NATO STANDARD

ATP-3.9.2

ALLIED TACTICAL DOCTRINE FOR LAND TARGETING

Edition A Version 1
MAY 2018

NORTH ATLANTIC TREATY ORGANIZATION

ALLIED TACTICAL PUBLICATION

Published by the
NATO STANDARDIZATION OFFICE (NSO)

INTENTIONALLY BLANK

NORTH ATLANTIC TREATY ORGANISATION (NATO)

NATO STANDARDISATION OFFICE (NSO)

NATO LETTER OF PROMULGATION

03 May 2018

1. The enclosed Allied Tactical Publication ATP-3.9.2, Edition A, Version 1, ALLIED TACTICAL DOCTRINE FOR LAND TARGETING, which has been approved by the nations in the Military Committee Land Standardization Board (MCLSB), is promulgated herewith The agreement of nations to use this publication is recorded in STANAG 2285.

2. ATP-3.9.2, Edition A, Version 1, is effective upon receipt and supersedes AJP-3.9.2, which shall be destroyed in accordance with the local procedure for the destruction of documents.

3. No part of this publication may be reproduced, stored in a retrieval system, used commercially, adapted, or transmitted in any form or by any means, electronic, mechanical, photo-copying, recording or otherwise, without the prior permission of the publisher. With the exception of commercial sales, this does not apply to member or partner nations, or NATO commands and bodies.

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

for

Dieter Schmaglowski
Deputy Director NSO
Branch Head P&C

Zoltán GULYÁS
Brigadier General, HUNAF
Director, NATO Standardization Office

INTENTIONALLY BLANK

RESERVED FOR NATIONAL LETTER OF PROMULGATION

INTENTIONALLY BLANK

RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATION BY NATIONS
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.	

INTENTIONALLY BLANK

RECORD OF SPECIFIC RESERVATIONS

NATION	DETAIL OF RESERVATION
BEL	**Belgium will implement this STANAG to the most possible extend within available means and capacities.**
CAN	**(1) In accordance to national law, Canada will not use any device which may be classified as anti-personnel mine according to the OTTAWA Treaty, 3 December 1997; and (2) In accordance to national law, Canada will not use any device, which may be classified as cluster munition according to the OSLO Convention, 3 December 2008.**
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.	

INTENTIONALLY BLANK

REFERENCES

A.	AArtyP-5(B)	NATO Fire Support Doctrine	November 2015
B.	AAP-06	Glossary of terms and definitions	2017
C.	AAP-15	Glossary of abbreviations	2016
D.	AAP-47(B)	Allied joint doctrine development	June 2016
E.	AJP-01(E)	Allied joint doctrine	February 2017
F.	AJP-2	Allied joint doctrine for intelligence, counter-intelligence and security	February 2016
G.	AJP-3(B)	Allied doctrine for joint operations	March 2011
H.	AJP-3.2	Allied joint doctrine for land operations	March 2016
I.	AJP-3.9	Allied joint doctrine for joint targeting	April 2016
J.	AJP-3.10	Allied joint doctrine for information operations	December 2015
K.	AJP-3.10.1(B)	Allied joint doctrine for psychological operations	September 2014

INTENTIONALLY BLANK

PREFACE

0001 **Scope**. The Allied Tactical Publication (ATP)-3.9.2 *Allied Tactical Doctrine for Land Targeting* addresses the roles, responsibilities, processes and products from the land command and the formations within this command inherent in this process.

0002 **Purpose**. ATP-3.9.2 explains how land targeting is planned, conducted and assessed. The document focuses on defining and discussing how land targeting fits into the joint targeting process, given the fact that principles of joint targeting apply to land targeting as well. The ATP 3.9.2. highlights the considerations particular for the conduct of operations within the land component. It reflects the evolution of land targeting to incorporate a full spectrum approach using the full range of available military capabilities against a range of actors, not simply an adversary. By doing so, land targeting, as written in this publication, attempts to connect the use of lethal and non-lethal capacities to create a broad range of physical and psychological effects to achieve the commander's objectives.

