1. The enclosed Allied Joint Publication AJP-3.9, Edition A, Version 1, ALLIED JOINT DOCTRINE FOR JOINT TARGETING, which has been approved by the nations in the Military Committee Joint Standardization Board, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 2524.

2. AJP-3.9, Edition A, Version 1, is effective upon receipt and supersedes AJP-3.9 which shall be destroyed in accordance with the local procedure for the destruction of documents.

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4. This publication shall be handled in accordance with C-M(2002)60.

Edvardas MAŽEIKIS
Major General, LTUAF
Director, NATO Standardization Office
Allied Joint Publication-3.9

Allied Joint Doctrine for Joint Targeting
Edition A Version 1

Allied Joint Publication-3.9 (AJP-3.9), dated April 2016, is promulgated as directed by the Chiefs of Staff.

Head Doctrine
Adopting NATO Doctrine

NATO underpins the defence of the UK and our allies, while also providing deployable, expeditionary capabilities to support and defend our interests further afield. In addition, the European Security and Defence Policy specifies that European Union-led military operations should also use NATO doctrine.

The need to achieve maximum coherence and interoperability within, and between, our closest allies and partners is vital. NATO is the institution best placed to help us achieve this. In July 2012, the Chief of the Defence Staff and the Permanent Under Secretary issued clear direction on how the UK’s contribution to NATO could be further improved, stating that:

‘We should use NATO doctrine wherever we can, and ensure coherence of UK doctrine with NATO wherever we cannot.’

For UK national operations, this doctrine should be read in conjunction with Joint Service Publication (JSP) 900, UK Targeting Policy.
## RECORD OF RESERVATIONS

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Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.
## RECORD OF SPECIFIC RESERVATIONS

<table>
<thead>
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| DEU      | Chapter 4, 0419: No-strike list  
The no strike list (NSL) is comprised of entities that are designated by the NAC as protected. Engagement of NSL entities could violate applicable international law, the Law of Armed Conflict, agreements, conventions, NAC policies or rules of engagement, depending on the reason for listing them on the NSL ...  
Rationale: As policy may be the reason for putting an entity on the NSL, it needs to be crystal clear that not all attacks on NSL entities will constitute a violation of law. |
| ITA      | With reference to para.0209 ITA maintains that the PID of the Target is always to be acquired in Phase 5 (Mission Planning and Force Execution) of the targeting cycle only in case of dynamic targeting. In particular, the PID is acquired in the fix step of the F2T2E2A (find, fix, track, target, engage, engage, exploit and assess) process, commonly used to execute dynamic targeting. |
| USA      | (1) The US has reservations with numerous terms (definitions and acronyms) that do not conform to the guidance found in C-M (2007) 0023. These are shown on the accompanying comment matrix. The US reservations are withdrawn once the terms are formally agreed by NATO and reflected in the NTMS.  
(2) The US has reservations with the way ‘effects’ are described in the AJP at paragraphs 0407, 0505, and in Fig. 5.3. We have consistently asserted that effects are created or generated to support achievement of objectives. This reservation will be withdrawn once the three paras are revised, consistent with our comments.  
(3) The US has reservations with targeting against a range of actors, not only against adversaries (preface paragraph 3). U.S. joint targeting is conducted only against a named adversary in an approved plan or order. This reservation will be withdrawn once the paragraph is revised, consistent with our comments.  
(4) The United States does not subscribe to the language as drafted in paragraph 0120 a. which states: "Any target prosecuted must offer a definite military advantage. If there is a choice between targets in order to realize a similar military advantage, the target that offers the least risk of collateral damage should be chosen. Military necessity never
justifies a breach of international law." The obligation under the law of war to minimize the risk of collateral damage derives from the legal principal of proportionality, not military necessity. This reservation will be withdrawn once the paragraph is revised, consistent with our comments.

(5) The United States does not subscribe to the language in paragraph 0120 c. which states: “Offensive action must only be directed against military objectives, making a clear distinction between them, civilian objects and civilians. All feasible precautions are to be taken in the choice of means and methods of any target prosecution to avoid – or at least minimize – incidental loss of civilian life, injury to civilians and damage to civilian objects. Particular care must be taken when considering targets in the vicinity of entities on the no-strike list.” The obligation under the law of war to minimize the risk of collateral damage derives from the legal principle of proportionality not distinction. This reservation will be withdrawn once the paragraph is revised, consistent with our comments.

(6) The US disagrees with the assertion that only the U.S. is engaged in sharing specific target intelligence. The para should be corrected to be inclusive to member nations. The characterization of “extract” is not the intent and direction the U.S. is pursuing. Asserting that the U.S. will extract the US MIDB is undermining to the improvements to data exchange. This reservation will be withdrawn once the paragraph is revised, consistent with our comments.

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Preface

Scope

Allied Joint Publication (AJP)-3.9(A) Allied Joint doctrine for Joint Targeting is the keystone NATO doctrine for joint targeting. It addresses the roles, responsibilities, processes and products from the strategic, operational and tactical commands, and the political guidance and oversight inherent in this process.

Purpose

AJP-3.9(A) explains how joint targeting is planned, conducted and assessed. The document focuses on the operational level. It reflects the evolution of joint targeting to incorporate a full spectrum approach using the full range of military capabilities against a range of actors, not only against an adversary.

Application

AJP-3.9(A) is intended primarily as guidance for NATO commanders and staffs. However, the doctrine is instructive to, and provides a useful framework for, operations conducted by a coalition of NATO members, partners and non-NATO nations. It also provides a reference for NATO civilian and non-NATO civilian actors.
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CHAPTER 1 – FUNDAMENTALS OF TARGETING

Section I – Introduction

0101 The contemporary operating environment has demonstrated that NATO forces have to be prepared to conduct a wide range of activities, often simultaneously, within a single operation. While military operations threatening or using acts of force to deter, compel or coerce an adversary remain necessary, military forces may also be used to support humanitarian goals or aid security, stabilization and reconstruction of a failed or fragile state, or to enforce a United Nations Security Council resolution which may, or may not, occur within a situation of armed conflict. NATO forces must therefore be able to coordinate and employ lethal and non-lethal capabilities against a range of actors, as part of NATO’s contribution to a comprehensive approach, in a variety of threat environments.

0102 To meet the challenges of contemporary operations, NATO requires a well-developed, flexible joint targeting process that applies a full spectrum approach, blending a variety of capabilities to generate a range of physical and psychological effects. Using strategic direction, operational-level targeting determines specific effects to create and synchronizes specific actions – both lethal and non-lethal – to satisfy a commander’s objectives. At the tactical level, targets are engaged in accordance with targeting guidance and approved rules of engagement (ROE).

Section II – Descriptions and definitions

0103 Joint targeting process. The joint targeting process links strategic-level direction and guidance with tactical targeting activities through the operational-level targeting cycle in a focused and systemic manner to create specific effects to achieve military objectives and attain the desired end state.

0104 Joint targeting cycle. The joint targeting cycle is a command function at both the operational and component level and assists with:

- determining the effects necessary to achieve the commander’s objectives;
- identifying the actions necessary to create them based on the means available;
- selecting and prioritizing targets;
- synchronizing capabilities; and then
- assessing their cumulative effectiveness, taking remedial action if necessary.

1 Further detail on legal considerations is given at Section VI.
Target. A target is defined as: an area, structure, object, person or group of people against which lethal or non-lethal capability can be employed to create specific psychological or physical effects. Note: person includes their mindset, thought processes, attitudes and behaviours.²

High-value target. A high-value target is defined as: a target identified as critical to an actor or organization for achieving its goal.³ Successfully influencing such a target will seriously hamper or support the actor or organization. They are determined by the value they offer to the actor or organization to which they belong.

High pay-off target. A high pay-off target is defined as: a high value target, the successful influencing of which will offer a disproportionate advantage to friendly forces. Note: High pay-off targets are determined by the value they offer to friendly forces rather than other actors.⁴

Time-sensitive target. Time-sensitive targets (TSTs) are derived from North Atlantic Council-approved (NAC) TST categories and, from these, specific targets are designated by the joint force commander (JFC).⁵ TSTs are those targets requiring an immediate response because they pose (or will soon pose) a danger to friendly forces or are highly lucrative, fleeting targets of opportunity whose successful engagement is of high priority to achieve campaign or operational objectives.

Within the joint targeting process there are two methods.

a. Deliberate targeting. Deliberate targeting prosecutes planned targets known to exist in an area of operations with lethal or non-lethal actions scheduled against them. Targets may be engaged in accordance with a timed schedule or held on call to engage if the situation demands it. In all cases, target data has sufficient detail to allow the capability matching and force assignment elements of the joint targeting cycle to be planned and conducted. This enables the JFC to establish the means for achieving their objectives and is often sequenced to include actions to be taken over a number of days. Resources are subsequently assigned corresponding to the level of effort dedicated to this category, which can vary over the length of the campaign or

² This term and definition modifies an existing NATO agreed term and/or definition and will be processed for NATO Agreed status. TTF 2010-0103 refers.
³NTMS – NATO Agreed.
⁴NTMS – NATO Agreed.
⁵ The term JFC is used throughout this document to indicate any appropriately designated joint force command or joint force commander (AAP-06). A commander of a joint task force (JTF) will be addressed as either ‘JTF commander’ or ‘the command’.
operation. This is most effective when target parameters, such as location, are well known or predictable.

b. **Dynamic targeting.** Dynamic targeting normally prosecutes targets known to exist in the area of operations. They have received some target development but were not detected, located or selected for action in sufficient time to be included in the deliberate process. Dynamic targeting also applies to unexpected targets that meet criteria specific to operational objectives; on these occasions, resources are required to complete the target development, validation and prioritization. Prosecuting these targets may be possible by redirecting existing assets.

0110 **Prosecuting of TSTs.** TSTs are specific targets designated by the JFC, who will provide guidance and prioritization for all TSTs within the area of operations. TSTs are targets that have been developed through the same procedures as planned targets and require an immediate response. TSTs can be prosecuted using both the deliberate and dynamic approach and are covered in detail in Annex A.

0111 **Combat engagement.** Combat engagement is not part of the joint targeting process. It usually includes actions – actual, imminent or likely – against an adversary. It normally involves joint fires coordinated at the tactical level in accordance with rules of engagement. Combat engagement is not to be confused with targeting.

0112 **The engagement continuum.** The joint targeting process and combat engagement exist alongside each other on an engagement continuum shown at Figure 1.1.
Section III – The purpose of joint targeting

0113 Joint targeting provides a methodology that aids decision-making linking objectives with effects through the appropriate prosecution of prioritised targets and the assessment of any effect generated. It is flexible enough to be adapted to any type of operation. The joint targeting cycle is examined in depth in Chapter 2 and the process in Chapters 3, 4 and 5.

0114 A common understanding of joint targeting and adherence to its principles (see below) enables joint force staff and subordinate component staff to:

- ensure compliance with North Atlantic Council (NAC), Military Committee (MC) and Supreme Allied Commander Europe (SACEUR) guidance and instructions;
- comply with JFC’s objectives, guidance and intent;
- rapidly respond when necessary to targets that present limited opportunities for action;
- assign the most appropriate capability to the proposed target as resources
permit;

- coordinate, synchronize and de-conflict actions, minimizing duplication of effort;

- fully integrate all capabilities as appropriate; and

- expedite assessment of executed operations.

