conduct of NATO operations is controlled by international customary and conventional law and the domestic law of the participating nations⁴, which impose boundaries upon targeting decisions and actions. While for policy and other reasons, targeting may be more restrictive than that permitted by international law, it may never be more permissive. Legal advisors play a key role in reviewing the targeting to facilitate compliance with legal principles.
0113. **Principles.** Each nation interprets the underlying primary concepts of the relevant international law, their own domestic law and, in certain circumstances, Host Nation law when making targeting decisions. A general description of international legal principles related to targeting is:
- a. **Military Necessity.** The principle of military necessity authorizes that use of force required to accomplish those actions that have a legitimate military rationale. It is a necessary pre-condition or a minimum criterion. It is in no sense an override permitting otherwise unlawful action on alleged grounds of “military necessity”. Military necessity justifies the use of force not otherwise prohibited by the international law to the extent necessary for the purpose of armed conflict, that is, the submission of the enemy at the earliest possible time with the least expenditure of personnel and resources. It bears repeating that military necessity never justifies a breach of the international law;
 - b. **Humanity.** The principle of humanity forbids the infliction of unnecessary suffering, injury or destruction not actually necessary for legitimate military purposes. It prohibits the intentional causing of unnecessary suffering;
 - c. **Distinction.** The principle of distinction imposes an obligation on all targeting decision makers to distinguish between legitimate targets, and civilian objects and the civilian population. The rule that requires only the targeting of military objectives is an expression of this principle;
 - d. **Proportionality.** No attack may be launched, and any attack in progress must be stopped, in which the expected CD would, in total, be excessive in relation to the concrete and direct military advantage anticipated. Note that the application of this rule is judged not on the actual CD or the actual military advantage of the

⁴ AJP-3 (A) para 0157

attack, but upon the CD expected and the military advantage anticipated. The military advantage anticipated refers to the advantage to be gained from the attack considered as a whole, and not from isolated or particular actions. Generally, military advantage is not restricted to tactical gains, but is linked to wider strategic goals;

- e. **Military Objective.** Only targets that are military objectives may be attacked. Military objectives are combatants and those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralisation, in the circumstances ruling at the time, offers a definite military advantage. Certain military targets will virtually always be military objectives. Examples of these targets are soldiers, fighter aircraft, submarines, ammunition depots etc. Some installations/facilities/objects that have both military and civilian uses (referred to as “dual use” facilities) are more difficult to identify as definite legitimate military targets. Examples of possible dual use facilities include bridges, electrical systems, fuel, communication nodes, vaccine and chemical plants, etc. Before attack, these dual use facilities must be carefully analysed based upon the current situation and information to determine if they are legitimate military objectives;
- f. **Responsibility.** Responsibility for lawful targeting rests at a number of levels. Those carrying out the attack have a responsibility to apply the international law. They will apply that law based on the facts available to them and those facts that they should reasonably have obtained. Those planning and authorising attacks (i.e. commanders), and their staffs, also have a legal duty to similarly apply the international law. While all reasonably feasible care must be taken at each stage of the targeting process, targeting decisions and actions are not legally judged based on perfection, or that of hindsight. Those involved need only take all those precautions that were reasonably feasible at the time of their decision or actions and in the circumstances prevailing at that time. However, this objective standard also means that recklessness, negligence and wilful blindness provide no excuse to unlawful targeting.

Section VI – Collateral Damage Considerations

- 0114. **Minimization of CD.** All reasonably feasible precautions in the choice of means and methods of attack must be taken with a view to avoiding, and in any event to minimising, expected incidental loss of civilian life, injury to civilians and damage to civilian objects (hereafter referred to collectively as “CD”).

0115. **Collateral Damage Estimation (CDE).** The CDE process is required to support the proportionality test by which commanders determine whether the expected CD would, in total, be excessive in relation to the concrete and direct military advantage anticipated. To perform this test, commanders must be supported by a CDE process that predicts, within acceptable levels of accuracy, the expected levels of CD likely to be produced by the type of attack envisaged. Compliance with applicable legal obligations is a national issue. Therefore nations will have individual policies regarding the methodologies and tools by which CDE is conducted. These policies are driven by political and economic factors in addition to legal obligations and as such, they may be more restrictive than strictly required by the law.
0116. A generic CDE process will usually employ some form of “tiering” methodology, with increasing levels of CD risk at each tier. The level of risk will be described in a form (for example % risk of death or injury to civilians in the open, or to a building of a particular type) measurable by defined CDE tools that will be employed by designated, qualified, operators. The same tools will be used to mitigate risks, by modelling the variables in an attack – this is particularly true of lethal action. These include the parameters (direction, height, speed etc) and the time of the attack (some targets are best attacked at times when the target is not in normal use, for instance at night); the weapon(s) to be used; the local environment and geography of the target; the characteristics of the target itself, for example if it contains hazardous or environmentally damaging material; the weather conditions for the attack and any other structures or civilians within a given distance from the target.
0117. For targets of a politico-strategic importance, authority to prosecute will often be held at the national level. In the majority of other cases a designated officer will normally be empowered by his nation to authorise attacks against targets. Assuming that the officer has access to relevant legal, political and CD estimation information, and a full understanding of the military advantage anticipated in attacking the target, he will be able to perform the proportionality test and authorise his nation’s military forces to attack targets in support of the JFC’s operation plan (OPLAN) if appropriate. This authorisation may require some caveats, usually expressed in terms of the mitigation measures described in paragraph 0116, to ensure that his nation’s obligation to minimise CD is discharged. Any targets that fall outside his delegated authority would be referred back to his nation for clearance.
0118. To accelerate the process, pre-approval of certain targets or target sets in particular circumstances (for example where there is a low probability of CD or where speed of response is vital to avoid potentially greater risk of CD) may be authorised on the basis that, at the time of final attack authorisation, the proportionality test is repeated to ensure that it remains valid. This pre-approval may be exercised through the NAC in the early stages of operational planning.

Section VII – Effects for Targeting

0119. **General.** The effects-based approach to operations (EBAO) is an evolving philosophy that is defined as ‘the coherent and comprehensive application of the various instruments of the Alliance, combined with the practical cooperation along with involved non-NATO actors, to create the effects necessary to achieve planned objectives and ultimately the NATO end state.’⁵ At the operational level, an effects based approach involves the selective combination of actions, coordinated with the activities of other organizations to create lethal and non-lethal effects in order to achieve operational objectives in support of this end state. Operations are still executed in the time-tested manner, applying operational art, design and management. Operational art, supported by the targeting process, seeks to analyze and then direct activity to defeat or neutralize an adversary. It integrates recent developments, for example, Info Ops, with more traditional methods. Understanding the adversary's operational objectives, capabilities, and intentions through analysis enables the use of capabilities to be focused on key components of the adversary's systems. This analysis is an integral part of the OPP⁶. The JFC establishes the operational objectives to be achieved. Targeting is focussed on creating specific desired effects to achieve the JFC's objectives and/or subordinate commanders supporting objectives. Effects based related terminology is still under development and is not discussed further in this document.⁷

⁵ MCM 0052/2006

⁶ See MC 133 and AJP-5

⁷ See MCM 0052/2006 MC position on an effects based approach to operations, 06 Jun 06.

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CHAPTER 2 - JOINT TARGETING CYCLE

Section I – The Joint Targeting Cycle⁸

0201. The joint targeting cycle consists of six phases. The phases are built upon the principles of effective and efficient joint targeting. The cycle focuses targeting options on the JFC's objectives for operations, while diminishing the likelihood of undesirable consequences.

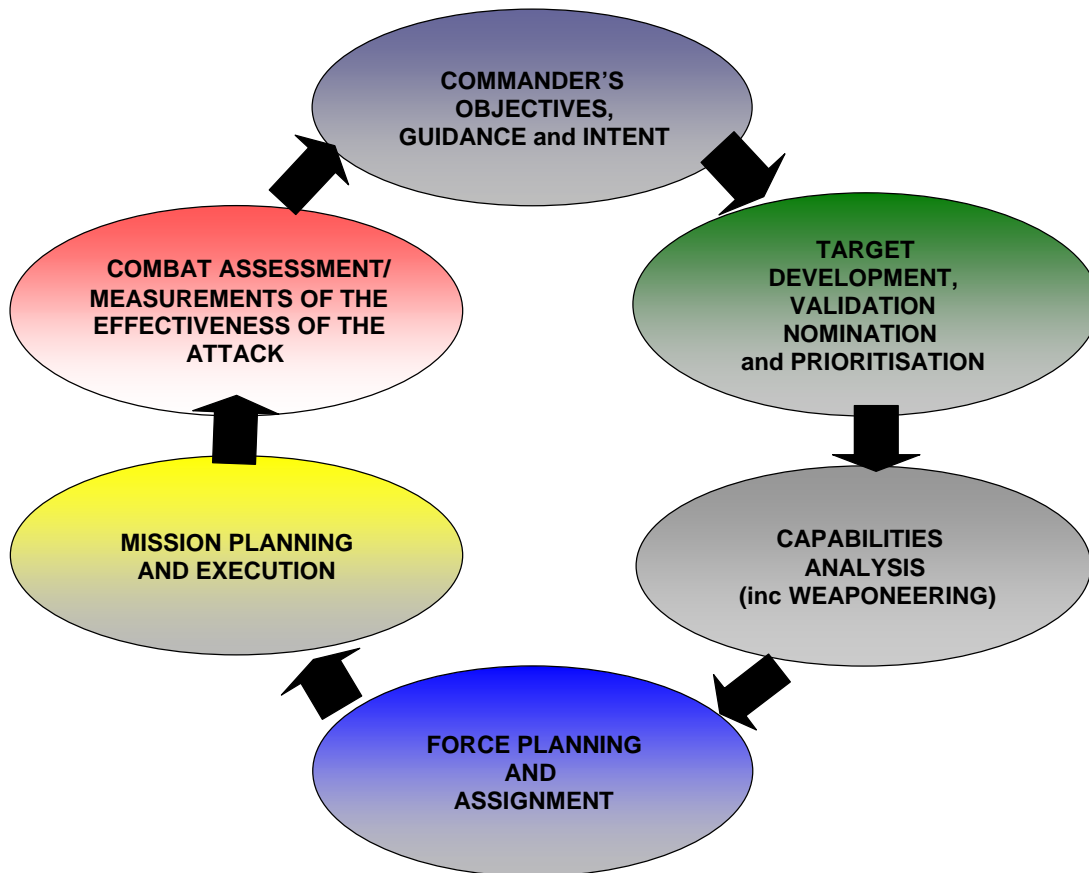


Figure 2.1 - The Joint Targeting Cycle

0202. Phase 1 — Analysis of the JFC's Objectives, Guidance, and Intent.

⁸ The Land Targeting Cycle is composed of five phases and is similar in output to the JTC process. In addition it links with/is synchronized to provide necessary inputs into the JTC process. It is described in detail in AJP 3.9.2.