0004 **Application.** ATP-3.9.2 is intended principally for a formation commander, the Chief of Staff (CoS) and those members of the staff with targeting responsibilities. This publication also serves a wider audience including senior officers, junior officers and senior non-commissioned officers working in the formation staff. It also addresses the roles, links, responsibilities and required products from the strategic and operational level, other tactical commands and formations applying influence in the land environment, and the political guidance and oversight inherent in this process.

TABLE OF CONTENT

INTENTIONALLY BLANK

CHAPTER 1 – Context and Fundamentals of Land Targeting

Section I – Introduction and context

0101. History has shown that NATO forces may find themselves conducting a wide range of activities 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. Therefore, NATO forces must, be able to coordinate and employ lethal and non-lethal actions against a range of actors, as part of NATO's comprehensive approach, in the midst of a variety of threat environments. This chapter will discuss two cycles used for targeting[1]: joint targeting and land targeting. Joint targeting is discussed in section I and land targeting in section II.

0102. **Joint Targeting**. 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, will allow NATO to meet the challenges of contemporary operations. Using strategic direction, operational-level targeting determines specific effects to generate and synchronizes specific actions, lethal and non-lethal, to generate them to satisfy the Joint Force Commander's (JFC) objectives. At the operational level, targets are identified, selected and endorsed in the joint targeting process. These targets may be engaged with assets at the tactical level in accordance with targeting guidance and approved rules of engagement (ROE).

0103. The value of the joint targeting process lies in the effort to focus on specific elements of an actor's long term capacity, will to sustain (hostile) activities, capability to conduct operations and the capability which enables him to sustain (hostile) activities. The joint targeting process consists of six phases that work as a cycle. This cycle focuses targeting options on the JFC objectives for operations, while diminishing the likelihood of undesirable consequences. The joint targeting cycle is inextricably linked to the intelligence process[2], and both feed the short and long term planning

[1]The joint and tactical level use the same definition for **Targeting**:
The process of selecting and prioritizing targets and matching the appropriate response to them, taking account of operational requirements and capabilities (AJP 3.9 *Allied Joint Doctrine for Joint Targeting*).
[2] AJP-2 "Allied *Joint Intelligence, Counter-Intelligence and Security Doctrine"*

processes. In para 0122 the linkage between the joint targeting process and the land targeting process is discussed.