Section IV – Joint targeting principles

0115 The principles of joint targeting are as follows.

a. **Objective-based.** Joint targeting focuses on achieving the JFC’s objectives effectively and efficiently within the guidance (under the responsibility of SACEUR) set by the NAC, Military Committee and Allied Command Operations (ACO).

b. **Effects-driven.** Joint targeting focuses on contributing to creating synchronized, measurable physical and psychological effects intended to achieve the JFC’s objectives while striving to avoid undesirable effects, fratricide and disproportionate collateral damage.

c. **Multidisciplinary.** Joint targeting requires the coordinated and integrated efforts of functional experts from many disciplines and capabilities.

d. **Timeliness.** Joint targeting is often time critical. It is, therefore, fundamental that transferring information from source to user is as direct and as fast as possible.

e. **Centrally controlled and coordinated.** Because of its importance, complexity and political sensitivity, targeting policy and direction is retained at the highest practical joint level, whereas authority for execution is delegated to the lowest practicable level. Maintaining a system of centralized control is important to the targeting process and helps avoid duplication, friendly fire and confusion.

f. **Information – accessibility and security.** Targeting depends on a number of information sources (fused intelligence, collateral damage details and so on) which should, wherever possible, be held on, and made available through, shared databases. Classified and sensitive information must be stored and disseminated on a ‘need to share’ basis,6 where the need to preserve

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6 Written for release at the lowest possible classification level and given the fewest possible dissemination restrictions within intelligence sharing guidelines and policies.
Section V – A full spectrum approach to joint targeting and effects

0116 Through comprehensive preparation of the operating environment (CPOE), the operations planning process identifies a range of operational-level effects that will contribute to the decisive conditions leading to operational objectives (see Figure 1.2). It includes measurement of task performance and how effective the targeting activity has been. Further detail on assessment is given in Chapter 2.

Figure 1.2 – Operational-level planning and joint targeting

0117 Joint targeting involves understanding the effect to create, identifying the node\textsuperscript{7} through which the effect can be realized and then applying the appropriate resourced activity against that node. Figure 1.3 depicts this approach against the ‘ends, ways and means’ model. Full spectrum targeting is a holistic approach that considers all available actions and potential effects set against the operations objective. The JFC, having identified the effect to create, uses target systems analysis (TSA) and target audience analysis (TAA) to examine behaviours, attitudes, perceptions and vulnerabilities of potential targets to determine whether,

\textsuperscript{7} A ‘node’ is an entity or point that could be examined to identify how it could be influenced to generate the desired effect.
and how, to engage them. Further refinement determines the blend of desired physical and psychological effects. This allows identification of behavioural objectives, the effects that will create them and the activities and resources required to generate those effects.

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- Determine what objective(s) you want to achieve and what effects will support achievement of the objective(s)
- The end result of the engagement

Who or what you need to target to create the desired effect? (The effected)

Which actions lethal or non-lethal against the node will produce the desired effect?

Which resources can perform the desired action? (Capabilities and effectors)

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**Figure 1.3 – Ends, ways, means and targeting**

**Strategic communications considerations**

0118 Using lethal and non-lethal capabilities affects the information environment, either positively by aligning actions with words, or negatively by contradicting NATO’s message to audiences or damaging the mission within, and outside, the area of operations. All targeting activities must be coherent with the NATO strategic communications (StratCom) framework and mission narrative. A full spectrum approach to targeting ensures inclusion of information operations and public affairs staffs at every level, ensuring coherence with the StratCom framework.

**Section VI – Legal considerations**

0119 International law, together with the domestic law of the participating nations, governs the conduct of NATO operations. This imposes limits upon targeting decisions and actions. While targeting direction and guidance may be more restrictive than that permitted by international law for policy and other reasons, it may never be more permissive. Military commanders must receive training in international law, as appropriate, and receive support from a legal advisor. Legal advisors will play a key role in reviewing the targeting products to ensure compliance with legal principles. To counter any subsequent legal challenge to the

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8 AJP-01(E), Allied Joint Doctrine.
targeting process, it is imperative that formal records are kept of the decision-making process and any advice given during that process. The wide utility of information activities alongside traditional lethal targeting demands wider consideration of the legal implications. Activities intended to have an influence on a particular target may affect third parties not involved in the crisis and those outside the joint operations area.

0120 Legal principles. As noted in the introduction, the international security situation may require a broad range of responses, sometimes within a single operation. Consequently, operations may occur within a complex legal framework regulating the use of force which may, in turn, restrict the use of lethal targeting. Each nation interprets and characterizes the situation and the applicable legal framework – including relevant international law, Security Council authorizations, its own domestic law and, in some circumstances, host nation law – when making targeting decisions. General descriptions of the Law of Armed Conflict principles related to targeting are below.

a. Military necessity. Any target prosecuted must offer a definite military advantage. If there is a choice between targets in order to realize a similar military advantage, the target that offers the least risk of collateral damage should be chosen. Military necessity never justifies a breach of international law.

b. Humanity. The principle of humanity forbids inflicting unnecessary suffering, injury or destruction to accomplish legitimate military purposes. Once the military purpose is achieved, inflicting further suffering, injury or destruction is forbidden.

c. Distinction. Offensive action must only be directed against military objectives, making a clear distinction between them, civilian objects and civilians. All feasible precautions are to be taken in the choice of means and methods of any target prosecution to avoid – or at least minimize – incidental loss of civilian life, injury to civilians and damage to civilian objects. Particular care must be taken when considering targets in the vicinity of entities on the no-strike list.

d. Proportionality. No engagement may be launched, and any engagement in progress must be stopped, in which the expected total incidental loss would be excessive in relation to the direct anticipated military advantage. Note that the application of this rule is judged not on the actual loss of civilian life, injury to civilians, damage to civilian objects (or a combination thereof) or the actual military advantage of the attack, but upon the loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof expected and foreseeable at the time the attack was planned, and the military advantage anticipated. The anticipated military advantage 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 operational objectives and the strategic end state.

0121 Other considerations.

a. Determining military objectives. Where entities are concerned, military objectives are those entities which by their nature, location, purpose or use make an effective contribution to military action, and whose total or partial destruction, capture or neutralization (in the circumstances ruling at the time) offers a definite military advantage. Certain targets will almost always be military objectives – examples include soldiers, fighter aircraft, submarines and ammunition depots. Some entities that have both military and civilian uses (sometimes informally referred to as ‘dual-use’) are more difficult to identify as legitimate military objectives. Examples of these entities include bridges, electrical systems, fuel, communication nodes and vaccine or chemical plants. Before attack, these entities must be carefully analyzed, based upon the current situation and information, to determine if they are military objectives. If there is doubt whether an object which is normally dedicated to civilian purposes is being used to make an effective contribution to military action, the presumption is that it is not.

b. Responsibility. Individual responsibility to comply with the Law of Armed Conflict rests at all levels. Those carrying out the attack shall apply the higher-level targeting guidance, approved rules of engagement and Law of Armed Conflict. They will apply the specified rules of engagement and the Law of Armed Conflict based on the facts available to them and those facts that they should reasonably have obtained. 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 hindsight. Those involved must take all precautions that were reasonably feasible at the time of their decision or actions, and in the circumstances prevailing at that time. This objective standard also means that recklessness, negligence and wilful blindness provide no excuse to unlawful targeting.

Section VII – Collateral damage considerations

0122 Collateral damage. For the purpose of collateral damage estimation (CDE), collateral damage is defined as: the unintentional or incidental physical damage to non-combatants, non-military objects or environment arising from engagement of a legitimate military target. The JFC receives targeting guidance from the NAC, through SACEUR, which will include a pre-authorized level of collateral damage. Beyond this level, the JFC must seek the authority of SACEUR, and ultimately the

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9 NATO CDE Methodology (IMSM-0634-2011 dated 15 Dec 2011) uses the term ‘civilian’ rather than ‘non-combatant’.
NAC, to approve a target prosecution. Even within approved collateral damage levels, the JFC must decide if any expected collateral damage would be unacceptable or not, in relation to the military advantage offered by prosecution of each target, and must take all reasonably feasible precautions to avoid it.

0123 **Collateral damage estimation.** CDE provides a probability, but not a certainty, of collateral damage for a specific weapon system. CDE facilitates the legal consideration of proportionality.

0124 **Collateral damage estimation for physical effects.** CDE for physical effects is a process (with tools and a methodology) that provides an aid to the commander’s judgement in using lethal/destructive capabilities. NATO’s CDE methodology recognises levels of collateral damage as estimated by certified analysts. They consider target parameters, such as location and proximity to non-military entities, and then mitigate risks by modelling the potential variables, such as the type of weapon system and the method, or time, of engagement.

0125 **Consideration of collateral psychological effects.** Lethal and non-lethal engagements can result in psychological effects, some of which may be undesirable. A deeper understanding of the human environment\(^{10}\) allows a better definition of desired and undesired psychological effects. This helps reduce the level of risk. Nevertheless, the psychological risk estimate may not achieve the same level of prediction as the physical one. Although there is no agreed methodology, commanders and their staffs should reduce the risk by understanding the human environment through target audience analysis.

0126 **Delegated authority for collateral damage.** The NAC will authorize the permitted level of collateral damage for each NATO-led operation. SACEUR will pass this to the JFC through the targeting guidance, although SACEUR may retain some authority at their level. The JFC is then able to authorize targets within this delegated authority, including delegating lower levels of authority to component commanders. If a target exceeds this level, authority must be sought from the NAC through SACEUR. Notwithstanding the above, all reasonable precautions in the choice of means and methods of prosecuting targets must be taken, with a view to avoiding – or minimizing – collateral damage.

0127 **National considerations for collateral damage.** Individual nations will often authorize specific levels of delegated authority of collateral damage for an operation in accordance with their legal interpretation and policy constraints. This will be passed to a senior national representative, who receives support from national

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\(^{10}\) Human environment is the social, political and economic organization, beliefs and values, and forms of interaction of a population.
legal, policy and targeting advisors. The senior national representative refers any targets that fall outside their delegated authority back to their nation for clearance.
CHAPTER 2 – JOINT TARGETING

Section I – Introduction

0201 The joint targeting process links strategic-level direction and guidance with tactical targeting activities. It realizes this through the operational-level targeting cycle in a focused and systematic manner to create specific effects to achieve military objectives and attain the desired end state.

0202 The process translates strategic guidance and the joint force commander (JFC)’s direction into tactical-level activities in accordance with their targeting priorities through the joint targeting cycle at the operational level. Within each component, tactical-level targeting activities allow component commanders to contribute to, and act on, the joint targeting process. Component targeting activities are explored further in Chapter 5. Figure 2.1 illustrates the process and the different levels of activity.
Section II – The joint targeting cycle

0203 The joint targeting cycle consists of six phases and is applicable to both the deliberate and dynamic methods; it is illustrated in Figure 2.2. This cycle focuses targeting options on the JFC’s objectives for operations, while reducing the likelihood of undesirable consequences. The joint targeting cycle is inextricably linked to the intelligence cycle and JISR process, and feeds the planning process. Detail on how these processes interact is given in Chapter 4.