- a. Guidance from the political, strategic, and operational levels directs targeting. The first activity of the joint targeting process is to translate the JFC's objectives, guidance and intent into discrete tasks, each logically and directly related to the overall desired end state. The JFC's objectives, guidance and intent are conveyed to Components in the form of the JFC OPLAN⁹ and Joint Coordination Order (JCO).¹⁰ The JFC must clearly identify what is to be operationally accomplished and under what circumstances and parameters, including appropriate measures of effectiveness (MOE).
- b. The components must develop their own objectives, tasks and supporting target nominations that will achieve JFC objectives. This method of planning ensures that tactical operations are ultimately driven by NAC objectives.

0203. **Phase 2 — Target Development, Validation, Nomination, and Prioritisation.**

- a. **Target Development** - Target Development involves the analysis of the adversary to determine the best targets to engage in order to achieve the JFC's objectives. Intelligence Preparation of the Battle Space (IPB) will normally build basic information on adversary facilities, organizations, individuals, and equipment. Multiple target analysis methods, such as Target System Analysis (TSA) and Critical Node Analysis, are normally employed to identify the adversary's strengths, weaknesses, and Centres of Gravity (COG). The analysis performed in target development must be conceived of as proceeding through successively greater levels of detail, flowing from the macro (broad scope) level to the micro (narrowly focused) level. Critical to the success of the entire targeting process is the establishment of intelligence requirements at all levels,¹¹ which in turn drives the production of collection plans.¹² The ultimate goal of this expansive research is to support COG analysis¹³ and determine exploitable vulnerabilities of the adversary. Targeteers will then select specific targets and target elements that can efficiently be engaged to affect the COG.
- b. **Validation** - Target validation is conducted to ensure compliance with the JFC's objectives, guidance, and intent, and with relevant international law. Target validation also verifies the accuracy and credibility of all source analysis used to develop a target.

⁹ AJP-5

¹⁰ AJP-3(A) Chapter 4

¹¹ AJP-5 para 0426

¹² AJP-2

¹³ AJP-5 Chapter 4

- c. **Nomination** - Once potential targets are identified and validated, they are nominated through the proper channels for approval.
- d. **Prioritization** – Nominated targets are prioritised based on the JFC's objectives, guidance and intent to maximize effective use of joint force capabilities while minimizing the likelihood of unintended, and potentially undesired, consequences.

0205. **Phase 3 — Capabilities Analysis.** This phase analyses the prioritized targets from the target development phase and matches appropriate capabilities in order to achieve the JFC's objectives whilst minimising undesirable effects. The capabilities analysis includes both lethal and non-lethal options and related means in order to allow the JFC to have a clear understanding of capability requirements and all possible options available upon which to base his ultimate employment decisions.

0206 **Phase 4 — Force Planning and Assignment.** This phase integrates the capabilities analysis results with the operational considerations resulting in prioritised targets being assigned to the available engagement assets. This is the foundation for the planning and execution of operations that perform discrete tasks that support the JFC's objectives.

0207. **Phase 5 — Mission Planning and Force Execution.** The component commanders are responsible for the conduct of this phase. It deals with the direct planning and execution of engagements, and includes co-ordinating the necessary assets to conduct assessments of such engagements.

0208. **Phase 6 — Assessment.**

- a. Assessment is used to measure progress of the joint force toward mission accomplishment. The assessment process is continuous and directly tied to the commander's decisions throughout planning, preparation and execution of operations. Assessment is performed at all levels. Strategic- and operational-level assessment efforts concentrate on broader tasks, effects, objectives, and progress toward the desired end state and are incorporated in strategy and guidance development.
- b. Tactical level assessment typically focuses on task accomplishment and target engagement. Combat assessment (CA) is an example of tactical level assessment and typically focuses on determining the results of weapons engagement (with both lethal and non-lethal capabilities.) Combat assessment is composed of three interrelated components: battle damage assessment (BDA); weapons effectiveness assessment (WEA); and future targeting or re-

engagement recommendations; and

- c. **Measures of Effectiveness (MOE).** MOE in military operations are defined as tools used to measure results achieved in the overall mission and execution of assigned tasks. MOE are a prerequisite to the performance of assessment. Assessment of such indicators normally takes place at the tactical, operational, and strategic levels of operations, and goes beyond counting craters or vehicles destroyed. These measures help determine progress towards accomplishing tasks, creating effects, and achieving objectives. Well-devised MOE, and other measures and indicators should be observable and measurable, enabling the JFC's staff and components to understand the causal linkage between specific tasks, creating the desired effects, and objectives, as well as guide future action.

CHAPTER 3 - JOINT TARGETING CONSIDERATIONS AT THE STRATEGIC LEVEL

Section I - General

0301. A general overview of NATO targeting approval process at the strategic level is as follows. The NAC defines military mission and issues an Initiating Directive through the MC to the SC. The SC develops a strategic-level OPLAN. This plan contains target sets by phase, including possible time sensitive targets (TST). The plan is passed through the MC to NAC seeking NAC¹⁴ approval of the target sets. Within the scope of the NAC-approved target sets, the SC provides targeting guidance to the operational level (JFC/CJTF). This targeting guidance will detail the commander's intent on how targets that fall in the approved target sets will be selected for attack. Relevant operational level NATO commander(s) approve the JPTL, to include pre-recognized TSTs, for each phase of the operation based on approved target sets and reflecting the strategic targeting guidance. At the tactical level, targets are engaged in accordance with higher-level targeting guidance, approved ROE, the LOAC and, if specified, within the agreed collateral damage limitations.

Section II – Political Direction

0302. The NAC provides the MC¹⁵ with the overarching military objectives and guidance for a campaign including any constraints and restraints that it wishes to impose. The NAC¹⁶ should provide the SC with objectives and guidance (O&G) that are clear, comprehensive, and that define the ROE and other limitations. The NAC reviews the target sets proposed by the SC, authorises them in their entirety, or elements thereof and issues any constraints and restraints that they wish to impose. NAC authorisation enables the SC to delegate the authority to prosecute targets to the appropriate commander.

0303. **Political Level Targeting Responsibilities to Strategic Commander (SC).** The NAC¹⁷ should provide the SC with O&G that are clear, comprehensive, and unambiguously define restrictions and other limitations that are to be imposed or that other nations participating in a NATO coalition effort or whose sovereign territories may be involved may place on the campaign. It must address the use of both lethal and non-lethal means. The NAC must also approve the target set(s) provided by the SC and issue any constraints and restraints that they wish to impose. NAC authorisation

¹⁴ In accordance with NATO's Operational Planning System, namely MC 133/3.

¹⁵ see AJP-01 for a more detailed discussion of this guidance and related issues.

¹⁶ In accordance with NATO's Operational Planning System, namely MC 133/3.

¹⁷ In accordance with NATO's Operational Planning System, namely MC 133/3.

enables the SC to delegate the authority to prosecute targets by either lethal or non-lethal means to the appropriate military level.

0304. **The Military Strategic Level.** At the military strategic level, armed forces are deployed and employed within an overarching political framework and in an integrated synchronised fashion with other non-military initiatives (e.g. diplomatic or economic) to achieve the strategic objectives of the Alliance. The MC considers the realistic contribution that military force can make to the achievement of Alliance objectives and provides advice to the NAC in the form Military Response Options (MRO).
0305. **Military Strategic Direction.** If the NAC decides that military intervention is required, it issues a NAC Initiating Directive. This NAC political guidance authorises the detailed OPP to commence. The MC is responsible for translating NAC political guidance into strategic military direction for the SC. The SC is responsible for the development of a military strategic-level Operation Plan (OPLAN) outlining the mission, command and financial arrangements as well as the command and control (C2) responsibilities. When endorsed by the MC and approved by the NAC, this OPLAN is provided to the operational commander for development and for the implementation of NAC approved ROE. Thereafter the SC monitors the operational level planning and execution of the campaign. The OPP describes a logical sequence of processes and procedures undertaken by commanders and staffs to conduct mission analysis and determine the best method for accomplishing assigned tasks and achieve a desired military end state. OPP also includes the identification of military forces and capabilities required to carry out the operation at the strategic, operational, and tactical command levels; they encompass both advance planning and crisis response planning (CRP) as found in AJP-5. The Targeting Annex/Appendix to the CONPLAN/OPLAN/SDP is the focal point of all targeting matters for that specific operation. All relevant targeting matters for the operation must be included. The contents will vary depending on the level (strategic/operational/tactical) of the planning involved.
0306. **Target Sets and Categories.** Within the operational planning process the SC will select target sets taking into account the NAC guidance, and any specific national guidance available. The SC will also define, as far as possible, sets of TSTs that would need to be engaged due to the threat that they would pose to, or the opportunity that they would present for, the success of the NATO mission. These proposed target sets will then be forwarded to the MC for endorsement (see Annex A for examples).
- a. Target Category can be described as a group of targets that serve the same function, such as bridges, roads, radio broadcast, newspapers etc.; and

- b. Target Set can be described as a group interrelated target categories within the adversary's system, such as Transportation/Lines of Communication, electric power and adversary media.

0307. **NAC¹⁸ Approval of Target Sets and Categories.** The SC via the MC must submit target sets and/or categories for NAC approval. The NAC will pass approved target sets/categories through the MC to the SC with any further amplifying guidance or caveats. Amplifying guidance or caveats may include additional NAC criteria affecting targets whose approval may be needed during operations. Target sets and associated categories not anticipated and consequently not approved or target sets not originally approved, but at a later stage, deemed necessary for the campaign may have a subsequent request for approval, staffed through the command chain to the NAC.
0308. **SC Guidance to Operational Level.** Within the scope of the NAC-approved target sets and/or categories, the SC will provide targeting guidance to the operational level. This SC guidance should translate the political intent and the military mission into clear military objectives: the targeting process should be clearly linked to these objectives. In addition, the political goals and objectives must be amplified into more detailed military guidance and any additional considerations that will apply during the operation. The operational and tactical level will maintain target lists, to include TST, that are based on approved target sets and reflect the strategic targeting guidance. National caveats must be observed carefully during the allocation process.
0309. **NAC¹⁹ Approval of Sensitive Targets.** The NAC Initiating Directive may also direct the SC to identify sensitive targets against which planned actions warrant NAC review. These targets should be identified and put on a RTL or a No-Strike Target List (NSL). The SC will update the NAC on identified restricted targets so that nations can provide their clearance or caveats to attack such targets. Proposed restricted targets must be forwarded at an early stage to the NAC or, based on pre-delegated authority, to the SC or the JFC, for timely approval. Whenever a subordinate NATO Commander judges that, to achieve a military objective, a target that is not in an approved set needs to be engaged, he is to refer that target to the chain of command for approval by the authority who decided the restriction in the first place. This could be a previously recognized target that is on the RTL, or a target not previously recognized.

Section III – Military Strategic Targeting Responsibilities

0310. **SC's Targeting Responsibilities to the NAC through the MC.** The SC must:

¹⁸ In accordance with NATO's Operational Planning System, namely MC 133/3.

¹⁹ In accordance with NATO's Operational Planning System, namely MC 133/3.