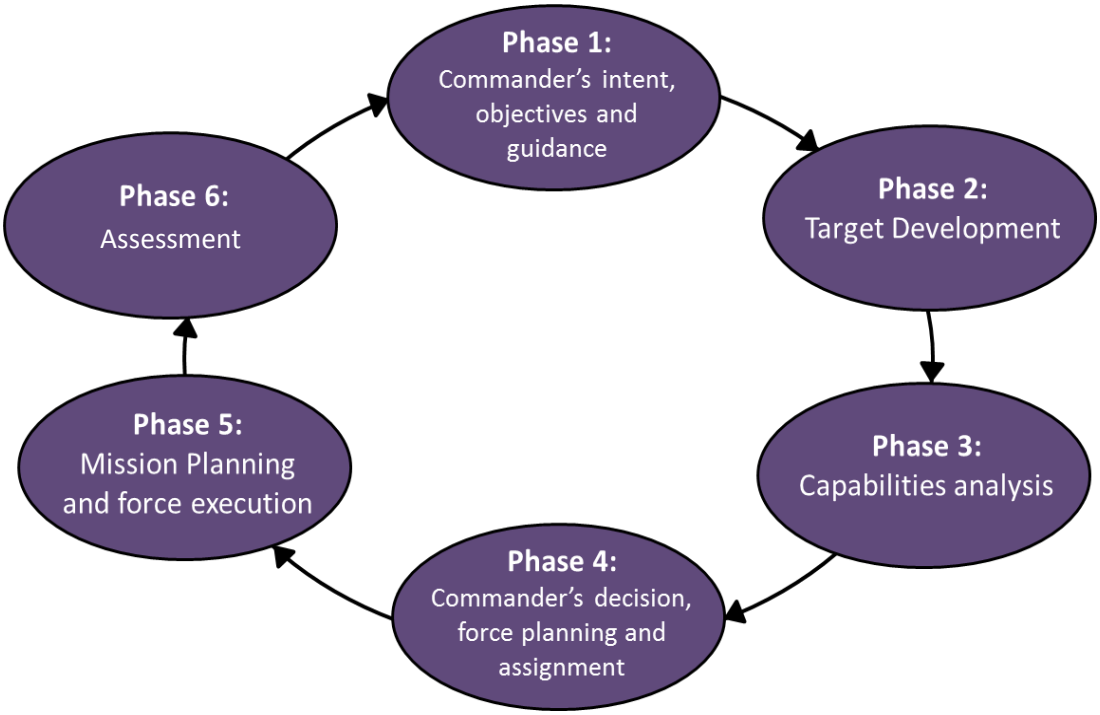

Figure 1.1 – the Joint Targeting Cycle

0104. Potential targets[3] include a wide range of mobile and static units, equipment, capacities and functionalities that an actor can use to achieve his goals. A target must contribute to the attainment of a military objective before it can become a legitimate object of military activity. These targets can be adversary, neutral or friendly in nature influenced by lethal or non-lethal actions, means or effects.

0105. The JFC OPLAN, OPORD or the Joint Coordination Order (JCO), and their appropriate annexes, provides guidance, constraints and restraints for the joint targeting process. As a subset of the JFC's targeting process, the land component commander's OPLAN, OPORD, and their appropriate annexes, provides guidance, constraints, and restraints for the land targeting process.

[3] 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* (AJP 3.9 Allied Joint Doctrine for Joint Targeting)

Section II – Land Targeting in general

0106. Targeting is a command function. Though much of targeting is focused on planning, it also provides the direction for execution and assessment that considers the effects required to accomplish the commander's objectives. It identifies, selects and prioritizes targets that must be acted upon to achieve those effects, selects and tasks the means with which to take action against those targets and assess the effectiveness of that action. It is not just about delivering a lethal effect, but encompasses the full range of munitions-based and non-munitions-based capabilities at a commander' s disposal.

0107. The purpose of land targeting is to plan, integrate and synchronize all capabilities into operations which enables the commander to select the most appropriate actions in order to generate the desired effects to achieve the mission. Targeting is not conducted in isolation but must be coherent with and support not just the current operation but also the NATO StratCom strategy and declared endstate.

0108. The land targeting process provides a methodology that aids decision-making, linking effects with the appropriate prosecution of prioritized targets and the assessment of any effect generated. The process is flexible enough to be adapted to any type of operation.

0109. Targeting requires the personal time, energy and attention of the commander. There is also a legal obligation that he must understand as he leads the land targeting process.

0110. At the brigade and higher tactical echelons, targeting is primarily focused on the planning and execution of shaping operations. The respective commander uses the land targeting process to focus his effort. A coordinated, agile targeting process is crucial in directing the effort of the respective force as part of the plan. It is an integrated part of the planning and provides input to changes in the execution of operations. The aim is to shape the adversary's course of action, combat power, and decision-making ability, before the adversary can influence the close fight. It's important to note that the shaping operation may not be linear or geographical and, therefore, exists across the spectrum of conflict. At battlegroup (battalion) and lower, targeting procedures will normally be replaced by combat engagement procedures and ROE checks.

0111. Principles of joint targeting apply regardless of the component or formation concerned and regardless of the prevailing operational environment. These principles also apply to land targeting and are outlined in the following paragraphs.

a. **Objective-based**. Land targeting focuses on contributing to the commander's objectives effectively and efficiently within the parameters set in the appropriate annexes of the operation plan and/or operation order.

b. **Effects-driven**. Land targeting focuses on creating synchronised, measurable physical and physiological effects, whilst striving to avoid undesirable effects, collateral damage or fratricide. Specifically for land targeting, formations should consider actions aimed at creating required effects and outcomes in the physical, cognitive and virtual domains.

c. **Multidisciplinary.** Land targeting requires the coordinated and integrated efforts of many functional experts across all disciplines and capacities.

d. **Timeliness.** Land targeting is often time critical. It is fundamental that transferring information from source/sensor to user be as direct and as fast as possible.