Figure 2.2 – The joint targeting cycle

0204 **Phase 1: Commander’s intent, objectives and guidance.** The targeting process is conducted within political and strategic direction and guidance. This is issued from the strategic planning level to the operational level through a strategic planning directive and strategic operations plan (OPLAN). At the operational level, the joint operations planning group translates this into the JFC OPLAN. The JFC must clearly identify what objectives to achieve, under what circumstances and within which parameters, including appropriate measures of performance (MOP) and measurements of effectiveness (MOE). The first activity of the joint targeting

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11 For details see AJP-2, **Allied Joint Doctrine for Intelligence, Counter-Intelligence and Security** and AJP-2.7 **Allied Joint Doctrine for Joint Intelligence Surveillance and Reconnaissance**.
process takes the JFC’s objectives, guidance and intent and through analysis matches them against NAC-approved target sets and audiences to create specific effects, each logically and directly related to the overall desired end state. These are then translated into a number of discrete operational tasks detailed in the OPLAN’s targeting annex and any subsequent joint coordination orders (JCOs). This is an iterative process between the JFC and component commanders allowing each to develop their own objectives, tasks and supporting target nominations.

0205 **Phase 2: Target development.** Target development identifies eligible targets that can be influenced to achieve the JFC’s objectives. During target development, issues relating to collateral damage and other undesired effects may become apparent and must be considered through the nomination and prioritization processes.

a. **Target analysis.**

(1) The JFC’s objectives normally seek some form of behavioural effect upon target audiences within the operations area. The start point for target analysis (TSA and TAA) is therefore developing an understanding of the target audience and its relationship with existing entities and networks. Taken together with a centre of gravity analysis, this identifies critical susceptibilities and vulnerabilities, leading to developing interrelated target systems. Based on TSA and TAA, this process identifies the most relevant targets together with the desired effects linked to them.

(2) The JFC should consider establishing a TSA Team (TSAT) to deliver this analysis, based on the application of fused all-sources intelligence, subject matter expertise, the use of specific intelligence tools and, potentially, developed collection efforts. A TSAT normally consists of a core team augmented by specialists who form a TSA planning group to focus on specific problems. This planning group will then establish a TSA community of interest to engage subject matter expertise from across the Alliance, both military and civilian, best suited to addressing the mechanism of any given target set.

b. **Target vetting.** Following initial selection of targets from the TSA/TAA process, targets are vetted by J2 (drawing on all-sources intelligence) to ensure the target performs the specified function for adversaries or other actors.

c. **Target validation.** Target validation ensures:

- continued compliance with the JFC’s objectives, guidance, intent and desired effects;
compliance with relevant international law and rules of engagement; and

the accuracy and credibility of sources used to develop a target.

d. **Target nomination.** Once potential targets are validated, they are nominated by components for approval via the joint coordination process and identified for inclusion and prioritization on the joint target list (JTL). Further detail on target lists is in Chapter 4.

e. **Target prioritization.** Nominated targets are prioritized 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. The principal output of this phase is the joint prioritized target list (JPTL). The JPTL informs the allocation of intelligence and engagement assets, dependent on the maturity and detail of the particular target folder.

CDE considerations are an element of the commander’s objectives, guidance and intent, because commanders must evaluate and balance mission requirements and threats to friendly forces while taking all reasonable steps to mitigate the potential for collateral damage. Failure to minimize collateral damage could subject NATO leadership to strategic consequences that may have an adverse impact on the military mission.

0206 **Phase 3: Capabilities analysis.** Phase 3 analyzes the prioritized targets from phase 2 and recommends to the JFC the synchronized combination of the most appropriate capabilities (lethal and non-lethal) that could be applied to generate the desired physical or psychological effects to achieve the objectives. This includes advice on whether the joint force has the capability to engage the target and, if so, how to mitigate any identified undesirable collateral effects. CDE (begun in target development, vetting, validation, nomination and prioritization) remains a critical component of the analysis.

0207 **Phase 4: Commander’s decision, force planning and assignment.** This phase integrates the outputs of capabilities analysis with any further operational considerations. The JFC then issues final approval for prioritized targets, which are then assigned to specific components for planning and execution.

0208 **Phase 5: Mission planning and force execution.** This phase deals directly with planning and the execution of tactical activity and is largely the responsibility of the component commanders. Key to success is a flexible approach allowing resources to be reassigned as priorities change and for both JFC and component commanders’ staff to re-prioritize missions. It is during this phase that targeting staff obtain final positive identification (PID) of targets. Target execution consists of

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seven steps. These are find, fix, track, target, engage, exploit and assess (F2T2E2A)\(^\text{12}\).

a. **Find.** This step relies on the joint intelligence preparation of the operating environment (JIPOE).\(^\text{13}\) Initial targeting data is refined through the JIPOE process. Additional intelligence requirements that arise during the targeting cycle are integrated into the intelligence collection plan. This uses traditional intelligence, surveillance and reconnaissance (ISR) (collection) and non-traditional ISR assets\(^\text{14}\) to detect the presence of targets in named areas of interest and to detect conditions that make it appropriate for target engagement. Once detected, potential targets trigger actions to determine whether or not the particular entity warrants further attention or deviation from the existing plan (as is the case for time-sensitive targets) and, if so, to move on to the next step. In the case of time-sensitive targets, the output of the find step is a time-sensitive target nomination for further refinement.

b. **Fix.** Focused sensors allow staff to identify and geolocate the target\(^\text{15}\) (typically via cross-cueing and intelligence fusing), conduct/confirm target mensuration (where applicable)\(^\text{16}\) and conduct an initial risk assessment.

c. **Track.** ISR capabilities are assigned and prioritized to track a target. Tracking is a continuous process to monitor a target and is maintained until the successful prosecution of the target and engagement assessment.

d. **Target.** Restrictions, including collateral damage estimation restrictions, rules of engagement, restricted targets of the joint target list (JTL) and de-confliction, are satisfied at this time. Engagement capabilities are aligned with the desired effect, the risk assessment is completed and the final determination on force packaging is made. The target step includes final approval for engagement with the tasking of the selected engagement system.

e. **Engage.** During this step, the target and its engagement are closely monitored to maintain awareness of the situation surrounding the engagement.

\(^{12}\) F2T2E2A is the method used when conducting dynamic targeting. See Chapter 1 for the description of dynamic targeting.

\(^{13}\) JIPOE replaces joint intelligence preparation of the battlespace (JIPB) for planning at the operational level.

\(^{14}\) Non-traditional ISR assets are those assets not assigned for a specific ISR task, but contribute to the intelligence picture as part of routine operations (such as aircraft targeting pods, radar warning receiver indication, input from an operating unit).

\(^{15}\) Obtaining accurate geolocation data may require support from a geospatial support group or the Geospatial Information Supporting Nation (GISN).

\(^{16}\) NATO Industrial Advisory Group (NIAG) SG201 proposes target mensuration as: target coordinate mensuration is the measurement of a feature or location on the earth to determine absolute latitude, longitude, and elevation. It is used in targeting to refer to the exact location of a target.
to ensure a successful prosecution and identify any opportunities for rapid exploitation.

f. **Exploit.** The engagement of any target, physical or psychological, can present immediate or longer-term opportunities for exploitation. During the planning phase, targeting and planning staffs should identify these opportunities and develop branch plans that can be executed if the appropriate conditions arise.

g. **Assess.** During the assessment phase, information about the results of the engagement are analyzed to determine whether the objectives have been achieved or the desired effects have been created. The output of this step is assessment of mission success to support a possible re-engagement decision (which could involve using a completely different capability). In the case of a time-sensitive target or high-value/high pay-off target, a rapid, initial assessment is vital if an opportunity to re-engage is to be exploited.

0209 **Phase 6: Assessment.** AAP-06 defines assessment as: *the process of estimating the capabilities and performance of organizations, individuals, materiel or systems.* The assessment phase within the joint targeting cycle seeks to measure if the planned effects have been realized after tactical activities have been executed. It contributes to the wider campaign assessment process and assists the JFC’s future decision-making.

a. **Battle damage assessment.** AAP-06 defines battle damage assessment (BDA) as: *the assessment of effects resulting from the application of military action, either lethal or non-lethal against a military objective.* It analyzes and reports what has been achieved through applying a capability (lethal or non-lethal) against a target. Although BDA is primarily an intelligence function, it has implications for, and requires planning with, both the planning and operations staffs. It is divided into three categories.

(1) **Phase 1 BDA.** Phase 1 BDA is a quick initial assessment to quantitatively estimate the amount of physical damage or behavioural influence achieved against a target, following the application of a capability.

(2) **Phase 2 BDA.** Phase 2 BDA reviews and amplifies the phase 1 BDA, providing a functional assessment by estimating how much the physical or psychological effect on a target has degraded its ability to perform its intended mission or shifted a behavioural pattern.

(3) **Phase 3 BDA.** Phase 3 BDA makes an assessment of the effect of the engagement on the entire target system, whether an air defence system, power grid or political network. This assessment is based on
the understanding of an individual target role within the target system and depends on the target systems analysis conducted at the beginning of the targeting process. This type of BDA is normally conducted at the operational level. This assessment of the ongoing effectiveness (or intentions) of a target system provides a major input into the overall combat assessment process.

b. Measuring effect.

(1) **Measures of performance.** Measures of performance (MOP) use a system of indicators to evaluate the accomplishment of own force actions. The MOP allow progress to be measured, intending to answer the question: are the actions being executed as planned? If, during execution, the desired effects are not being created to provide progress towards achieving desired objectives, a possible cause is that actions are not being carried out as planned (which could include the functionality of lethal weapons systems or non-lethal capabilities). In simple terms, what did we do and did we do things right.

(2) **Measurements of effectiveness.** Measurements of effectiveness (MOE) are indicators to measure a system. The MOE will help identify if the actions are on track to create the intended effect within the planned timescale. This may require multiple MOE per system to fully capture any changes. An essential aspect for successful MOE is establishing a baseline understanding of the system before any actions by the joint force, and a collection mechanism to identify subsequent characteristics. In essence, MOE answer the question: did we do the right things.

c. **Assessment processes for information activities.** Battle damage assessment for information activities is just as important and can follow a similar methodology. However, the information operations staff who lead on this assessment and the commanders they support must understand that the effects of information activities may take longer to manifest themselves than the physical effects from a lethal strike. Their identification requires the JFC to use a broad range of collection assets from the joint task force and other agencies. In essence, applying information activities against a target may result in some kind of change within that target which could affect attitude or behaviour. A change of attitude is unlikely to be measurable until reflected in the target’s behaviour and so the measurements of effectiveness should focus on behaviour – and collection mechanisms tasked accordingly. More information on the assessment of information activities is contained in AJP-3.10(A), Allied Joint Doctrine for Information Operations.