- a. Develop a list of the target sets with associated categories that envelop all the anticipated targets against which the military might require to use lethal and non-lethal force during any subsequently authorised action, using the objectives of the political campaign, as laid down in the Initiating Directive.
- b. Ensure target sets requested for clearance by the NAC are in accordance with Annex A or are defined if specific to the operation. Some or all of these sets may be requested for clearance. These sets may be submitted via the concept of operations (CONOPS) and OPLAN with its targeting annex/appendix or under separate cover; and
- c. Submit unanticipated targets that fall outside NAC approved target sets for approval prior to authorising any engagement.

0311. **Targeting in OPLANs.** The targeting annex/appendix to the OPLAN/COP/standing defence plan (SDP) should be the focal point of all targeting matters for that specific operation and as a minimum will address:

- a. **Target Sets and Categories.** The target sets and categories authorised by the NAC;
- b. **Restricted and Prohibited Targets.** Targets identified as restricted or prohibited will be designated on the RTL and NSL and will be annotated as such on the target database so as to be identifiable, when accessed, on all other target lists. Changes to their status will appear in the targeting annex of the joint coordination order (JCO); and
- c. **Time Sensitive Targets (TSTs).** The targeting annex will also define, as far as possible, the anticipated TSTs likely to be encountered during the campaign based on the assessment of the adversary's capabilities. TSTs that do not fall within NAC pre-approved target sets must be submitted for approval to the NAC.

Section IV – National Inputs

0312. **National Inputs to the NATO Targeting Process.** National targeting guidance will always remain a sovereign right and should be established before the onset of a crisis. Undoubtedly, and appropriately, nations will modify and refine their national guidance to conform to the exact nature of a specific operation. However, this refinement should be made with regard to the general principles and guidance made known to NATO by nations explicitly detailing generic national targeting caveats prior to any crisis. Nations contributing attack assets/units must provide their refined guidance and national

caveats for these units employment as early as possible during the planning phase of an operation. NATO relies on intelligence input and target materials to be provided from the nations to support the targeting process.

0313. **National Representation in the NATO Targeting Process.** The targeting process will be facilitated by each nation nominating a national targeting expert to the SC planning staff to ensure national guidance and caveats are clearly understood and taken into account. At operational and/or tactical level (JFC, CJTF, CC, CAOC/AOC) the unit representative/unit liaison officer will advise on their unit's capabilities, limitations and utilisation. The unit representative/unit liaison officer will also ensure that national guidance and caveats are observed during the tasking process. The latter will not absolve the commanding Officer of the tasking authority of his responsibility to ensure that national guidance and caveats are followed. National representatives should be given access to any proposed or agreed targeting study or list at the level to which they are assigned.

Section V – Advanced Planning

0314. **Provision of Targeting Information.** In support of NATO, certain nationally produced target intelligence, target materials (TM), and conventional weaponeering materials (WM) are made available to the SC for distribution to forces and HQs involved in operations. This material and intelligence is provided for military planning purposes. It should be noted that under normal conditions NATO units are not currently permitted to hold operational target materials except for training purposes for current operations. TM and data that are provided under the targeting support programs form the standard intelligence references for the NATO targeting process. These materials and data are considered the primary graphic and data base references for operational targeting within NATO.
0315. **Security and Accountability.** Organisations receiving hard-copy intelligence materials/data through targeting support programs will provide appropriate security. Additionally, holders of all TM/data will adhere to all special caveats attached to or shown on the products, the provisions of targeting directives, and any specific provisions issued separately. Regardless of storage, dissemination, or application media (hard copy, soft copy, magnetic tape, disk, CD-ROM, electronic, etc.), all target intelligence and TM products distributed to NATO users through the targeting support programs are provided to NATO on a strict "need to know" basis and are only to be handled by those personnel with the necessary clearances.
0316. **Target Intelligence Production.** Target intelligence documents, including TM are not produced in any particular order of precedence, but rather on a set time schedule or on an "as required" basis. Operational TM are only to be held for current operations.

Therefore, all TM not directly related to operational targets will be produced only when required in response to official tasking.

0317. **Target Intelligence Requisition.** SC will provide an extract of the modernised integrated database (MIDB) for input into the integrated command and control joint targeting system (ICC-JTS). Requests for other target intelligence must be made through appropriate command channels using the collection, coordination and intelligence requirements management (CCIRM) process.
0318. **Non-Kinetic Material.** Non-kinetic material are mainly, ECM/EA equipments/assets, PsyOps assets, computer attack equipments/assets, radio/TV broadcast stations. It should be noted the methods to involve in producing accurate non-kinetic solutions require technological development as well as extensive training of the personnel who perform the task. Also for non-kinetic material, non-kinetic solutions are currently produced by national units.

Section VI - Post-Campaign and Operations Activities

0319. During the transition phase of an operation the joint targeting process does not end. There is requirement to collect all available information that enables:
- a. Evaluation and archiving of the full extent of target physical and functional damage;
 - b. Determining the true effectiveness of employed delivery systems and munitions;
 - c. Critiquing and improving the assessment analysis and reporting process; and
 - d. Operations analysis and lessons identified.

CHAPTER 4 - JOINT TARGETING AT THE OPERATIONAL LEVEL

Section I – General

0401. Due to its importance, complexity, and potential political sensitivity, targeting policy and direction is normally retained at the highest practical joint level whilst the authority for the execution of that policy is delegated to the lowest practicable level. The targeting process is governed by the NAC, guided by ACO policy and plans, driven by the JFC direction and guidance and is subject to the relevant international law and ROE. It is usually further constrained by the requirement to ensure that NATO maintains its cohesion by keeping public opinion positive. This chapter describes the military responsibilities for the campaign synchronisation and joint targeting process.

Section II – Strategic to Operational General

0402. **Strategic Commander (SC) Targeting Responsibilities.** The SC should:

- a. Clearly define the objectives of the military operation and which target sets and associated categories the JFC is authorised to approve for attack;
- b. Detail under what circumstances, and by what process, the JFC must seek further authorisation from higher authority for the approval to engage any targets that are accorded special ROE;
- c. Provide the JFC with an integrated database (IDB) on integrated command and control – joint targeting system (ICC-JTS). The IDB is a NATO releasable extract of the USA modernised integrated database (MIDB);
- d. Request the provision of target material for the Joint Operations Area (JOA) from the nations;
- e. Ensure that information about emerging discovered targets is passed to the JFC for inclusion in appropriate databases;
- f. Ensure that requests from subordinate units for target materials are passed to the nations and subsequently supplied national target materials are distributed to those subordinate units that require access to them; and
- g. Assist and advise as required, subordinate formations/units to ensure that they appropriate suitable functional area services with the necessary communications capacity, to support the targeting process.

0403. **JFC Targeting Responsibilities.** The JFC should:

- a. Establish and manage the joint targeting process, including the TST process, within a suitable framework organisation and ensure that this organisation develops all the necessary targets for the campaign;
- b. Submit target sets to the SC to pass to the NAC for pre-approval. The JFC must pass any target sets and/or categories not originally approved, but at a later stage deemed necessary for the campaign, to the SC in order to seek approval from the NAC, or the NAC's delegated representative;
- c. Implement ROE received from the SC;
- d. Request Production of target folders for approved JPTL targets;
- e. Ensure that any national intelligence material, including target material, is only passed to those authorised, and required, to receive it;
- f. Provide information about any emerging targets;
- g. Establish a assessment cell to assess progress toward achieving campaign objectives and provide timely, comprehensive and consolidated assessments reports to the JFC;
- h. Provide clear direction and guidance D&G on targeting issues to subordinate commanders;
- i. Oversee campaign synchronisation and the targeting process and provide a forum, usually the JCB, for component commanders' (CCs') representatives to resolve conflicting issues;
- j. Ensure that all requests for target materials and intelligence received from subordinate components are processed;
- k. Ensure that, in consultation with SHAPE Strategic Direction Centre (SDC) J-6, subordinate formations/units have access to the appropriate functional area services (ICC-JTS, LOCE, etc.), with the necessary communications capacity, to support the targeting process;
- l. Retain authority and responsibility to direct target priorities, relative levels of effort, and the sequence of those efforts to components of the Joint Force; and

m. Provide targeting guidance on weapons munitions usage and restrictions.

0404. **CCs' General Targeting Responsibilities.** CCs will nominate targets inside their Area of Operations (AOO) and will designate target priority, effects, and timing. They may also nominate targets outside their AOOs, indicating target priority, effects, and timing. All these priorities are considered along with JFC's JOA-wide interdiction priorities and are reflected in his apportionment decision. In general terms the CC must perform the following:

- a. **CCs' Targeting Responsibilities to the JFC.** Develop target list and priorities for achieving their objectives in support of JFC objectives. CCs are responsible for providing representatives to the JFC's JCB and providing support to the JTCB and their staff as required by the JFC. CCs must also ensure that requests for clarification and support on targeting issues are passed to the JFC in a timely manner. BDA information must be passed to the JTCB's target support cell and CA information to the JFC's CA Section for fusion with other information sources. CCs are responsible for targeting, weaponeering, and allocation of organic assets for assigned JPTL targets; and
- b. **CCs' Targeting Responsibilities to Formations/Units.** CCs must ensure that all targets passed to formations/units for prosecution meet the legal requirements of the LOAC and comply with the ROE. However, this does not relieve lower echelon commanders and operators from using sound judgement to ensure continued compliance with LOAC and ROE. At all levels of operations, the joint targeting responsibilities should include legal scrutiny and review to ensure compliance with International Law.

0405. **Targeting Responsibilities of the CC Level.** At the CC level tactical forces are organised and tasked to conduct military operations, plan, execute and assess assigned tasks and achieve military objectives. Successful accomplishment of these objectives is designed to contribute to the overall success of the campaign:

- a. Develop target list and priorities for achieving their objectives in support of JFC objectives (via the target nomination process/lists (TNL) process);
- b. Provide representatives to the JCB and provide support to the JTCB and their staff as required by the JFC;
- c. Ensure that requests for clarification and support on targeting issues are passed to the JFC in a timely manner;

- d. Assessment information must also be passed to the JTCB and the JFC for fusion with other information sources;
 - e. CCs are responsible for targeting, weaponeering, and allocation of organic assets for their component targets within their assigned area;
 - f. Ensure that all targets passed to formations/units for prosecution meet the legal requirements of relevant international law and ROE;
 - g. As required, support other CCs in the prosecution of targets in their AOO.
0406. Details of specific component targeting methodologies are covered in appropriate Allied Joint Publications (AJPs) and Allied Tactical Publications (ATPs): AJP-3.1 Maritime Operations, AJP-3.9.2 Land Targeting, AJP-3.3 Joint Air & Space Operations Doctrine, ATP-8 (B) Amphibious Operations, ATP-37 Supporting Arms in Amphibious Operations, AJP-3.5 Joint Special Operations, AJP-3.6 Allied Joint Electronic Warfare Doctrine, AJP-3.10 Allied Joint Doctrine for Information Operations, ATP 44 Electronic Warfare in Air Operations, and Electronic Warfare in the Land Battle.

Section III – Battlespace Framework

0407. The JFC determines and adjusts the AOOs allocated to his CCs and designates supported and supporting relationships as the campaign plan is developed. The JFC will normally designate a main effort in order to mass his forces, accepting an economy of force elsewhere, while retaining the ability to shift his main effort rapidly to take account of the evolving situation. As circumstances change, so the main effort will shift, and it is the speed and poise with which this can be achieved that is the essence of successful joint operations.
0408. Joint fire support can be delivered by air, land, sea, and SOF against surface targets anywhere in the JOA and is usually executed within the boundaries of the land, maritime, or special operations. However, the requirement for joint fire support is not necessarily confined to a land, maritime, or special operations force commanders' AOOs.
0409. Although all component commanders structure their operations in support of the JFC's objectives, their forces usually face competing priorities with limited resources. Guidance from the JFC assists component commanders' planning, coordination, and synchronization of limited fires resources. Additionally, the JFC's organization of forces establishes the supported and supporting relationships essential to synchronizing operations, preventing fratricide, and maximizing the effectiveness of fires.

0410. **Supported and Supporting Relationships.** The supported/supporting relationship principle allows the strengths and capabilities of the headquarters and forces of the military command structure to complement each other to best overall effect. Within a force, components or elements can support or be supported for the achievement of a particular task. Subordinate commanders may be supported and act as supporting commanders concurrently. Supported commander will determine the priority, timing and effects of operations conducted within the assigned AOO. This includes the authority to designate the target priority, effects and timing of fires. The JFC may establish theatre and/or JOA priorities that will be executed across AOOs. If the JFC designates commanders to have theatre and/or JOA wide functions, those commanders have the latitude to plan and execute these JFC prioritized operations and attack targets with other AOOs. However, the commander with a theatre/JOA wide mission must be aware of the ongoing operations within AOOs.

Section IV – Targeting and Synchronization During Operations

0411. **The Joint Coordination Process.** The JFC directs the JCB and under his authority the JCB assigns execution responsibilities, prioritizes, deconflicts and synchronizes all aspects of tactical activities. It ensures that Info Op and the targeting effort are coordinated and focused on the Commander's objectives and follow his direction and guidance. The board is responsible for providing joint objectives to the CCs, for specifying the supported/supporting relationship of the CCs and approving the apportionment of air assets. The JCB will also review target prioritization, restrictions, and allocation for execution. Other responsibilities include:
- a. Review and recommend JFC approval of the Joint Coordination Order (JCO)²⁰, which is executed by the Combined Joint Operations Centre (CJOC).²¹ Resolve any conflicts in the supported/supporting commander relations;
 - b. Provide proposals for JFC decision on the composition of and relationship between CCs, and guidance for formations or units not delegated to subordinate commanders, especially those earmarked as operational reserves;
 - c. Review and recommend JFC approval of all products from the Joint Targeting Coordination Board (JTCB)²², Information Operation Coordination Board (IOCB) and other established working groups; and

²⁰ The JCO provides, in one document, the overall operational focus of the campaign showing the total interaction of all forces and capabilities, lethal and non-lethal, that the JFC has available to complete his mission. The JCO states the JFC's intent, the point of main effort, provides amplifying guidance and coordinating instructions. It includes annexes for the JPTL, TST, Info Ops objectives matrix and any special instructions on restricted targets, joint fires and Info Ops.

²¹ The CJOC synchronizes the short term, out to about 3 days, operations by issuing fragmentary orders to augment the JCO.

- d. Allocate available strategic Intelligence, Surveillance and Reconnaissance (ISR) assets to the appropriate CC for tasking, recommended by the Daily Assets Reconnaissance Board (DARB), and provide oversight on their support to the joint targeting process.

0412. **Joint Targeting Coordination Board.** The JFC may establish and task an organisation to accomplish targeting oversight functions or may delegate the responsibility to a subordinate commander. Typically, the JFC may create a joint targeting coordination board (JTCB) comprised of representatives from the Joint Force Headquarter (JFHQ) and all components of the Joint Force and, if required, national liaison representatives. If the JFC so designates, a JTCB would be an integrating centre providing a macro-level targeting review mechanism.
0413. The JFC defines the role of the JTCB. Typically, the JTCB would review target information, develop targeting guidance, priorities, and may prepare and refine joint target lists for recommendation to the JFC. During operations, the JTCB should also maintain a complete list of restricted targets and areas where special operations Forces (SOF) are operating to avoid endangering current or future operations. The JTCB is the primary agency for the synchronisation and management of the joint targeting efforts. As such they will prepare target lists for joint coordination board (JCB) review and if necessary JFC's approval, maintain the targeting database and coordinate the production of target materials as developed through the application of the targeting process. The typical composition of the JTCB is shown in Figure 4-1.
0414. Campaign integration and synchronisation is an iterative process. The JCO cycle starts with the JCB issuing the JFC's D&G to the components and the JCB supporting groups. The JTCB manages the targeting process by coordinating the targeting inputs of the CCs with additional inputs received from other organisations such as the IOCB. The JTCB selects, harmonizes, nominates and prioritises targets; proposes the desired effects to be created, assigns an executing authority; and develops a draft JPTL for JCB approval.

²² ACO Directive 80-70 Campaign Synchronization and Joint Targeting at ACO currently establishes a joint targeting working group (JTWG)

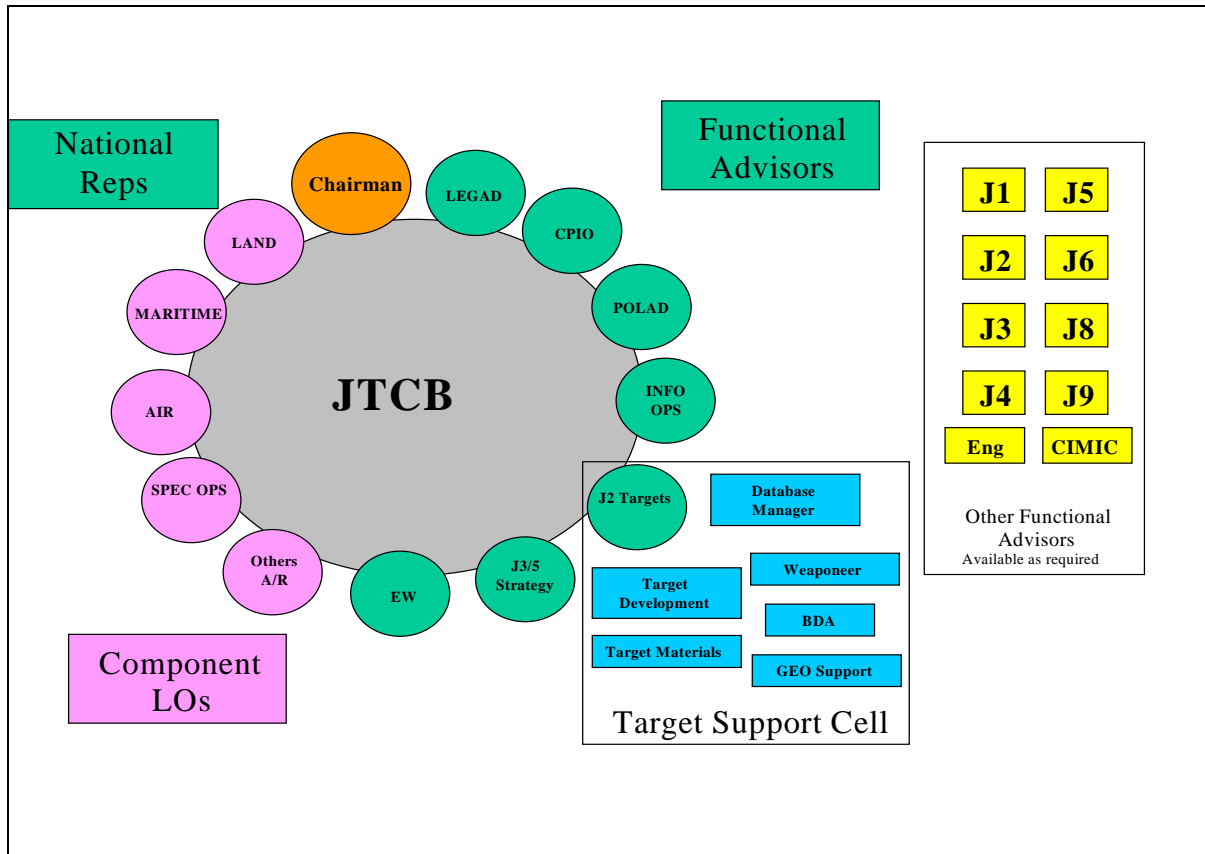


Figure 4.1 - Typical Composition - Joint Targeting Coordination Board

Section V - Target Lists and Databases

0415. **Introduction.** The Integrated command and control – joint targeting system (ICC-JTS) is the tool to manage the NATO targeting process. Populating the ICC-JTS database with the appropriate information enables all the target lists to become merely different outputs from the same database all linked directly to the appropriate target materials for that target. ICC-JTS has only one database from which the JTL for the specific campaign will be derived (if more than one campaign is in operation then each will have its own separate JTL). The JTL will initially be drawn from the US Modernised integrated database (MIDB) (NATO version is the integrated database (IDB)) as a once only cut; thereafter it will live on as a separate NATO database. The JTL is a database from which all other lists will be produced as sub-sets, but importantly they remain linked to the JTL so that updates to the master data are reflected in all sub-lists.

0416. **IDB.** The IDB is a read-only NATO releasable subset of the US MIDB that is updated quarterly. The IDB is a listing of all potential targets within the NATO

Area of Intelligence Interest (All). Under SACEUR direction, nations will provide/contribute their information to the IDB. The IDB serves as the basis for Phase 2 of the Joint Targeting Cycle, and should be kept under constant review to ensure that it can form the basis of an accurate database from which the JTL will be derived at the start of a campaign.

0417. **JTL.** The JTL is managed by the JTCB with oversight maintained for the JFC by the JCB. It provides all fixed targets and some mobile targets within the Area of Operations (AOO) for the campaign. The targets on the JTL are not finally legally cleared against ROE, relevant international law, national and NATO caveats until such time as they are selected for engagement (i.e. nominated for the JPTL). The JTL will be amended through the joint targeting cycle, to include new nominated targets from the components, nations or other agencies. Mobile targets and mobile target sets, prohibited and restricted targets will be highlighted in the database to ensure they are easily and unmistakably identified.
0418. **JPTL.** The JPTL is a list of targets that have been legally scrutinised, risk assessed and have been prioritised in line with campaign objectives by the JTCB. It is derived from the JTL and is the end product of the target development phase(s). The engagement by lethal and non-lethal means of targets on the JPTL is co-ordinated and de-conflicted with all components and relevant organisations of the joint force to ensure synergy of effort and the absence of conflicts.
0419. The JTCB will develop a JPTL and submit it, together with all relevant target data, to the JCB for full review/consideration and JFC's approval. Targets are selected from the JTL based on JFC's guidance. The JPTL should include the proposed means of attack, both lethal and non-lethal, and will be issued as an annex to the JCO. The target prioritization may be modified to reflect changes in the battlespace, or a possible readjustment of objectives. The JPTL will also show the components responsible for engaging the targets and may include recommendations covering the collection of intelligence for the subsequent assessment.
0420. **TNL.** The TNL is a target nomination list from a component, which contains targets prioritised in accordance with the guidance provided by the CC. It is forwarded to the JTCB for consideration. The TNL contains 2 types of targets:
- a. Completely new targets never before included as targets on the JTL that are forwarded for inclusion on the JTL (the ICC-JTS Database Manager will confirm that they are indeed new targets). These targets may also be nominated to the JPTL; and
 - b. Targets already on the JTL being nominated for the JPTL for engagement.