**Targeting at component level**
Targeting activity occurs at all levels of command within the joint force and is applied at the component level by forces capable of delivering both lethal and non-lethal capabilities to create the desired effects (physical or psychological). Maritime, land, air and special operations components will establish their own procedures and mechanisms within the joint targeting cycle to provide inputs and action outputs; these are explored further in Chapter 5.
CHAPTER 3 – JOINT TARGETING CONSIDERATIONS AT THE STRATEGIC LEVEL

Section I – Political direction

0301 The North Atlantic Council (NAC) provides the Military Committee (MC) with the overarching military objectives, desired end state and guidance for an operation, including any constraints and restraints that it wishes to impose. The NAC should provide the Supreme Allied Commander Europe (SACEUR) with clear objectives and comprehensive guidance defining the rules of engagement (ROE) and unambiguously define restrictions and other limitations that are to be imposed on the operation (or that other nations participating in a NATO coalition effort, or whose sovereign territories may be involved, may impose). It must address the use of both lethal and non-lethal means.

0302 Military strategic direction. The NAC, assisted by the Military Committee, translates political guidance into strategic military direction to SACEUR. Headquarters Allied Command Operations (ACO) then develops a military strategic-level operation plan (OPLAN) outlining the mission, command and financial arrangements, as well as the command and control (C2) responsibilities. Following NAC approval, this OPLAN is provided to the operational commander to develop and implement NAC-approved rules of engagement. Thereafter, ACO monitors the operational-level planning and execution of the campaign or operation. The targeting guidance/annex to the OPLAN 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.

0303 Target sets and categories. In conjunction with the operational commander and as part of the operations planning process, SACEUR selects target sets in accordance with NAC and any specific national guidance. SACEUR also defines, as far as possible, sets of time-sensitive targets. These proposed target sets are then forwarded to the Military Committee for endorsement and subsequently to the NAC for approval (see Annex B for examples).

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17 See AJP-01 Allied Joint Doctrine for a more detailed discussion of this guidance and related issues.
18 In accordance with MC 471-1, NATO Targeting Policy.
19 A ‘target set’ is a group of interrelated target categories within an actor’s system, such as transportation/lines of communication, electric power and adversary media.
20 A ‘target category’ is a group of targets serving the same function, such as bridges, roads, radio broadcasts and newspapers. Target categories are described in STANAG 3596 Air Reconnaissance Requesting and Target Reporting Guide.
NAC approval of target sets and categories.\textsuperscript{21} SACEUR, via the Military Committee, must submit all target sets and categories to the NAC for approval. The NAC will pass approved target sets and categories through the Military Committee to SACEUR with any additional guidance or caveats. Additional guidance or caveats may include further NAC criteria for engagement, which may require NAC approval. Target sets not originally approved but deemed necessary for the operation will have a subsequent request for approval staffed through the chain of command to the NAC.

SACEUR's guidance to the operational level. Within the scope of the NAC-approved target sets or categories, SACEUR will provide targeting guidance to the operational level, translating the political intent and the military mission into clear military objectives; the targeting process links directly to these objectives. Political goals and objectives will be translated into detailed military guidance, including any additional considerations that will apply. The operational and tactical levels will maintain target lists, to include time-sensitive targets, based on approved target sets and reflecting the strategic targeting guidance. National caveats must be observed carefully during the allocation process.

NAC approval of sensitive targets.\textsuperscript{22} The NAC initiating directive may also direct SACEUR to identify sensitive targets against which planned actions require NAC review. These targets should be identified and put on the restricted target list (RTL). Such targets exceed the operational commander's delegated authority and must be elevated to SACEUR for consideration. SACEUR will conduct a Target Clearance Board (TCB) in which he may give his approval, reject the target or target set or elevate it further to the NAC for consideration. Only the authority that placed the restriction is able to remove it and give authorization.

Section II – Military strategic targeting responsibilities

SACEUR's targeting responsibilities to the NAC through the Military Committee. ACO will do the following.

a. Using the strategic military objective, develop a list of the target sets, with associated categories that include all the anticipated targets against which the military might be required to use lethal or non-lethal means during any subsequently authorized action.

b. Ensure target sets submitted to the NAC for clearance are in accordance with the examples at Annex B, or are defined if specific to the operation. Some or all of these sets may be requested for clearance and can be submitted via the

\textsuperscript{21} In accordance with MC 133/4, NATO's Operations Planning.

\textsuperscript{22} Ibid.
concept of operations (CONOPS) and OPLAN with its targeting annex, or under separate cover.

c. Submit unanticipated targets that fall outside NAC-approved target sets for approval prior to authorizing any engagement.

0308 **Targeting in OPLANS.** A targeting annex will form part of the strategic OPLAN and should be the focal point of all targeting matters for that specific operation. It will include:

- delegation of target engagement authority, listed for lethal and non-lethal engagement;
- target sets and categories;
- restricted targets and no-strike entities;
- time-sensitive targets (TST); and
- the non-combatant casualty cut-off value.

**Section III – National inputs**

0309 **National inputs to the NATO targeting process.** Nations will always reserve the right to issue national targeting guidance in respect of specific operations. However, any generic national guidance should be communicated to NATO by the appropriate national representative at the political (NAC), military strategic (ACO), and operational (JFC) levels before the onset of, and during, any operation. Nations contributing capabilities for the prosecution of targets will provide refined guidance and national caveats for their employment as early as possible during the planning phase of an operation. This guidance should cover any national requirement for approving targets allocated for prosecution by that nation’s assets, including both the level of that approval and the method required to achieve it.

0310 **Intelligence and target materials.** NATO relies on member nations to provide intelligence input and target materials to enable an effective targeting process. Providing such support early on in the operations planning process enhances NATO’s ability to adopt a full spectrum approach.

0311 **National representation in the NATO targeting process.** The targeting process will be facilitated by each nation nominating a national targeting expert to ACO during the planning phase. This ensures that national guidance and caveats are clearly understood and taken into account. National representatives should be given access to any proposed or agreed targeting study or list (NATO and national) at the level to which they are assigned.
Section IV – Operations planning

0312 Target Materials. In support of NATO operations, nations typically provide NATO forces and headquarters with a range of target materials including TSA, imagery and weaponeering. These materials include, and allow for, the development of target dossiers and folders. Any centralized targeting capacity (CTC) or NATO headquarters is authorized to produce and hold target material in line with SACEURs guidance and subject to NAC approval. During peacetime, SACEUR provides specific target material production requirements on specific regions or countries with a high impact and interest to NATO to the NAC for approval. These requests, including situation updates, will be submitted biannually or as the situation dictates. Subsequent NAC approval will define peacetime operational targeting guidance. Through this staged authorization, NATO peacetime activity is limited to intelligence-focused activities while the NAC retains the ability to authorize when targets may be developed.

0313 Specific target intelligence. For input into the targeting management tool, ACO will receive an extract of the US modernized integrated database (MIDB). Requests for other target intelligence, including those related to non-lethal capabilities, are made through appropriate command channels using the intelligence requirements management and collection management (IRM&CM) process.\(^{23}\)

0314 Target Intelligence production. Target intelligence documents, including target materials, are not produced in any particular order of precedence, but on a set time schedule or on an as-required basis. During peacetime, operational targeting material is only produced in accordance with SACEURs guidance and is subject to NAC approval.

0315 Security and accountability. Regardless of storage or dissemination methods, all target intelligence and target material products are to be correctly classified and caveated from the outset. Distribution to NATO users through the targeting support programmes is provided on a strict need-to-know basis and is only to be handled by those personnel with the appropriate clearances.

Section V – Post-campaign and operations activities

0316 During an operation’s transition phase, the joint targeting process continues up to the strategic level. Information is collected to enable:

- ACO evaluation and archiving of the full extent of target physical and

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\(^{23}\) IRM&CM is a new term replacing CCIRM in AJP 2, \textit{Allied Joint Doctrine for Intelligence, Counter-intelligence and Security}. 
functional damage;

- determining the strategic effectiveness of employed delivery systems and munitions,\(^{24}\) (this may include providing information on the location of unexploded ordnance);

- critically analyzing and improving the assessment analysis and reporting process;

- continued behavioural assessment and measurement of effectiveness;

- operations analysis and lessons identified; and

- an effective NATO response to any post-operation allegations that NATO commanders acted improperly.

\(^{24}\) The assessment of weapons effectiveness is made by individual nations who may then contribute this to NATO’s measures of effectiveness process.
CHAPTER 4 – JOINT TARGETING AT THE OPERATIONAL LEVEL

Section I – General

0401 As described in Chapter 3, the targeting process is governed by the North Atlantic Council (NAC), guided by Allied Command Operations (ACO) policy and plans, driven by the Joint Force Commander (JFC)’s direction and guidance and subject to the relevant international law. NATO’s requirement to maintain campaign authority through positive public support may also shape the process. This Chapter describes the military responsibilities for the operations synchronization and joint targeting process.

Section II – Strategic input to the operational-level targeting process

0402 Allied Command Operations targeting input. ACO (under Supreme Allied Commander Allied Command Europe (SACEUR)’s direction) provides the JFC with the following targeting-related products and guidance.

a. A strategic communications (StratCom) framework, including a strategic narrative and major operational themes.

b. A strategic operation plan (OPLAN), the targeting annex of which clearly defines objectives, intent and guidelines for the military operation together with those target sets, including approved time-sensitive targets, the JFC is authorized to prosecute.

c. The circumstances and processes by which the JFC must seek extensions to, or clarification of, the rules of engagement.

d. An integrated, shared and interoperable database\textsuperscript{25} supporting a specific targeting management tool.

e. The products of any higher-level target systems analysis (TSA) and target audience analysis (TAA), including target material for the area of operations from the nations.

f. Any information about emerging targets for inclusion in appropriate databases.

\textsuperscript{25} Currently an extract from the Modernized Integrated Database (MIDB) supported by the joint targeting system (JTS).
units for target materials and subsequently to distribute those materials to the units that require them.

h. Assistance and advice, as required, to ensure that subordinate formations/units have appropriate, suitable functional area services with the necessary communications capacity, to support the targeting process.

Section III – Joint force commander’s joint targeting responsibilities

0403 The JFC:

- establishes and directs the joint targeting process, addressing both deliberate and dynamic targeting, and integrates it into the joint coordination process;
- submits target set proposals to ACO to pass to the NAC for approval;
- passes any target sets and/or categories not originally approved (but at a later stage deemed necessary for the campaign) to ACO to seek approval from the NAC;
- submits to the NAC (via the Military Committee) for approval time-sensitive targets that do not fall within NAC pre-approved TST categories;
- implements rules of engagement received from ACO;
- ensures production and dissemination of target materials to those authorized and required to receive them;
- provides, and requests when necessary, information about any emerging targets;
- ensures that the assessment cell evaluates the overall effectiveness of the targeting effort and in relation to the campaign objectives;
- allocates targets and provides clear direction and guidance on targeting issues to subordinate commanders about target priorities, using lethal and non-lethal capabilities, restrictions, guidance on relative levels of effort and sequencing, and any specific guidance on the format and content of target folders;
- directs the campaign synchronization and targeting process, providing a forum for component commanders’ representatives to resolve conflicting issues related to targeting, such as the Joint Targeting Coordination Board (JTCB).
and the Information Activities Coordination Board (IACB);  

- ensures that all requests for target materials and intelligence received from subordinate components are prioritized for processing;

- ensures that, in consultation with the Comprehensive Crisis and Operations Management Centre (CCOMC), formations (and units, where necessary) have access to the appropriate tools and communication and information systems capacity to support the overall targeting process;

- approves and issues the joint prioritized target list (JPTL);

- within strategic guidance, approves and issues the time-sensitive target matrix;

- approves target engagement authority delegation to the appropriate subordinate level;

- disseminates capability restrictions or caveats related to collateral damage estimation, and ensures that an appropriate collateral damage estimation methodology is in place;

- takes account of advice, recommendations and caveats expressed by senior national representatives; and

- maintains database integrity.