0421. **PTL.** A PTL is a target list derived from the JPTL that allocates prioritized targets to individual components. Each component will have a separate PTL relevant to its allocated targets. A PTL will normally be based on the requested target nominations made by the component itself earlier in the process, but may well also include other targets (or exclude expected targets that have been reallocated or prioritised) that have been allocated in support of other CC during the co-ordination process. Additional co-ordination between components is required to ensure de-confliction and/or synchronization of joint operations.
0422. **Restricted Target List (RTL).** The RTL is a sub-set of the targets on the JTL of which some may be on the JPTL. These targets are lawful targets that are temporarily or permanently restricted from engagement by NATO's own decision-making process. These targets require special consideration, usually where simple destruction is not sought. Special consideration may be warranted because of: the particular sensitivity of the site; the need to de-conflict any proposed action with other activities; the site is assessed to have a significant intelligence value; the wish to use a unique weapon; the desire to exploit the target, or post-conflict reconstruction considerations.
0423. **No-Strike Target List (NSL).** The NSL is a sub-set of the JTL. It is comprised of prohibited targets, which must not be engaged due to protection by relevant international law or for policy reasons as determined by NAC. As such, they must not be engaged until they lose that protection and, consequently, become subject to lawful engagement.

Section VI - Intelligence Support to Joint Targeting

0424. Intelligence supports targeting mainly by locating, identifying and analysing potential targets and target systems in order to identify their value to an adversary and exposing their vulnerabilities. This information can then be used to allocate relative importance to targets, or target elements, in support of operational decisions and the target prioritisation process. Intelligence ensures that the JFC selects targets focussed at the appropriate level. Details of intelligence support to operations are contained in the AJP 2 series of publications. In particular, the details of Joint Intelligence Preparation of the Battlespace (JIPB) are contained in AJP 2.1.
0425. **Intelligence Support to the Joint Targeting Cycle.** Intelligence support is used throughout the joint targeting cycle but is particularly relevant to:
- a. **Phase 1** - Targets are developed once the JFC selects his objectives. Intelligence provides the commander with an understanding of the adversary in terms of probable intent, objectives, strengths, weaknesses, probable course of

actions (COA), most dangerous COA, and critical factors. This is conducted in support of the estimate;²³

- b. **Phase 2** (see Chapter 2) - Critical to the success of the entire targeting process is the establishment of intelligence requirements at all levels,²⁴ which in turn drives the production of collection plans.²⁵ The adversary's systems will be analysed using various methods.²⁶ The ultimate goal of this expansive research is to support COG analysis²⁷ and determine exploitable vulnerabilities of the adversary. This will provide the most efficient method of achieving the JFC's objectives within established constraints and restraints;
- c. **Phase 5** – Intelligence support to targeting for mission planning confirms whether the assessments and decisions made during the target approval process remain valid or not. If not, the original engagement decision must be re-visited. During execution, the situation may change as the adversary responds to the friendly force action. Intelligence support to targeting is vital for the maintenance of situational awareness, targeting for future missions, and post-action assessment; and
- d. **Phase 6** - This is focussed on assessment by gathering information that is critical for the evaluation of measures of effectiveness (MOE) and assessing campaign progress. During this phase the intelligence support to targeting is focussed on gathering information to enable:
 - (1) The evaluation of MOE derived during Phase 1;
 - (2) The combat assessment; and
 - (3) The necessary re-engagement decisions.

²³ AJP-5 Chapter 4

²⁴ AJP-5 para 0426

²⁵ AJP-2

²⁶ AJP-2.1

²⁷ AJP-5 Chapter 4

CHAPTER 5 - TIME SENSITIVE TARGETING

Section I - General

0501. Time sensitive targets (TSTs) are those targets requiring immediate response because they pose (or will soon pose) a danger to friendly operations, or are highly lucrative, fleeting targets of opportunity. TSTs are designated as such by the JFC because their engagement is of a high enough priority to warrant immediate action in order to support campaign objectives. A large proportion of TSTs involve cross-boundary issues and multi-component or joint force assets to find, fix, track, target, engage and assess them. These TSTs need to be prioritised, categorized, coordinated, de-conflicted, and directed for engagement by the joint force. Some examples of potential TSTs could include:

- a. Mobile rocket launchers (MRLs);
- b. Mobile high threat surface-to-air missile systems (SAMs);
- c. Mobile C2 vehicles and facilities;
- d. Naval vessels, military or civilian which pose a threat and demand an immediate action to neutralize;
- e. Loaded transporter, erector, launchers (TELs);
- f. Deployed theatre ballistic missiles (TBMs);
- g. Weaponized WMD assets;
- h. Previously unidentified C2 nodes (requiring an immediate Info Ops response);
- i. Fixed targets (e.g. a previously untargeted bridge that is about to be crossed by an enemy armoured counterattack force rapidly becomes time-sensitive);
- j. Terrorist leadership; and
- k. Mobile radio/TV broadcast stations.

0502. Successfully engaging TSTs requires centralized planning and decentralized execution. Centralized planning occurs at the joint force level with JFC guidance and intent, target prioritisation, and establishing the criteria for what constitutes a TST and the actions to be taken against them. Decentralized execution consists of delegating

engagement authority to joint force component commands—either directly, or through joint force target coordinating agencies. Other keys to successful TST engagement include:

- a. Clear and detailed NAC and SC guidance, including pre-approved TST categories;
- b. Specific objectives and guidance from the JFC regarding TSTs;
- c. Robust communications to provide near real time capability to support TST operations;
- d. A capability to share relevant, timely information about targets, surrounding threats, and CD assessments. The information must be presented in a format that will facilitate rapid decision-making;
- e. Updated ISTAR information and a common operating picture (COP) must be shared between echelons;
- f. C2 procedures and systems in place to allow the decentralized execution of TST, while providing simultaneous synchronization and de-confliction throughout the entire JOA; and
- g. Clear and detailed procedure to attain approval to engage unanticipated TSTs.

0503. **Structure to Prosecute TST.** While overall responsibility for TSTs remains with the JFC, there are several options with which to structure C2 to support TST prosecutions. The JFC and CCs will establish a TST Cell at their respective HQs. The JFC will designate the targeting cell, best suited to the task, as the overall TST coordination element (TCE). While airpower is well suited to TSTs engagement, making combined air operations centres (CAOCs), either on land or afloat, the usual choice to coordinate their engagement, the JFC may want to place the TCE with a different Component Commander (CC) or retain it at joint force HQ. The broad options are:

- a. **JFC TST Coordination Element (TCE).** The JFC may establish a TCE in the J3 to provide oversight for the TST process. The TCE within the Joint Operations Centre will supervise, coordinate ongoing operations, adjudicate or arbitrate component problems in accordance with JFC direction and guidance, ROE, and LOAC. The TCE is the single point of contact at the JFC level for any TST related component activities or questions;

- b. **TST Team.** The JFC may also maintain a deployable JFC TST Cell, which may remain collocated with the JFC HQ or deploy to a JFC designated component, as the nucleus of a larger TST cell and be embedded in that component's current operations cell; and
- c. **TST Lead Component.** A component may be designated as the TST lead if it has the best information or situational awareness to prosecute TSTs. The JFC will normally embed his deployable TST Cell within a lead component's current operations section.

0504. Other Considerations

- a. **Compressed Decision Cycle.** Successful TST engagement requires a significantly time compressed targeting cycle though each individual step thereof is still performed. Compression is achieved through appropriate C2 mechanisms and detailed prior planning and coordination. Prior planning should include the production of a TST matrix. Compression does not imply application of less rigor or the skipping of various process steps. Clear guidance on what constitutes a TST and engagement criteria are essential to aid in the use of IPB and intelligence surveillance reconnaissance (ISR) assets;
- b. **Intelligence Preparation of the Battlespace (IPB).** IPB is used to identify the probable locations or operating areas where TSTs may emerge. Depending on the seriousness of the threat, resources available, and level of confidence in the IPB, component commanders may elect to position or posture target acquisition and strike assets to rapidly respond to the forecasted areas. During execution planning, intelligence closely monitors target status in order to update final planning before execution;
- c. **Risk Assessment.** Within the compressed decision cycle, commanders should conduct a risk assessment that considers the level of risk to the force (to include fratricide and diversion of resources from other assigned tasks), to mission accomplishment, the CDE and to the contribution to the campaign objectives; and
- d. **Component Critical Targets.** A component-critical target (CCT), while not a TST, is a target designated by one or more CCs that may require "time-sensitive" treatment, which are of concern primarily to the CCs (vital to their schemes of manoeuvre or immediately threatening their forces, for instance). CCTs are composed of high-value targets (HVT) and high-payoff targets (HPT). CCTs can be prosecuted by or between components, or passed to the joint

force commander where they may be handled in accordance with time sensitive procedures or passed to deliberate planning.

Section II – Time Sensitive Target Process

0505. **JFC Guidance.** The JFC designates TSTs, stating exactly what constitutes one, and provides guidance on targeting priorities. Only the TSTs within target categories approved by the NAC will be prosecuted. Targets that do not fall within the target categories approved by the NAC will be forwarded by the JFC onwards for NAC approval. The JFC guidance should clearly define the TST coordination procedures between the components, applicable ROE, any restrictions including CD considerations and reporting conditions. Elements that should be included in the JFC guidance are:
- a. **TST Priorities.** The JFC, in coordination with the components, identifies and prioritises TSTs. The highest priority should be allocated to those targets that require immediate engagement because they pose an immediate and significant threat to friendly forces or those persons or facilities under the protection of NATO. Priorities must be allocated to establish precedence when tasking assets away from pre-planned targets. JFC should limit the amount of TST categories or the priorities become meaningless;
 - b. **Engagement Approval Authority.** The JFC must balance strategic impact, CC's AOO and assigned functional missions, with the requirement to rapidly strike TSTs when assigning TST engagement approval authority. Ideally, execution approval authority is delegated to the lowest level possible while maintaining the ability to command, control and coordinate the TST operation; this is normally the component level. However, political and other considerations may require retaining engagement approval authority at the JFC;
 - c. **Positive Identification (PID).** The JFC establishes requirements for PID prior to TST execution. Different TST types, or the location of the TST (such as in an urban area) may require data from multiple sensors in order to achieve the confidence level required for the JFC to authorize an attack;
 - d. **Rules of Engagement.** The JFC ROE for TST must be in accordance with the Law of Armed Conflict (LOAC), but may have national caveats, additional restrictions, or considerations depending on the situation;
 - e. **Collateral Damage.** The JFC will define parameters and a CDE process to be implemented – there may be national caveats as well (like for ROE), and the CC

will determine processes to be followed. Components will develop procedures to ensure compliance with JFC CD guidance;

- f. **Command and Control and Coordination Requirements.** The JFC establishes specific guidance on how C2, coordination, de-confliction, integration and synchronization will occur amongst components; and
- g. **Acceptable Risk.** JFC's guidance should stipulate the degree of acceptable risk when engaging specific TSTs. Specific TSTs may be such a threat to the force or to mission accomplishment that the JFC is willing to accept a higher level of risk and collateral damage and attack the target immediately upon its detection. The risk associated with TSTs involves the possible trade-off of diverting ISR and/or attack assets from its planned mission to that of a TST. Risks must be balanced against a target's window of vulnerability.