Section IV – Component commander’s joint targeting responsibilities

0404 Component commanders will nominate targets that could be both inside and outside their area of operations. They will designate target priority, effects and timing. These priorities are considered along with JFC’s joint operations area targeting priorities.

0405 In general terms, component commanders must develop target nomination lists and attend the JFC’s Joint Coordination Board (JCB). They support the JFC’s targeting process, including with organic assets, and ensure compliance with the Law of Armed Conflict and rules of engagement (ROE). Further detail is contained in Chapter 5.

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26 As described in AJP-3.10, *Allied Joint Doctrine for Information Operations*, where necessary and when the situation dictates the Information Activities Coordination Board may be merged with the Joint Targeting Coordination Board to create a single decision-making board.
Section V – Targeting synchronization during operations

0406 The joint coordination process. The Joint Coordination Board is the key mechanism for the JFC to exercise authority over the joint force. The Joint Coordination Board assigns execution responsibilities, prioritizes, de-conflicts and synchronizes all aspects of component activities. It ensures that both lethal and non-lethal targeting efforts are coordinated and focused on the Commander’s objectives. In particular, it focuses on the following.

a. Reviewing and recommending JFC approval of all products from the JTCB, IACB and other established boards and working groups. It is important that these bodies coordinate their work to provide the Joint Coordination Board with consolidated lists of targets, optimized to create the desired effects through the best use of lethal and non-lethal capabilities.

b. Allocating available intelligence, surveillance and reconnaissance (ISR) assets to the appropriate component commander for tasking as recommended by the Joint Collection Management Board (JCMB).

0407 The Joint Targeting Coordination Board. The JFC will establish a JTCB comprising representatives from the Joint Task Force Headquarters (JTF HQ), all components of the joint force and, if required, national liaison representatives. The chairman of the JTCB gathers inputs from the targeting community, including the IACB, to provide the optimum approach for generating the desired effect with respect to each target.

0408 The role of the Joint Targeting Coordination Board. The JFC defines the role of the JTCB. Typically, the JTCB reviews target information, develops targeting guidance and priorities while preparing and refining joint target lists for recommendation to the JFC. During operations, the JTCB will also maintain a restricted target list (RTL). The JTCB is the primary agency for synchronizing and managing joint targeting efforts. It will: prepare target lists for Joint Coordination Board review and, if necessary, JFC approval; validate changes in the targeting database; and coordinate target material production, as developed through the targeting process. The JTCB is supported by a joint targeting working group and a target support cell (TSC). Figure 4.1 shows a typical composition of the JTCB.

a. Joint targeting working group. A joint targeting working group (JTWG) may be established to prepare and staff targeting products before presentation to the JTCB. The joint target working group is not a decision-making body.

b. Target support cell. The target support cell is responsible for managing the joint targeting system, sourcing up-to-date intelligence products (including battle damage assessment), producing targeting products and acting as custodians of target folders. The target support cell will also provide support.
to the Information Activities Coordination Board.

0409 **The Information Activities Coordination Board.** The IACB is the forum for implementing information operations (Info Ops) collective coordination and advice. Chaired by Chief Info Ops on behalf of the JFC, it ensures that information activities are coherent and synchronized with other actions (potentially) affecting the information environment. Within the scope of its assigned functions, the IACB will provide initial coordination of target nominations related to information and information systems to facilitate subsequent harmonization at the JTCB. It also provides advice on possible effects in the information environment created by other military actions. The Info Ops representative at the JTCB will present the decisions from the IACB to the JTCB, monitor the selection, harmonization, nomination and prioritization process, and advise on overarching, cross-functional issues, as required. It further provides a forum for coordination, de-confliction and monitoring of Info Ops plans and activities. When appropriate, the IACB could be subsumed into the JTCB creating a single decision body for the planning and coordination of lethal and non-lethal targeting.

0410 **Operations synchronization.** Operations integration and synchronization is an iterative process. The Joint Coordination Order (JCO) cycle starts with the Joint Coordination Board issuing the JFC’s direction and guidance to the components and the Joint Coordination Board supporting groups (JTCB and IACB). The JTCB manages the targeting process by coordinating the targeting inputs of the component commanders with additional inputs received from other bodies such as the IACB. The JTCB develops a draft joint prioritized target list (JPTL). The JTCB proposes amendments to the restricted target list (RTL) for Joint Coordination Board approval.
Figure 4.1 – Typical composition of the Joint Targeting Coordination Board
Section VI – Target lists and databases

0411 **The NATO integrated database.** The NATO integrated database (IDB) is created with contributions from NATO members, facilitated by other support agencies as required, to support NATO operations. The IDB contains all entities considered to be potential targets within the NATO area of intelligence interest. ACO will request nations to provide their information to the IDB. This provides the basis for phase 2 (target development) of the joint targeting cycle. The IDB is kept under constant review to ensure currency and accuracy.

0412 **Target folders.** Target folders are populated by multi-source intelligence, containing the details for each individual target. All related information should be included in the folder and they are retained as operational records by J3.

0413 **Joint target list.** The joint target list (JTL) is the target list from which all other target lists, except the no-strike list (NSL), will be produced. All other sub-lists remain linked to it so that updates to the NATO integrated database are reflected in all sub-lists. The JTCB manages the JTL with oversight maintained by the Joint Coordination Board on the JFC’s behalf. It provides all known targets within the NAC-approved target sets considered for lethal or non-lethal engagement within the joint operations area. The targets on the JTL are not finally, legally cleared against rules of engagement, relevant international law and NATO caveats until such time as they are selected for engagement (i.e., nominated for the joint prioritized target list (JPTL)). The JTL is developed through the joint targeting cycle, to include newly nominated targets from the components, nations or other agencies. Mobile and restricted targets will be included, and annotated as such in the database to ensure they are easily identified.

0414 **Target nomination list.** The target nomination list (TNL) is a component list, which contains targets prioritized in accordance with the guidance provided by the component commander. It is forwarded to the JTCB for consideration. The target nomination list contains two types of targets:

- new targets that are forwarded, together with all associated materials for validation and inclusion on the joint target list. These targets may also be nominated to the joint prioritized target list; and

- targets already on the joint target list being nominated for the joint prioritized target list.

Although components will have developed target folders for targets on the target nomination list, these may not yet be fully mature. This may be because the component does not have the intelligence, surveillance and reconnaissance assets to develop fully the target, and seeks assistance from the target support cell to do so.
Restricted target list. The restricted target list (RTL) is a joint target list subset owned by the JFC and may include some joint prioritized target list targets. They are lawful targets that have temporary or permanent operational restrictions for engagement and require special consideration. Special consideration may be warranted because of:

- the particular sensitivity of the target;
- a need to de-conflict any proposed action with other activities;
- the target is assessed to have a significant intelligence value;
- a wish to use a specific asset;
- a desire to exploit the target; or
- post-conflict reconstruction considerations.

Joint prioritized target list. The JPTL is a list of targets that have been validated and prioritized in-line with the JFC’s desired effects and guidance by the JTCB. The targets are allocated by ability to prosecute. It is derived from the joint target list and is the end product of the decision-making process. The JPTL directs the collection task list through the intelligence collection plan (ICP) for target development and authorizes prosecution when target detail is sufficiently mature. The JFC defines the approval process for the joint prioritized target list.

The JTCB will develop a JPTL and submit it, together with all relevant target data, to the Joint Coordination Board for full review/consideration and JFC’s approval. The JPTL should include the proposed means of prosecution (lethal or non-lethal) and will usually be issued as an annex to the Joint Coordination Order (with the updated JPTL available on the joint targeting system). The target prioritization may be modified to reflect changes in the battlespace or a possible readjustment of objectives. The JPTL shows which components are responsible for engaging which targets and may include remarks.

Prioritized target list. A prioritized target list (PTL) is a target list derived from the joint prioritized target list that allocates prioritized targets to individual components. Each component will have a separate prioritized target list. A prioritized target list will normally be based on the requested target nominations made by the component, but may also include targets that have been allocated in support of other component commanders during the coordination process. It may not include all the targets originally nominated by the component.

No-strike list. The no-strike list (NSL) is comprised of entities that are designated by the NAC as protected. Engagement of NSL entities violates international law.
the Law of Armed Conflict, agreements, conventions, NAC policies or rules of engagement. As such, they must not be engaged unless that protection is removed and, consequently, become targets subject to lawful engagement. Entities on the NSL that lose their protected status and become subject to lawful engagement are likely to remain sensitive. Targets which were placed on the NSL by the NAC or SACEUR must have their removal from this list approved prior to prosecution as directed by SACEUR. Entities on the NSL are initially drawn from the modernized integrated database (MIDB). The NSL is maintained by the JFC.

0420 The relationship between target lists is shown in Figure 4.2.

![Figure 4.2 – Target lists and their relationships](image)

Section VII – Intelligence support to joint targeting

0421 Intelligence supports targeting by leading on target analysis (TSA and TAA) providing a detailed picture of actors’ capabilities, structure, organization, intentions, objectives and vulnerabilities – all in context. This intelligence is used to allocate relative importance to targets, or target elements, in support of operational decisions and the target prioritization process. Details of intelligence support to operations are contained in the AJP-2 series of publications. Intelligence supports targeting throughout the process as described next.

a. **Phase 1: Commander’s objectives, guidance and intent.** Target
development commences once the JFC has selected his objectives. However, intelligence and geographic data supporting targeting (i.e., imagery, systems analysis, facilities identification and significance, and psychological profiles) may be developed in advance of the planning phase of an operation as part of the crisis response intelligence package (CRIP) that is built up during the indication and warning phase. Intelligence provides the commander with an understanding of the environment and actors within it – in terms of probable intent, objectives, strengths, weaknesses, probable courses of action (COAs), most dangerous COA and critical factors. This is conducted in support of the estimate.\(^\text{27}\)

b. **Phase 2: Target development.** Establishing intelligence requirements at all levels, which in turn drives the production of collection plans, is critical to the success of the entire targeting process.\(^\text{28}\) The environment and the systems within it will be analyzed using various methods to create a target systems analysis.\(^\text{29}\) The ultimate goal of this research is to develop a detailed assessment of actors' will, capability and understanding to determine critical vulnerabilities that can be targeted to create the JFC’s desired effects by lethal or non-lethal means. For targets engaged to create physical effects, this includes generating target definition data such as locations of critical functionalities, determining communications paths, and how any physical or electronic hardening might affect the weapon/target interaction. For targets engaged to create psychological effects, this includes generating target definition data, such as locations of media and general public infrastructure or network nodes that, if engaged, have a direct impact on the target audience. This will point to the most effective and efficient method of achieving the JFC’s objectives within established restrictions.

c. **Phase 3: Capabilities analysis.** During phase 3 the target support cell completes production of target materials. The intelligence characterization of the target allows the effective assessment of the best available capabilities (lethal and non-lethal) to employ against the target to achieve the individual objectives.

d. **Phase 4: Commander’s decision, force planning and assignment.** During phase 4, intelligence continues to support the planning and decision-making process.

e. **Phase 5: Mission planning and execution.** During mission planning, the original intelligence assessments must be constantly reviewed to ensure they remain valid. If not, the original engagement decision must be revisited.