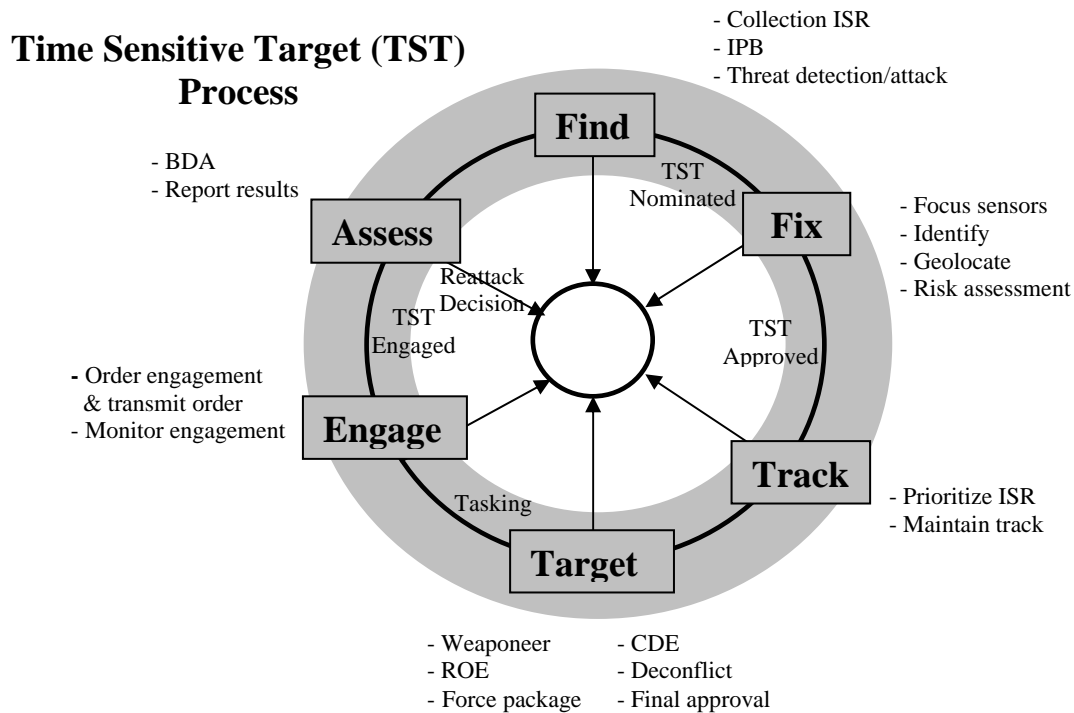


Figure 5.1 – Time Sensitive Target (TST) Process

0506. **F2T2EA Process.** Within the dynamic targeting process, including TST prosecution, there are six steps; find, fix, track, target, engage and assess (F2T2EA). F2T2EA is a deliberate process based on previously determined information that can be stored in readily accessible databases for immediate retrieval. With access to the right

information systems, much of the pre-mission planning and portions of the targeting process can be completed beforehand, in collaboration with other forces, and stored for later retrieval to effectively compress the targeting sequence for TSTs. Final engagement planning that can not be completed until target details are known (i.e., identification and location) can be done in parallel using near-real-time (NRT) information sharing to further compress planning-to-execution timelines. The F2T2EA process involves:

- a. **Find.** This step involves the intelligence collection process of IPB, traditional ISR (collection) and non-traditional ISR (i.e. aircraft targeting pod, radar warning receiver (RWR) indication, SOF), and recognizes initial detection of a potential TST. Potential TSTs, when detected, trigger actions to determine whether or not the particular event warrants further attention or deviation from the existing plan, and leads to initiation of the TST targeting cycle. The output of the find step is a TST nomination for further refinement;
- b. **Fix.** Sensors identify and geo-locate a TST (typically via cross-cuing and intelligence fusing) and allow an initial risk assessment. The output of the Fix step is an approved geo-located TST in accordance with JFC guidance;
- c. **Track.** During the Track step, sensors are prioritized and track of the TST is maintained. Tracking is a continuous process and runs from the Fix step to the successful prosecution of the target and its assessment;
- d. **Target.** Restrictions including CDE, ROE, restricted/prohibited targets of the JTL or JPTL, and deconfliction are satisfied during the target step. This step aligns engagement capabilities with the desired effect, completes a risk assessment, and determines required force packaging. Final approval for TST engagement is made during the target step, and the output is a tasking to the selected component engagement system;
- e. **Engagement.** During the engagement phase, the TST engagement is ordered and transmitted to the selected engagement system. The engagement is monitored, and the output is the actual target engagement; and
- f. **Assessment.** During the assess phase the collection BDA and assessment of information about the results of the TST engagement is conducted to determine whether the objectives have been achieved or the desired effects have been created. The output of the assess step is confirmation of mission success or a re-attack decision.

0507. **Command Responsibilities.** The following are the general responsibilities with regard to TST in a joint force:

a. **JFC:**

- (1) Analyses and recommends target categories for NAC approval;
- (2) Approves TST matrix developed by the JTCB (Figure 5.2 contains sample TST Matrix);
- (3) Designates and prioritises TSTs;
- (4) Issues TST guidance and delegation of authority for TSTs to CCs; and
- (5) Within the JOA, the JFC will assign battlespace to CCs, within which they have responsibility for TSTs.

b. **JFC Director Of Intelligence (J-2):**

- (1) Intelligence development on targets/target sets designated as TSTs by JFC;
- (2) Alerts JFC TST cell to potential TSTs for immediate attack;
- (3) Assesses the effectiveness of ISR collection plans with regard to TST priorities and recommends appropriate adjustments; and
- (4) Coordinates TST IPB effort with other J-Divisions.

c. **JFC Director Of Operations (J-3):**

- (1) Promulgates and executes the JFC's guidance for TST operations;
- (2) Establishes a TCE and JFC TST cell;
- (3) Initiates NAC approval for new TST target categories submitted by component, headquarters, or non-NATO entities;
- (4) Ensures TCE and JFC TST cell are correctly manned, trained, and equipped; and
- (5) Provides requirements to J-6 for C2 architecture and collaborative tools.

- d. **JFC TCE:**
- (1) Drafts TST guidance and priorities for JFC approval and incorporation into the JCO;
 - (2) Ensures compliance with approved JFC guidance;
 - (3) If applicable, coordinates TST operations with entities outside NATO command authority;
 - (4) Facilitates timely approval for engagement of targets requiring JFC or higher authority;
 - (5) Arbitrates conflicting TST requirements between components; and
 - (6) Provides TST expertise to the JFC.
- e. **CC.** TSTs will normally be prosecuted by the component that has responsibility for operations within its AOO. If a JFC designated TST within a component's AOO is detected, the CC will report the initiation of processing and may independently prosecute the TST with organic/direct support assets. If unable to prosecute a TST the component may request support from another component. Via the collaborative network, the JFC TST cell and other component TST cells have visibility of the processing of the TST. Any TST cell may offer other solutions/assets via the collaborative network, and coordinate with the JFC TST cell. The CC remains responsible for engagement de-confliction within his AOO. The TCE monitors all potential TST prosecutions and monitors, arbitrates, and coordinates issues that may arise in cross-component AOO actions.
- (1) On order, components plan, posture, and execute TST operations as tasked by JFC based on JFC D&G);p
 - (2) Establishes a TST function to coordinate with the JFC's TST cell and designated TCE;
 - (3) Reviewing all TSTs against JFC D&G to determine execution authority;
 - (4) Reporting processing of JFC designated TSTs; and

- (5) Coordinating with JFC TST cell or the designated TCE for TSTs requiring coordination between two or more components or requiring JFC action in accordance with D&G.

NOTIONAL JFC TST DECISION MATRIX						
EFF DATE/TIME:						
JFC Priority	TST Target Type	Approval Authority	Additional Restrictions (1)	Acceptable Risk Level	Other Requirements or Notes	Desired Effects
1	Impending SCUD Missile Launch	On-scene Commander		High (2)	Strike immediately with any asset. Package recommended , but will go without if required.	Launch interrupted . Launcher neutralized .
2	Adversary National Leadership	JFC		High	Notify JFC immediately & maintain sensor track. Package recommended / threat dependent	Capture
3	WMD Transport	JFC		Med	Plume analysis required. Package required	Destruction
4	Unlocated Strategic SAMs	Component		Low	SEAD required	Destruction

- 1 - Normal ROE and CDE procedures apply to all targets.
 2 – JFC will accept increased risk of fratricide and collateral damage.

Figure 5.2 Example of a Time sensitive Target (TST) Matrix

Section III – Means to Engage Time Sensitive Targets

0508 **Targeting and Engagement Capabilities and Limitations.** Generally, the primary engagement systems suitable for TST prosecution in an operational area are fixed-wing aircraft, attack helicopters, army tactical missile system (ATACMS), multi-rocket launch system (MRLS), conventional artillery, cruise missiles, naval surface fire support (NSFS), and SOF. This generality does not preclude the TST cell from considering and applying non-kinetic means to achieve the desired results. Determination of the most appropriate TST asset begins during the target step and continues through to engage step. Time permitting each component provides recommendations highlighting the pros and cons of their available weapon systems based upon the current situation. The JFC also provides guidance to CCs to allow them the flexibility to make the proper decision regarding rapid selection of most appropriate engagement capability. Each of the different weapon systems has associated pros and cons regarding; effectiveness against different target types, responsiveness, range, accuracy, vulnerability to adversary threat, and associated risks of employment.

0509. **Find, Fix, Track and Assessment of TSTs – ISTAR Capabilities and Limitations.**

- a. **Sensors.** Various sensors, both manned and unmanned, can detect, identify, track and assess TSTs. These sensors are very specific and generally require cross cueing to each other or with other available intelligence to provide identification. In order to effectively employ ISTAR sensors and systems the TST cell must know what is available, what products are provided by the available systems, what the capabilities and limitations of each sensor and system are and where to access the information. Ideally multiple sensors and ISTAR products need to be available for effective engagement of TSTs; and
 - (1) **Manned Systems.** Manned airborne sensors are generally more flexible than other platforms as the “man in the loop” allows for direct contact and re-tasking when required. Manned platforms require a high degree of security, such as air supremacy or protection in the form of dedicated combat air patrol, when operating in a potentially hostile AOO. The TST cell must understand the capabilities, limitations and level of risk tolerance of each available ISTAR platform in order to re-task it;

- (2) **Unmanned Aerial Vehicles (UAVs).** UAVs may be equipped with the same range of sensors as available on manned airborne sensors. Some UAVs are armed and can bring immediate ordnance to bear on TSTs. They are a very useful asset to provide surveillance of heavily defended areas or in areas that have unknown threat level. They may be redirected if required, may possess long loiter times, and may provide real-time feedback (system dependent). It is critical that the TST cell know where to access the UAV information (both real time and analysed) and how to task the platform. The relatively small size of UAVs may limit the size of the mission sensor package and may not provide the same level of coverage that is available on larger manned platforms;
- (3) **Space Based Sensors.** Space-based sensors provide long-term, large and small area surveillance with excellent resolution and with minimal vulnerability to adversary actions. Depending on orbit and positioning, they may suffer gaps in surveillance periods and may be difficult to retask to a new surveillance area. By its nature, satellite coverage schedules are predictable and the adversary can adjust activities to avoid detection. The two primary problems associated with space-based sensors are releasability and timeliness. Because these systems are closely held national assets, releasability is a problem in the dissemination of real time and “unsanitized” data and information. As a result, the TST cell may not get reports until long past the window for TST engagement. In many cases the raw imagery and/or data that precipitated intelligence may not be provided while the sanitized intelligence is made available. Responsiveness to tasking is not a feature of space-based systems. As a result, real time data from space systems will probably not be available for TST operations. However, as a source of cross cueing, intelligence and imagery (if available) from space based sensors may be invaluable for cueing current ISTAR manned and UAV systems operating in real time within the AOO; and
- (4) **Ground Based Sensors.** Ground (land and maritime) based sensors such as acoustic, seismic, electromagnetic spectrum (including infrared (IR) and electro-optics (EO)) sensors are part of an overall collection effort mostly managed within the land and maritime component. These systems serve tactical commanders and are virtually impossible to re-task. However, their data and information may be invaluable in the cueing of other ISTAR assets and in the identification of TSTs within the AOO.

- b. **Other Intel Sources.** Other intelligence sources, such as open source and human intelligence (HUMINT), as well as the cyber domain may provide cueing and or identification for the TST process as well.

ANNEX A

NATO TARGET SETS

A001. Target Sets are delineated by type and do not differentiate between military and civilian installations. Civilian installations may only be targeted if they are legitimate military targets in accordance with the Law of Armed Conflict (LOAC). Target Sets that are to be approved only for non-lethal means of attack should be annotated as such; for example, "General Public" may be subject to a Psychological Operations (PsyOps) campaign.

<u>Target Sets</u>	<u>Abbreviated Title</u>
Command, Control, Communication, Computers, and Intelligence	C4I
Weapons of Mass Destruction	WMD
Ground Forces and Facilities	GFF
Air Forces and Airfields	AFA
Air Defence	ADF
Naval Forces and Ports	NFP
Space Forces	SPF
Ballistic Missiles	MSL
Electric Power	PWR
Petroleum Industry	POL
Industry	IND
Transportation/Lines of Communication	LOC
Military Supply and Storage	MSS
Special Category	SCT
Military Leadership	MLS
Political Leadership	PLS
Economic Leadership	ELS
General Public	GEP
Adversary Media	AM

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LEXICON**PART I – ACRONYMS AND ABBREVIATIONS**

ACO	Allied Command Operations
ADF	Air Defence (target set)
AFA	Air Forces and Airfields (target set)
All	Area of Intelligence Interest
AJP	Allied Joint Publication
AM	Adversary Media (target set)
AOC	Air operations centre
AOO	Area of Operations
ATACMS	Army tactical missile system
ATO	Air tasking order
ATP	Allied Tactical Publication
BDA	Battle damage assessment
C2	Command and Control
C4I	Command, Control, Communications, Computers and Information (target set)
CA	Combat assessment
CAOC	Combined air operations centre
CC	Component command or component commander
CCIRM	Collection coordination and intelligence requirements management
CCT	Component critical target
CD	Collateral damage
CDE	Collateral damage estimation
CIMIC	Civil-military cooperation
CIS	Communication and information systems
CJOC	Combined Joint Operations Centre
CJTF	Combined Joint Task Force
COA	Course of actions
COG	Centres of gravity
CONOPS	Concept of operations
CONPLAN	Contingency plan
COP	Common operational picture
CPIO	Chief public information officer
CRP	Crisis response planning
D&G	Direction and guidance
DARB	Daily Asset Reconnaissance Board
DP	Decisive point
DPC	Defence Planning Committee

EA	Electronic attack
EBAO	Effects-based approach to operations
ECM	Electronic countermeasures
ELS	Economic Leadership (target set)
EO	Electro-optics
EW	Electronic warfare
F2T2EA	Find, fix, track, target, engage and assess
GEP	General Public (target set)
GFF	Ground Forces and Facilities (target set)
HPT	High-payoff target
HQ	Headquarters
HUMINT	Human intelligence
HVT	High-value target
ICC	Integrated command and control
IDB	Integrated database
IND	Industry (target set)
Info Op(s)	Information Operation(s)
Intel	Intelligence
IOCB	Information operations coordination board
IPB	Intelligence preparation of the battlespace
IR	Infrared
ISR	Intelligence surveillance reconnaissance
ISTAR	Intelligence surveillance target acquisition reconnaissance
JCB	Joint coordination board
JCO	Joint coordination order
JFC	Joint force command(er)
JFHQ	Joint Force Headquarter
JIPB	Joint intelligence preparation of the battlespace
JOA	Joint operations area
JPTL	Joint prioritized target list
JTC	Joint targeting cycle
JTCB	Joint targeting coordination board
JTL	Joint target list
JTS	Joint targeting system
JTWG	Joint Target Working Group
LEGAD	Legal advisor

LO	Liaison officer
LOAC	Law of Armed Conflict
LOC	Transportation/Lines of Communication (target set)
LOCE	Linked operational intelligence centres, Europe
MC	Military Committee
MIDB	Modernised integrated database
MLS	Military Leadership (target set)
MOE	Measures of effectiveness
MPF	Multinational protection force
MRL	Mobile rocket launcher
MRLS	Multi-rocket launch system
MRO	Military response option
MSL	Ballistic missiles (target set)
MSS	Military Supply and Storage (target set)
NAC	North Atlantic Council
NATO	North Atlantic Treaty Organization
NFP	Naval Forces and Ports (target set)
NRT	Near real-time
NSA	NATO Standardization Agency
NSFS	Naval surface fire support
NSL	No-strike target list
O&G	Objectives and guidance
OPLAN	Operation plan
OPP	Operational planning process
OPSEC	Operations security
PID	Positive identification
PLS	Political Leadership (target set)
POL	Petroleum Industry (target set)
POLAD	Political advisor
PsyOp(s)	Psychological operation(s)
PTL	Prioritised target list
PWR	Electrical Power (target set)
RFI	Requests for information
ROE	Rules of engagement
RTL	Restricted targets list
RWR	Radar warning receiver
SACEUR	Strategic Allied Commander, Europe

SAM	Surface-to-air missile
SC	Strategic command (commander)
SCT	Special Category (target set)
SDC	Strategic direction centre
SDP	Standing defence plan
SEAD	Suppression of enemy air defences
SHAPE	Supreme Headquarters Allied Powers Europe
SOF	Special operations forces
SPF	Space Forces (target set)
TBM	Theatre ballistic missile
TCE	TST coordination element
TEL	Transporter erector-launcher
TM	Target material
TNL	Target nomination lists
TSA	Target system analysis
TST	Time sensitive targets
TV	Television
UAV	Unmanned aerial vehicle
WEA	Weapons effectiveness assessment
WM	Weapon engineering material
WMD	Weapon of mass destruction

LEXICON

PART II – TERMS AND DEFINITIONS

area of intelligence interest

That area concerning which a commander requires intelligence on those factors and developments likely to affect the outcome of his current or future operations. (AJODWP 96)
See also area of intelligence responsibility.

area of intelligence responsibility

An area allocated to a commander in which he is responsible for the provision of intelligence, within the means at his disposal. *See also area of interest; joint operations area; area of responsibility.* (AAP-6)

area of interest

The area of concern to a commander relative to the objectives of current or planned operations, including his areas of influence, operations and/or responsibility, and areas adjacent thereto. *See also area of operations, area of responsibility.* (AAP-6)

area of operations

That portion of an operational area necessary for military operations and for the administration of such operations. (AJODWG 00) Note that AAP-6 refers to 'an area of war'; an amendment is to be sponsored by the US.

area of responsibility

The geographical area assigned to the Supreme Allied Commander Strategic Command Europe. (AAP-6)

battle damage assessment

The assessment of effects resulting from the application of military action, either lethal or non-lethal, against a military objective. (AAP-6)

battlespace

The environment, factors, and conditions that must be understood to successfully apply combat power, protect the force, or complete the mission. This includes the air, land, sea, space environments, the included enemy and friendly forces, facilities, weather, terrain, the electromagnetic spectrum and the information environment within the operational areas and areas of interest.

campaign

A set of military operations planned and conducted to achieve a strategic objective within a given time and geographical area, which normally involve maritime, land and air forces. (AAP-6)

centre of gravity

Characteristics, capabilities, or localities from which a nation, an alliance, a military force or other grouping derives its freedom of action, physical strength, or will to fight. (AAP-6)

collection

The exploitation of sources by collection agencies and the delivery of the information obtained to the appropriate processing unit for use in the production of intelligence. (AAP-6)

combined

Adjective used to describe activities, operations and organisations in which elements of more than one nation participate. *See also multinational.* (AAP-6)

combined joint task force

A Combined Joint Task Force is a multinational (combined) and joint task force, task-organised and formed for the full range of Alliance's military missions, which Commander Combined Joint Task Force commands from a multinational and joint headquarters. The joint task force may include elements from non-NATO troop contributing nations. (MC 389/1) See *Joint Force Commander for definitions of component commanders*.

command of the sea

The freedom to use the sea and to deny its use to an adversary in the sub-surface, surface and above water environments. (AAP-6)

communications and information system

Assembly of equipment, methods and procedures, and if necessary personnel, organised so as to accomplish specific information conveyance and processing functions. *Also referred to as CIS; see also command, control and information system.* (AAP-6)

concept of operations

A clear and concise statement of the line of action chosen by a commander in order to accomplish his mission. (AAP-6)

conduct of operations

The art of directing, coordinating, controlling and adjusting the actions of forces to achieve specific objectives. (AAP-6)

control

That authority exercised by a commander over part of the activities of subordinate organisations, or other organisations not normally under his command, which encompasses the responsibility for implementing orders or directives. All or part of this authority may be transferred or delegated. *See also administrative control, operational control, tactical control.* (AAP-6)

co-ordinating authority

The authority granted to a commander or individual assigned responsibility for co-ordinating specific functions or activities involving forces of two or more countries or commands, or two or more services or two or more forces of the same service. He has the authority to require consultation between the agencies involved or their representatives, but does not have the authority to compel agreement. In case of disagreement between the agencies involved, he should attempt to obtain essential agreement by discussion. In the event he is unable to obtain essential agreement he shall refer the matter to the appropriate authority. (AAP-6)

course of action

In the estimate process, an option that would accomplish or contribute to the accomplishment of a mission or a task, and from which a detailed plan is developed. (AAP-6)

decisive point

A point from which a hostile or friendly centre of gravity can be threatened. This point may exist in time, space or in the information environment. (AAP-6)

direct action

A short-duration strike or other small scale offensive action by special operations forces or special operations capable units to seize, destroy, capture, recover or inflict damage to achieve specific, well-defined and often time sensitive results. 1/10/2001 (AAP-6)

dissemination

The timely conveyance of intelligence, in an appropriate form and by any suitable means, to those who need it. (AAP-6)

electronic attack (EA)