\(^{27}\) AJP-5, *Allied Joint Doctrine for Operational-Level Planning.*

\(^{28}\) AJP-2, *Allied Joint Doctrine for Intelligence, Counter-intelligence and Security.*

\(^{29}\) AJP-2.1(A), *Intelligence Procedures.*
During execution, the situation may change as the actor responds to the friendly force action. Intelligence support to targeting is vital for maintaining situational awareness and targeting for future engagement.

f. **Phase 6: Assessment.** It is vital that the effectiveness of activities conducted can be assessed to inform campaign progress. Elements of the ICP must be focused on collecting data against the measurements of effectiveness identified in phase 1.
CHAPTER 5 – TARGETING AT COMPONENT LEVEL

Section I – General

0501 At the component level, outputs from the joint targeting cycle are translated into actions conducted by tactical units. Components also contribute to the joint cycle by nominating their own targets specific to their own environment and mission within the Joint Force Commander (JFC)’s intent. Such targets could be outside their own area of operations.

0502 Within the priorities set by the JFC, component commanders will allocate priorities, designate effects and specify timings. Component collection capabilities will assist the JFC during target development and assessment phases of the joint targeting cycle.

0503 Component commanders will:

- develop target nomination lists and priorities in accordance with the mission assigned by the JFC;
- provide representatives to the Joint Coordination Board, Joint Targeting Coordination Board (JTCB) and Information Activities Coordination Board (IACB) as directed by the JFC;
- contribute to the development of targets on the joint target list and their prioritization onto the joint prioritized target list;
- contribute to the approval process through the membership of the JTCB;
- confirm that targets meet legal and policy requirements, including that of military necessity, and account for any caveats expressed by national representatives;
- allocate organic assets to prosecute those targets assigned on the prioritized target list;
- prosecute time-sensitive targets as detailed in Annex A;
- ensure that all targets passed to subordinate formations for prosecution have been validated and approved, noting that this does not relieve lower echelon commanders of their responsibilities under international human rights law, Law of Armed Conflict and the rules of engagement;
- provide input into the assessment phase, consolidating appropriate battle damage assessments and weapon effectiveness assessments (i.e. mission
reports, cockpit video and post-meeting reports), passing assessment information to the JFC’s target support cell and combat assessment information to the campaign assessment section for fusion with other information sources; and

- make re-engagement recommendations.

0504 Figure 5.1 shows the interaction of components with the joint targeting process.
Figure 5.1 – Component interaction with the joint targeting process
Section II – Decide, detect, deliver, assess

Component commanders and their staffs may use different processes within the joint targeting cycle managed by the JFC. One example is the ‘decide, detect, deliver, assess’ process (D3A). Throughout, the process is dependent on the clear direction and guidance of the JFC to the component commander and is particularly suitable where component commanders have been given responsibility for an area of operation and a degree of autonomy to conduct operations. The following paragraphs provide a summary of the D3A process which is illustrated in Figure 5.2.

a. Decide. The ‘decide’ phase is the initial and most involved part of the process, although much of the work may have been done in earlier phases of the joint targeting cycle. This phase takes place in parallel and is integrated with the component operations planning process and intelligence collection planning\(^{30}\). The decide phase will take the direction and guidance provided by the JFC to the component commander, who then translates this into desired effects and how they expect to create them, using this to identify target types and target areas, and the accuracy to which they can be established based on available technical systems. This will provide input into their intelligence collection plan (ICP) for the focusing of assets – including intelligence, surveillance and reconnaissance (ISR) assets – to develop an understanding of the physical and psychological target sets available to them. At the same time, the staff will consider what measurements of effectiveness will be used, including criteria for battle damage assessment. The outputs from the decide phase will include target nominations, including those from the IACB to be presented to the JTCB, and a variety of other products such as high pay-off target lists and target selection standards (TSS).\(^{31}\) The component commander nominates targets when they have identified them as high pay-off targets but lacks the capacity and/or capability to collect intelligence or to act against them.

b. Detect. Understanding what has been developed during the decide phase will guide when and where to look for a target, and the ICP will guide the employment of ISR assets to detect the presence of targets in any named area of interest, or detect the conditions that make it appropriate for target engagement. Once located, a target must be positively identified against the target selection standards derived during the decide phase. Once positively identified, and depending on the target’s priority, ISR assets will continue to track the target to ensure it is not lost and to develop and maintain a current, precise target location. On conclusion of this phase and before starting the

\(^{30}\) Intelligence requirements management and collection management (IRM&CM) processes.

\(^{31}\) ‘Target selection standards’ are criteria that are applied to possible future targets to determine what degree of accuracy and timeliness is required from detection systems to enable their successful engagement.
‘deliver’ phase, all legal and other requirements, including collateral damage constraints, must be met.

c. **Deliver.** During the ‘deliver’ phase, the primary activity is applying the planned capability to create the desired effect against a particular target. The aim of this phase is to ensure that the appropriate capability is applied against the target as efficiently as possible. Applying lethal capabilities against adversarial target sets may be relatively straightforward in comparison with applying non-lethal capabilities against both adversaries and other actors.

d. **Assess.** This phase feeds directly back to phase 6 of the joint targeting cycle – assessment. During this phase, staff will seek to identify the effectiveness of the actions applied against particular targets. This will determine any requirement for a follow-up engagement, including consequence management, and assist in identifying opportunities to exploit and contribute to overall campaign assessment both within the component command and by the JFC. While the most critical element is measuring what has changed, or whether the desired effect has been created, both measures of activity and measures of performance are important. The assessment phase is likely to include four separate elements, as detailed next.

1. **Battle damage assessment.** The assessment of effects resulting from the military activity, either lethal or non-lethal; the result of the target engagement.

2. **Measures of performance.** To determine if the correct amount of activity/capability was applied to create the planned effect.

3. **Measurements of effectiveness.** How any changes in the target (physical, attitudinal or behavioural) are related to the intended effect; whether the activity created the planned effect.

4. **Follow-up actions.** Confirmation of mission success or recommendation to re-engage if required.

The staff should also evaluate the effectiveness of the assess phase and the tools employed (battle damage assessment, measures of performance and measurements of effectiveness) against achieving the JFC’s objectives, and then make adjustments as appropriate. This assessment complements the actual assessment of effects generated.
Figure 5.2 – D3A

Legend
BDA Battle damage assessment
D3A Decide, detect, deliver, assess
ICP Intelligence collection plan
ISR Intelligence, surveillance and reconnaissance
MOE Measurements of effectiveness
Section III – NATO Special Operations targeting process: find, fix, finish, exploit, analyze and disseminate

Tactical operations – strategic effects. NATO’s Special Operations Force (SOF) is commanded through a Special Operations Component Command, which will contribute to the joint targeting cycle in terms of target nomination and development alongside other components. However, during the deliver phase at the tactical level, activity cycles – such as find, fix, finish, exploit, analyze and disseminate (F3EAD) – may be used to manage the execution of an activity. This may be especially useful when targeting human networks and when coordinating activity against dynamic and emerging targets, where target engagement authority is sought after a target has been detected but before it can be acted against. F3EAD facilitates a hasty targeting process and is applicable for delivery of both lethal and non-lethal capabilities to create physical and psychological effects. Although optimized to deliver a lethal strike against a dynamic or time-sensitive target, it has utility across the full spectrum of operations. The process is illustrated at Figure 5.3 and further details describing it, along with its associated process of find, feel, understand, influence and disrupt (F2UID), are contained in AJP-3.5, *Allied Joint Doctrine for Special Operations*.

**Figure 5.3 – F3EAD cycle**

- **Find**
  1. Identify/locate leading to positive identification

- **Disseminate**
  6. Re-engage recommendations, network insights, suggest new lines of operation, provide leads or start points

- **Analyze**
  5. Weapons effects assessment, battle damage assessment, measurements of effectiveness of action 2nd/3rd order effects, reflections, consider additional actions

- **Exploit**
  4. Exploitation of opportunities arising, evidence collection, technical exploitation, tactical questioning, document exploitation

- **Fix**
  2. Consider: pattern of life, collateral damage estimate, rules of engagement, target engagement authority decision

- **Finish**
  3. Lethal or non-lethal activity to create desired effects synchronized with other activity. Consequence management

Legend
F3EAD Find, fix, finish, exploit, analyze, disseminate
ANNEX A – PROSECUTING TIME-SENSITIVE TARGETS

Section I – General

A1. Time-sensitive targets (TST) usually warrant immediate target prosecution and will normally be critically important to an adversary – who will make every attempt to conceal their location. Most TST engagements involve assets from a variety of components operating together to detect and engage the adversary and assess the results. Consequently, TST are prioritized, categorized, coordinated, de-conflicted and directed for engagement at the joint force level. Their immediacy means they are typically dealt with through dynamic targeting. Some examples of potential TST include:

- mobile high-threat surface-to-air missile systems;
- deployed theatre ballistic missiles;
- mobile command, control, communications, computers and intelligence (C4I);
- weapons of mass destruction assets;
- adversary leadership;
- mobile radio/TV broadcast stations; and
- adversary propaganda.

A2. Successful TST engagement. Keys to successful TST engagement include:

- clear, detailed North Atlantic Council (NAC) and Supreme Allied Commander Europe (SACEUR) guidance, including pre-approved TST sets;
- a TST matrix containing specific direction and guidance regarding TST including target engagement authority and collateral damage levels from the JFC;
- effective intelligence, surveillance and reconnaissance (ISR) and communications providing near-real-time capability to support TST operations;
- a capability to share relevant, timely information about targets, surrounding threats and collateral damage assessments (where the information must be presented in a format that facilitates rapid decision-making);
- updated information and a common operational picture shared between components;
A3. **Structure to prosecute time-sensitive targets.** Overall responsibility for command, control and coordination of TST remains with the Joint Force Commander (JFC). There are several options with which to structure command and control systems to support TST prosecutions and these are as follows.

a. **TST coordination element.** Coordination of TST is always retained at the JFC level. A TST coordination element (TCE) is established in the joint operations centre (JOC) to provide oversight for the TST process. The TCE within the JOC will supervise and coordinate ongoing operations while adjudicating or arbitrating component targeting issues in accordance with JFC direction and guidance, rules of engagement, Law of Armed Conflict and relevant international law. The TCE is the single point of contact at the JFC level for any TST-related component activities or questions.

b. **TST cell.** A TST cell, responsible for TST execution under the guidance of the TCE, is established at both the joint force and component level. TST cells will include, as a minimum, fires, intelligence and targeting experts. The JFC may also maintain a deployable JFC TST cell, which may remain co-located with the Joint Task Force Headquarters (JTF HQ) or deploy to a designated component, as the nucleus of a larger TST cell embedded in that component's current operations cell.

c. **Lead component.** A component may be designated as the TST lead if it has the best information or situational awareness to prosecute TST. While airpower is well suited to TST prosecution, making combined air operations centres (CAOC) the usual choice to coordinate their engagement, the JFC may wish to allocate the lead to a different component commander or retain it at JTF HQ. The JFC will normally embed their deployable TST team within a lead component’s current operations section; the TCE remains at the joint force level. Figure A.1 shows the TST organization when the JFC retains a TST cell at their level.
A4. **Other considerations.**

   a. **Accelerated decision making.** Successful TST engagement requires accelerating the decision-making process. This is achieved through appropriate command and control mechanisms, alongside well-understood and well-rehearsed procedures coupled to prior planning and coordination. Planning should include producing a TST matrix and engagement criteria.

   b. **Identifying TST.** Comprehensive preparation of the operating environment (CPOE), supported by joint intelligence preparation of the operating environment, identifies the probable locations or operating areas where TST may emerge. If confidence in the intelligence picture is high, and subject to the nature of the TST, component commanders may elect to position or posture ISR and strike assets to reduce response times when TST are identified. During mission planning and execution, intelligence closely monitors target status in order to provide real-time support to execution.

   c. **Risk assessment.** Within the accelerated decision-making process, staff should conduct a risk assessment balanced against the guidance in the TST matrix to consider:

      - the level of risk to the force (including fratricide and diverting resources from other assigned tasks);
      - the risk to operational success (including any impact on freedom of action and impact on the operation’s information strategy); and
      - collateral damage risk.