Electronic attack (EA) is the subdivision of EW involving the use of electromagnetic, DE, or anti-radiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability and is considered a form of fires. EA includes actions taken to prevent or reduce an enemy's effective use of the EMS, such as jamming and electromagnetic deception, and employment of weapons that use either electromagnetic or directed energy as their primary destructive mechanism. (AJP-3.6)

electronic countermeasures

That division of Electronic Warfare involving actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum through the use of electromagnetic energy. There are three subdivisions of electronic countermeasures: electronic jamming, electronic deception and electronic neutralization. (AAP-6)

electronic jamming

The deliberate radiation, reradiation or reflection of electromagnetic energy with the object of impairing the effectiveness of hostile electronic devices, equipment or systems. (AAP-6)

electronic neutralization

In electronic countermeasures, the deliberate use of electromagnetic energy to either temporarily or permanently damage enemy devices which rely exclusively on the electromagnetic spectrum. (AAP-6)

electromagnetic spectrum

The entire and orderly distribution of electromagnetic waves according to their frequency or wavelength. The electromagnetic spectrum includes radio waves, microwaves, heat radiation, visible light, ultraviolet radiation, x-rays, electromagnetic cosmic rays and gamma rays. (AcomP-01)

end-state

The political and/or military situation to be attained at the end of an operation, which indicates that the objective has been achieved. (AAP-6)

fires

The effects of lethal and non-lethal weapons. (AJOD WG 98)

information operations (Info Ops)

Info Ops are coordinated and synchronized actions to create the desired effects on the will, understanding and capability of adversaries, potential adversaries and other NAC approved parties in support of the Alliance overall objectives by affecting their information, information-based processes and systems while exploiting and protecting one's own. (MC 422)

intelligence

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

intelligence preparation of the battlespace

A systematic and continuous process of analysis of adversary/targeted force doctrine, order of battle, weather and terrain matched against the friendly commander's mission in order to determine and evaluate the threat's/targeted force's capabilities, intentions and vulnerabilities.

interdiction

An action to divert, disrupt, delay or destroy the enemy's military potential before it can be used effectively against friendly forces. (US Joint Pub 3-0)

joint

Adjective used to describe activities, operations, organisations in which elements of at least two services participate. *See also combined.* (AAP-6)

joint force commander

A general term applied to a commander authorised to exercise command authority or operational control over a joint force. (AJOD WG 98).

For the purpose of joint operations, component commanders may be appointed as follows:

joint force air component commander

A commander, designated by the JFC or higher authority, who would be responsible for making recommendations to the JFC on the employment of air forces and assets, planning and co-ordinating air operations and accomplishing such operational missions as may be assigned to him. The joint force air component commander is given the authority necessary to accomplish missions and tasks assigned by the designating commander.

joint force land component commander

A commander, designated by the JFC or higher authority, who would be responsible for making recommendations to the JFC on the employment of land forces and assets, planning and co-ordinating land operations and accomplishing such operational missions as may be assigned to him. The joint force land component commander is given the authority necessary to accomplish missions and tasks assigned by the designating commander.

joint force maritime component commander

A commander, designated by the JFC or higher authority, who would be responsible for making recommendations to the JFC on the employment of maritime forces and assets, planning and co-ordinating maritime operations and accomplishing such operational missions as may be assigned to him. The joint force maritime component commander is given the authority necessary to accomplish missions and tasks assigned by the designating commander.

joint force special operations component commander

A commander, designated by the JFC or higher authority, who would be responsible for making recommendations to the JFC on the employment of special operations forces and assets, planning and co-ordinating special operations and accomplishing such operational missions as may be assigned to him. The joint force special operations component commander is given the authority necessary to accomplish missions and tasks assigned by the designating commander.

joint prioritised target list (JPTL)

Once the JTL is expanded with the addition of targets drawn from the component operations plans, it becomes the Joint Integrated target List (JITL). Once the JITL has been approved, it is prioritised and becomes the JPTL. The JPTL is the basis for the weaponeering process that links weapons to targets.

joint operations area

A temporary area defined by a NATO strategic or regional commander, in which a designated joint commander plans and executes a specific mission at the operational level of war.

Note: It is defined in co-ordination with nations and approved by the North Atlantic Council or the Military Committee as appropriate, in accordance with NATO's Operational Planning Architecture. A joint operations area and its defining parameters, such as time, scope of the mission and geographical area, are contingency- or mission-specific and may overlap areas of responsibility. *See also area of responsibility; operational level of war. (AAP-6)*

joint target list (JTL)

The JTL is the primary target list for supporting a particular operation. It represents the compendium of available targets for the creation of strategic and operational effects that could be attacked in pursuit of the operational objectives.

joint targeting

Joint targeting is the process of determining the effects necessary to achieve the commander's objectives, identifying the actions necessary to create the desired effects based on means available, selecting and prioritizing targets and the synchronization of fires with other military capabilities and then assessing their cumulative effectiveness and taking remedial action if necessary.

measures of effectiveness

Tools used to measure results achieved in the overall mission and execution of assigned tasks.

mission

1. A clear, concise statement of the task of the command and its purpose.
2. One or more aircraft ordered to accomplish one particular task. (AAP-6)

multinational

Adjective used to describe activities, operations and organisations in which elements of more than one nation participate. *See also combined.* (AAP-6)

NATO military authority

Any international military headquarters or organization covered by the Protocol on the Status of International Military Headquarters set up pursuant to the North Atlantic Treaty, (called the Paris Protocol) and any other military authority to which the NATO Council has applied the provisions of the Agreement on the Status of the North Atlantic Treaty Organization, National Representatives and International Staff (called the Ottawa Agreement) by virtue of the said Agreement. (AAP-6)

No-Strike Target List (NSL)

It is a sub-set of the Joint Targeting List. It is comprised of prohibited targets which must not be engaged due to protection by international law or for policy reasons as determined by the NAC. (MC 471/1, 19 March 2007)

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. Related term: target1. 6/1/06 (AAP-6)

operation

A military action or the carrying out of a strategic, tactical, service, training, or administrative military mission; the process of carrying on combat, including movement, supply, attack, defence and manoeuvres needed to gain the objectives of any battle or campaign. (AAP-6)

operation order

A directive, usually formal, issued by a commander to subordinate commanders for the purpose of effecting the co-ordinated execution of an operation. (AAP-6)

operation plan

A plan for a single or series of connected operations to be carried out simultaneously or in succession. It is usually based upon stated assumptions and is the form of directive employed by higher authority to permit subordinate commanders to prepare supporting plans and orders. The designation 'plan' is usually used instead of 'order' in preparing for operations well in advance. An operation plan may be put into effect at a prescribed time, or on signal, and then becomes the operation order. (AAP-6)

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 control as may be deemed necessary. It does not of itself include responsibility for administration or logistics. May also be used to denote the forces assigned to a commander. (AAP-6)

operational control

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

operational level of war

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

operations security

The process which gives a military operation or exercise appropriate security, using passive or active means, to deny the enemy knowledge of the dispositions, capabilities and intentions of friendly forces. (AAP-6)

processing

The production of intelligence through collation, evaluation, analysis, integration and interpretation of information and/or other intelligence. (AAP-6)

prohibited targets

Prohibited targets are protected against attack by relevant international law and various other protocols and treaties. They are listed in the No-Strike target list (NSL). As such, they will

remain prohibited until they lose that protection and, consequently, become subject to lawful attack.

public information (PI)

PI is information released or published for the primary purpose of keeping the public fully informed, thereby gaining their understanding and support. (AAP-6)

restricted targets

Restricted targets are lawful targets that are temporarily or permanently prohibited from engagement by NATO's own decision-making process. These targets require special consideration, usually where simple destruction is not sought. Special consideration may be warranted because of: the particular sensitivity of the site; the need to de-conflict any proposed action with other activities; the site is assessed to have a significant intelligence value; the wish to use a unique weapon; the desire to exploit the target; or post-conflict reconstruction considerations. (MC 471/1, 19 March 2007)

restricted target list (RTL)

The RTL is a sub-set of the targets on the JTL of which some may be on the JPTL. These targets are lawful targets that are temporarily or permanently restricted from engagement by NATO's own decision-making process. These targets require special consideration, usually where simple destruction is not sought. Special consideration may be warranted because of: the particular sensitivity of the site; the need to de-conflict any proposed action with other activities; the site is assessed to have a significant intelligence value; the wish to use a unique weapon; the desire to exploit the target, or post-conflict reconstruction considerations. (MC 471/1, 19 March 2007)

rules of engagement (ROE)

Directives issued by competent military authority which specify the circumstances and limitations under which force will initiate and/or continue combat engagement with other forces encountered. (AAP-6)

support

The action of a force, or portion thereof, which aids, protects, complements, or sustains any other force. (AAP-6)

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. *See also supporting commander.* (AAP-6)

supporting commander

A commander who provides a supported commander with forces or other support and/or who develops a supporting plan. *See also supported commander.* (AAP-6)

supporting plan

An operational plan prepared by a supporting or subordinate commander to satisfy the requirements of the supported or superior commander. (AJODWG 00)

suppression enemy air defence (SEAD)

That activity which neutralizes, temporarily degrades or destroys enemy air defences by a destructive and/or disruptive means. (AAP-6)

sustainability

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

tactical command

The authority delegated to a commander to assign tasks to forces under his command for the accomplishment of the mission assigned by higher authority. (AAP-6)

tactical control

The detailed and, usually, local direction and control of movements or manoeuvres necessary to accomplish missions or tasks assigned. (AAP-6)

target

A target is a selected geographic area, object, capability, person, or organization (including their will, understanding, and behaviour); which can be influenced as part of the military contribution to a political end state. A target is normally not critical in and of itself but rather its importance is derived from its potential contribution to achieving the commander's military objective(s).

target category

A group of targets that serve the same functions, e.g. bridges. (MC 471/1, 19 march 2007)

targeteer

A targeteer is a person qualified to advise commanders on the validity of targets, the means to affect such targets and the appropriate means of measuring achieved affects.

targeting

The process of selecting targets and matching the appropriate response to them taking account of operational requirements and capabilities. (AAP-6) Joint targeting determines the desired effects necessary to accomplish operational objectives; selects targets that create those effects; and selects or task the means, lethal or non-lethal, with which to take action upon those targets.

time-sensitive targets (TSTs)

Those targets requiring immediate response because they pose (or will soon pose) a danger to friendly forces or are highly lucrative, fleeting targets of opportunity whose destruction is of high priority to achieve campaign objectives. (MC 471/1, 19 March 2007) The time available does not allow for the standard targeting timeline to be followed.