---

**Figure A.1 – TST Cell and TCE at joint force level**

<table>
<thead>
<tr>
<th>Legend</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>Air Component Command</td>
</tr>
<tr>
<td>JFC</td>
<td>Joint Force Command</td>
</tr>
<tr>
<td>JTF HQ</td>
<td>Joint Task Force Headquarters</td>
</tr>
<tr>
<td>LCC</td>
<td>Land Component Command</td>
</tr>
<tr>
<td>MCC</td>
<td>Maritime Component Command</td>
</tr>
<tr>
<td>SOCC</td>
<td>Special Operations Component Command</td>
</tr>
<tr>
<td>TCE</td>
<td>Time-sensitive target coordination element</td>
</tr>
<tr>
<td>TST</td>
<td>Time-sensitive target</td>
</tr>
</tbody>
</table>

---
Section II – Roles and responsibilities

A5. **JFC guidance.** The JFC designates TST, stating exactly what constitutes one, and provides guidance on targeting priorities. Only TST within target sets approved by the NAC will be prosecuted. However, during ongoing operations new potential TST may emerge; those that fall outside these categories will be forwarded by the JFC for NAC approval before being considered for designation as a TST. The JFC guidance must clearly define the TST coordination procedures between the components, applicable rules of engagement, any restrictions (including collateral damage considerations) and reporting conditions. The guidance will include a number of factors.

a. **TST priorities.** Following planning, including input from the components, the JFC identifies and prioritises TST. Priorities must be allocated to establish precedence when tasking assets away from other targets. The JFC will limit the number of TST categories or these priorities may become meaningless.

b. **Target engagement authority.** Political and other considerations may require the JFC to retain target engagement authority. Wherever possible, target engagement authority is delegated to the lowest level possible. This allows component commanders the flexibility to execute targets within delegated collateral damage levels and rules of engagement. To maintain the ability to command, control and coordinate the TST operation, this activity is normally carried out at the component level. The JFC, when assigning engagement authority, has to balance strategic impact, component commander’s areas of operation and assigned functional missions, with the requirement to strike rapidly against TST.

c. **Positive identification.** The JFC establishes requirements for positive identification (PID) prior to TST engagement. The type of TST or its location (such as in an urban area) will affect the JFC’s decision-making. This may require data from multiple sensors/sources to achieve the confidence level required for the JFC to authorize target prosecution.

d. **National caveats.** During planning and execution, the JFC must be aware of any national caveats, additional restrictions or considerations depending on the situation that could affect assigning resources for target prosecution. National caveats are reported through appropriate national representatives.

e. **Collateral damage.** The JFC ensures that collateral damage estimation is conducted in accordance with the parameters of NATO collateral damage estimation methodology. Components develop procedures to ensure compliance with JFC’s collateral damage direction.
f. **Command and control and coordination requirements.** The JFC establishes specific command and control guidance for TST prosecution, including mechanisms for coordination, de-confliction, integration and synchronization amongst components. A well-practised, well-executed command and control process is essential for successful TST prosecution.

g. **Desired effects.** The desired effects are given in the TST matrix and express the required action and the intended effect.

h. **Acceptable risk.** JFC’s guidance should stipulate the degree of acceptable risk (including that posed by collateral damage) when engaging specific TST. The acceptable risk will be addressed within the TST matrix, as well as assessed in the target engagement authority brief. Specific TST 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 engage the target immediately upon detection. The risk associated with TST involves a possible trade-off between diverting ISR and engagement assets from their planned mission to a TST. Risks must be balanced against a target’s window of vulnerability.

A6. **Command responsibilities.** The following are the general responsibilities in a joint force with regard to TST.

a. **Joint Force Commander:**

   o analyzes and recommends TST categories for NAC approval;\(^{32}\)

   o designates and prioritizes TST;

   o approves the TST matrix developed by the Joint Targeting Coordination Board (see Figure A.2, which contains a sample TST matrix);

   o issues TST directions and guidance, and delegation of engagement authority for TST to component commanders; and

   o establishes a JFC TST cell and a TST coordination element as required.

b. **JFC Director of the Knowledge Management Directorate:**

   o develops targets/target sets designated as TST by the JFC;

   o assesses the effectiveness of collection plans with regard to TST priorities and recommends appropriate adjustments;

\(^{32}\) During this process the JFC should consider advice from senior national representatives.
coordinates CPOE effort with other directorates and branches; and
supports the target engagement authority briefing.

c. **JFC Director of Operations:**
- promulgates and executes the JFC’s guidance for TST operations;
- establishes a TST coordination element and JFC TST cell;
- initiates NAC approval for new TST target categories submitted by components, headquarters or non-NATO entities;
- ensures TST coordination element and JFC TST cell is correctly manned, trained and equipped; and
- provides requirements to J-6 CIS Branch for command and control architecture and collaborative tools.

d. **JFC TST cell/coordination element:**
- drafts TST guidance and priorities for JFC approval and incorporation into the joint coordination order;
- ensures compliance with approved JFC guidance;
- if applicable, coordinates TST operations with organizations outside NATO’s command authority;
- facilitates timely approval for the engagement of targets requiring JFC or higher authority;
- arbitrates conflicting TST requirements between components; and
- provides TST expertise to the JFC.

e. **Component commanders.** If a TST is detected within a component’s area of operations, the component commanders plan and execute TST operations as tasked by the JFC. If approved for engagement by the appropriate target engagement authority, the component commander may independently prosecute the TST with organic capabilities or request support from another component. Any component TST cell may offer other solutions/assets via the collaborative network and coordinate with the JFC TCE cell. The component commander remains responsible for engagement de-confliction within his area of operations. The TST coordination element monitors all potential TST prosecutions, arbitrates and coordinates issues that may arise in cross-
component area of operations actions. Component commanders, or their designated representatives, will:

- establish a TST cell to coordinate with the JFC’s TST coordination element;
- review all TST against JFC direction and guidance and the joint coordination order to determine engagement authority;
- report processing of JFC-designated TST; and
- coordinate with the JFC TST coordination element for TST requiring coordination between two or more components or requiring JFC action in accordance with JFC direction and guidance.
Annex A to AJP-3.9

### Table: Example of a time-sensitive target matrix

<table>
<thead>
<tr>
<th>JFC priority</th>
<th>TGT set</th>
<th>TGT type</th>
<th>Desired effect</th>
<th>TEA</th>
<th>ROE</th>
<th>Acceptable risk to friendly forces</th>
<th>Acceptable CDE</th>
<th>PID</th>
<th>Remarks/ restrictions/amplifications</th>
<th>C2 coordination requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/I</td>
<td>ADF</td>
<td>High threat SAM</td>
<td>KK/KC</td>
<td>CC</td>
<td>231</td>
<td>High</td>
<td>4</td>
<td>Intel and operator input</td>
<td>If SAM threat poses or soon will pose, a threat to ATO execution, strike with any available asset</td>
<td>TCE/JTST Cell</td>
</tr>
<tr>
<td>2/I</td>
<td>MSL</td>
<td>Loaded NO DONG TEL</td>
<td>KK/KC</td>
<td>JFC</td>
<td>231</td>
<td>High</td>
<td>5</td>
<td>Intel and operator input</td>
<td>If TEL is within range of NATO fielded forces, or key infrastructure strike immediately with any asset</td>
<td>TCE/JTST Cell</td>
</tr>
<tr>
<td>3/I</td>
<td>MSL</td>
<td>Loaded SCUD TEL</td>
<td>KK/KC</td>
<td>JFC</td>
<td>231</td>
<td>High</td>
<td>5</td>
<td>Intel and operator input</td>
<td>If TEL is within range of NATO fielded forces, or key infrastructure, strike immediately with any asset</td>
<td>TCE/JTST Cell</td>
</tr>
<tr>
<td>4/A</td>
<td>PLS</td>
<td>Adversary national leadership</td>
<td>KC/JJ</td>
<td>SACEUR</td>
<td>193, 255</td>
<td>High</td>
<td>5</td>
<td>Intel input</td>
<td>Limit actor’s control capability or capture actor</td>
<td>TCE/JTST Cell</td>
</tr>
<tr>
<td>5/A</td>
<td>MLS</td>
<td>Adversary national leadership</td>
<td>KK/ KC/ JJ</td>
<td>CC</td>
<td>183, 255, 168</td>
<td>Medium</td>
<td>4</td>
<td>Intel input</td>
<td>Kill or limit actor’s control capability capture actor</td>
<td>TCE/JTST Cell</td>
</tr>
</tbody>
</table>

**Legend**

<table>
<thead>
<tr>
<th>ADL</th>
<th>Air defence forces</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADL</td>
<td>As soon as possible</td>
</tr>
<tr>
<td>ATO</td>
<td>Air tasking order</td>
</tr>
<tr>
<td>C2</td>
<td>Command and control</td>
</tr>
<tr>
<td>CC</td>
<td>Component commander</td>
</tr>
<tr>
<td>CDE</td>
<td>Collateral damage estimate</td>
</tr>
<tr>
<td>JPTL</td>
<td>Joint prioritized target list</td>
</tr>
<tr>
<td>Intel</td>
<td>Intel Intelligence</td>
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<tr>
<td>JFC</td>
<td>Joint Force Commander</td>
</tr>
<tr>
<td>KC</td>
<td>Kill capabilities</td>
</tr>
<tr>
<td>MLS</td>
<td>Military leadership</td>
</tr>
<tr>
<td>MSL</td>
<td>Missile</td>
</tr>
<tr>
<td>P</td>
<td>Prevent use</td>
</tr>
<tr>
<td>PP</td>
<td>Positive identification</td>
</tr>
<tr>
<td>PLS</td>
<td>Political leadership</td>
</tr>
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<td>ROE</td>
<td>Rules of engagement</td>
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<tr>
<td>SAM</td>
<td>Surface to air missile</td>
</tr>
<tr>
<td>TCE/JTST</td>
<td>TST coordination element / Joint time-sensitive target cell</td>
</tr>
<tr>
<td>TEA</td>
<td>Target engagement authority</td>
</tr>
<tr>
<td>TEL</td>
<td>Transporter erector-launcher</td>
</tr>
<tr>
<td>TGT</td>
<td>Target</td>
</tr>
<tr>
<td>TST</td>
<td>Time-sensitive target</td>
</tr>
<tr>
<td>SACEUR</td>
<td>Supreme Allied Commander Europe</td>
</tr>
</tbody>
</table>

1. As laid down in ACO Directive (AD) 80-70 Campaign Synchronisation and Joint Targeting in ACO.
2. These could relate to possible situations and the level of authority that holds the risk. For example high risk could involve fratricide, casualties caused by an adversary or the diversion of assets from another mission. Such a level of risk may be held at the JFC level. A medium risk could be a possible negative impact on the JFC’s information operations which could be held at component commander level.

**Figure A.2 – Example of a time-sensitive target matrix**
ANNEX B – EXAMPLE NATO TARGET SETS

B1. Supreme Allied Commander Europe, in coordination with the joint force commander, will select target sets based on specific North Atlantic Council direction and (if available) national guidance. 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 and relevant international law. A list of common target sets and their abbreviations is below.

B2. Each target set consists of a number of target categories. For more details see STANAG-3696.

<table>
<thead>
<tr>
<th>Target sets</th>
<th>Abbreviated title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Command, control, communication, computers and intelligence</td>
<td>C4I</td>
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<tr>
<td>Weapons of mass destruction</td>
<td>WMD</td>
</tr>
<tr>
<td>Ground forces and facilities</td>
<td>GFF</td>
</tr>
<tr>
<td>Air forces and airfields</td>
<td>AFA</td>
</tr>
<tr>
<td>Air defence</td>
<td>ADF</td>
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<tr>
<td>Naval forces and ports</td>
<td>NFP</td>
</tr>
<tr>
<td>Space forces</td>
<td>SPF</td>
</tr>
<tr>
<td>Ballistic missiles</td>
<td>MSL</td>
</tr>
<tr>
<td>Electric power</td>
<td>PWR</td>
</tr>
<tr>
<td>Petroleum industry</td>
<td>POL</td>
</tr>
<tr>
<td>Industry</td>
<td>IND</td>
</tr>
<tr>
<td>Transportation/lines of communication</td>
<td>LOC</td>
</tr>
<tr>
<td>Military supply and storage</td>
<td>MSS</td>
</tr>
<tr>
<td>Special category</td>
<td>SCT</td>
</tr>
<tr>
<td>Military leadership</td>
<td>MLS</td>
</tr>
<tr>
<td>Political leadership</td>
<td>PLS</td>
</tr>
<tr>
<td>Economic leadership</td>
<td>ELS</td>
</tr>
<tr>
<td>Adversary media</td>
<td>AME</td>
</tr>
<tr>
<td>Rules of engagement defined forces, groups, individuals</td>
<td>RDF</td>
</tr>
<tr>
<td>Militant, criminal forces</td>
<td>MCF</td>
</tr>
<tr>
<td>Religious leadership</td>
<td>RLS</td>
</tr>
<tr>
<td>Media</td>
<td>MED</td>
</tr>
</tbody>
</table>
LEXICON

PART I – ACRONYMS AND ABBREVIATIONS

ACO  Allied Command Operations
AJP  Allied Joint Publication
BDA  battle damage assessment
CDE  collateral damage estimation
COA  course of action
CPOE  comprehensive preparation of the operating environment
D3A  decide, detect, deliver, assess
F2T2E2A  find, fix, track, target, engage, exploit, assess
F3EAD  find, fix, finish, exploit, analyze, disseminate
IACB  Information Activities Coordination Board
ICP  intelligence collection plan
IDB  integrated database
Info Ops  information operations
IRM&CM  intelligence requirements management and collection management
ISR  intelligence, surveillance and reconnaissance
JCO  joint coordination order
JFC  joint force commander
JIPOE  joint intelligence preparation of the operating environment
JOC  joint operations centre
JPTL  joint prioritized target list
JTCB  Joint Targeting Coordination Board
JTF  joint task force
JTL  joint target list
MC  Military Committee
MIDB  Modernised Integrated Database
MOE  measurement of effectiveness
MOP  measure of performance
NAC  North Atlantic Council
NATO  North Atlantic Treaty Organization
NSL  no-strike list
OPLAN  operation plan
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>PID</td>
<td>positive identification</td>
</tr>
<tr>
<td>ROE</td>
<td>rules of engagement</td>
</tr>
<tr>
<td>RTL</td>
<td>restricted target list</td>
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<tr>
<td>SACEUR</td>
<td>Supreme Allied Commander Europe</td>
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<tr>
<td>StratCom</td>
<td>strategic communications</td>
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<tr>
<td>TAA</td>
<td>target audience analysis</td>
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<tr>
<td>TCE</td>
<td>Time Sensitive Target coordination element</td>
</tr>
<tr>
<td>TNL</td>
<td>target nomination list</td>
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<tr>
<td>TSA</td>
<td>target systems analysis</td>
</tr>
<tr>
<td>TSAT</td>
<td>target systems analysis team</td>
</tr>
<tr>
<td>TST</td>
<td>time-sensitive target</td>
</tr>
</tbody>
</table>
PART II – TERMS AND DEFINITIONS

area of intelligence interest
A geographical area for which a commander requires intelligence on the factors and developments that may affect the outcome of operations. (NTMS – NATO Agreed)

area of operations
An area defined by the joint force commander within a joint operations area for the conduct of specific military activities. (NTMS – NATO agreed).

assessment
The process of estimating the capabilities and performance of organizations, individuals, materiel or systems.
Note: in the context of military forces, the hierarchical relationship in logical sequence is: assessment, analysis, evaluation, validation and certification. (NTMS – NATO agreed)

battle damage assessment
The assessment of effects resulting from the application of military action, either lethal or non-lethal, against a military objective. (NTMS – NATO agreed)

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

campaign
A set of military operations planned and conducted to achieve a strategic objective. (NTMS – NATO Agreed)

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. (NTMS – NATO agreed)

collateral damage
Inadvertent casualties and destruction in civilian areas caused by military operations. (NTMS – NATO agreed)

collateral damage estimation
A methodology that provides a probability, but not a certainty, of collateral damage for a specific weapon system. [AJP-3.9 (not NATO-agreed)]
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. (NTMS – NATO agreed)

communication and information systems
Collective term for communication systems and information systems. (NTMS – NATO-agreed)

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. (NTMS – NATO agreed)

designed to affect information or information systems. Note: Information activities can be performed by any actor and include protection measures. (NTMS – NATO Agreed)
information environment
An environment comprised of the information itself; the individuals, organizations and systems that receive, process and convey the information; and the cognitive, virtual and physical space in which this occurs. [AJP-3.10(A) (not NATO Agreed)]

information operations
A staff function to analyze, plan, assess and integrate information activities to create desired effects on the will, understanding and capability of adversaries, potential adversaries and North Atlantic Council approved audiences in support of Alliance mission objectives. [AJP-3.10(A) (not NATO Agreed)]

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

joint
Adjective used to describe activities, operations, organizations in which elements of at least two services participate. (NTMS – NATO agreed)

joint fires
Fires applied during the employment of forces from two or more components in coordinated action toward a common objective. (NTMS – NATO agreed)

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

joint prioritized target list
A prioritized list of targets approved and maintained by the joint force commander. [AJP-3.9 (not NATO Agreed)]

joint target list
A consolidated list of selected but unapproved targets considered to have military significance in the joint operations area. [AAP-39 (not NATO Agreed)]

measure of performance
A criterion to assess friendly actions that is tied to measuring task accomplishment. [AAP-39 (not NATO Agreed)]

measurement of effectiveness
The assessment of the realization of intended effects. (NTMS – NATO Agreed)
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.
   (NTMS – NATO agreed)

multinational
An adjective used to describe activities, operations and organizations in which elements of
more than one nation participate. See also ‘combined’. (NTMS – NATO agreed)

named area of interest
A geographic area where information is gathered to satisfy specific intelligence
requirements. (NTMS – NATO agreed)

no-strike list
A subset of the integrated database (IDB) comprising entities which must not be engaged
due to protection by international law or for policy reasons as determined by the North
Atlantic Council. [AJP-3.9 (not NATO Agreed)]

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

operation
A sequence of coordinated actions with a defined purpose.
Notes:
1. NATO operations are military.
2. NATO operations contribute to a wider approach, including non-military actions.
   (NTMS – NATO agreed)

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. (NTMS – NATO Agreed)

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. (NTMS – NATO agreed)
restricted target
A valid target that has specific restrictions placed on the actions authorized against it due to operational considerations. [AJP-3.9 (not NATO Agreed)]

restricted target list
A list of restricted targets nominated by elements of the joint force and approved by the joint force commander or directed by higher authorities. [AJP-3.9 (not NATO Agreed)]

rules of engagement
Directives to military forces (including individuals) that define the circumstances, conditions, degree and manner in which force, or actions which might be construed as provocative, may be applied. [MC 362-1 (not NATO Agreed)]

support
The action of a force, or portion thereof, which aids, protects, complements, or sustains any other force. (NTMS – NATO agreed)

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. (NTMS – NATO agreed)

target
A target is an area, structure, object, person and group of people against which lethal or non-lethal capability can be employed to create specific psychological or physical effects. Note: person includes their mindset, thought processes, attitudes and behaviours. (This term and definition modifies an existing NATO-agreed term and/or definition and will be processed for NATO-agreed status)

targeting
The process of selecting and prioritizing targets and matching the appropriate response to them, taking account of operational requirements and capabilities. (NTMS – NATO agreed)

target audience
An individual or group selected for influence or attack by means of psychological operations. (NTMS – NATO agreed)

target audience analysis
The systematic study of people to enhance our understanding of them and to identify their accessibility, vulnerability and susceptibility to behavioural and attitudinal information activity. [AJP3.9 (not NATO agreed)]

target category
A group of targets that serve the same functions. [MC 471/1, 15 June 2007 (not NATO Agreed)]
**target engagement authority**
The level of command required to authorize an engagement at each collateral damage estimation level.
Note: This is defined in the operation plan specific to each NATO operation.
[AJP-3.9 (not NATO Agreed)]

**target systems analysis**
The holistic and dynamic intelligence assessment of all aspects of potential target sets (physical and psychological) to identify vulnerabilities which, if targeted by the appropriate capability (lethal or non-lethal) would achieve desired objectives.
[AJP-3.9 (not NATO agreed)]

**time-sensitive target**
A target requiring immediate response because it poses (or will soon pose) a danger to friendly forces or is a highly lucrative, fleeting target of opportunity whose destruction is of high priority to achieve campaign objectives.
[MC 471/1, 15 June 2007 (not NATO Agreed)]
AJP-3.9(A)(1)