e. **Centrally controlled and coordinated**. Due to its importance, complexity and political sensitivity, land targeting is tied to the JFC's targeting objectives and guidance. The authority for execution is delegated to the lowest practicable formation level. Maintaining a system of centralised control helps to avoid duplication, risk of friendly fire incidents and confusion.

f. **Information – accessibility and security**. Land targeting relies on a number of information sources (fused intelligence, collateral damage details, etc.) which should, wherever possible, be held on shared databases. However, classified and sensitive information must be stored and disseminated on a 'need to share' basis[4]. Whilst operations security (OPSEC) is important, the need to preserve it must be balanced against the need for timely access.

[4] Written for release at the lowest possible classification level and given the fewest possible dissemination restrictions within intelligence sharing guidelines and policies.

0112. Within the land targeting process there are two approaches[5]:

a. **Deliberate targeting** prosecutes planned targets known to exist in an operational area with lethal and/or non-lethal activities scheduled against them. Targets may be engaged in accordance with a timed schedule or held on call to be prosecuted if the situation demands it. In all cases, target data has sufficient detail to allow capacity and activities to be planned and conducted. This enables the task force (TF) to establish the means for achieving his objectives. Lethal and non-lethal activities are often integrated and sequenced to include actions to be taken over a number of days. Resources are subsequently assigned corresponding to the level of effort, which can vary over the length of the operation. This is most effective when target parameters, such as location, are well known or predictable.

b. **Dynamic targeting** prosecutes targets that were not planned as scheduled or on-call during deliberate targeting. These targets emerge as targets of opportunity during execution and may be anticipated or unanticipated. Anticipated targets have gone through some degree of target development but were not scheduled for execution. Unanticipated targets are unknown or not expected to be present in the operational environment, thus they have not gone through target development but meet criteria specific to the commanders intent or guidance. On these occasions, additional resources will be required to complete the target development, validation and prioritization and will typically require redirecting existing assets for prosecution.

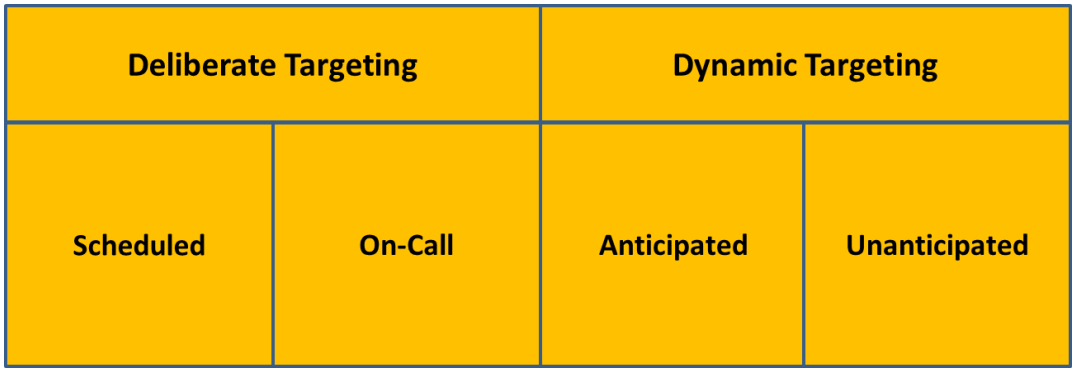

Figure 1.2 - Approaches to prosecution of targets

0113. Combat engagement covers the application of lethal force against authorized targets, within circumstances and limitations dictated by

[5] See fig 2

competent military authority that result in units, sub-units or pilots having to act or react to enemy actions that does not constitute an imminent threat to life and are not undertaken in self-defense. Combat engagement usually includes attack against an adversary and normally involves joint fire support coordinated at the tactical level in accordance with ROE and Law of Armed Conflict (LOAC). Combat engagement should not be confused with dynamic targeting. However, during combat engagements, time can be critical and this can impact the use of the full range of ISTAR inputs. In such circumstances it is still necessary to regulate the use of force in order to ensure military success and to minimize the risk of incurring collateral damage[6].

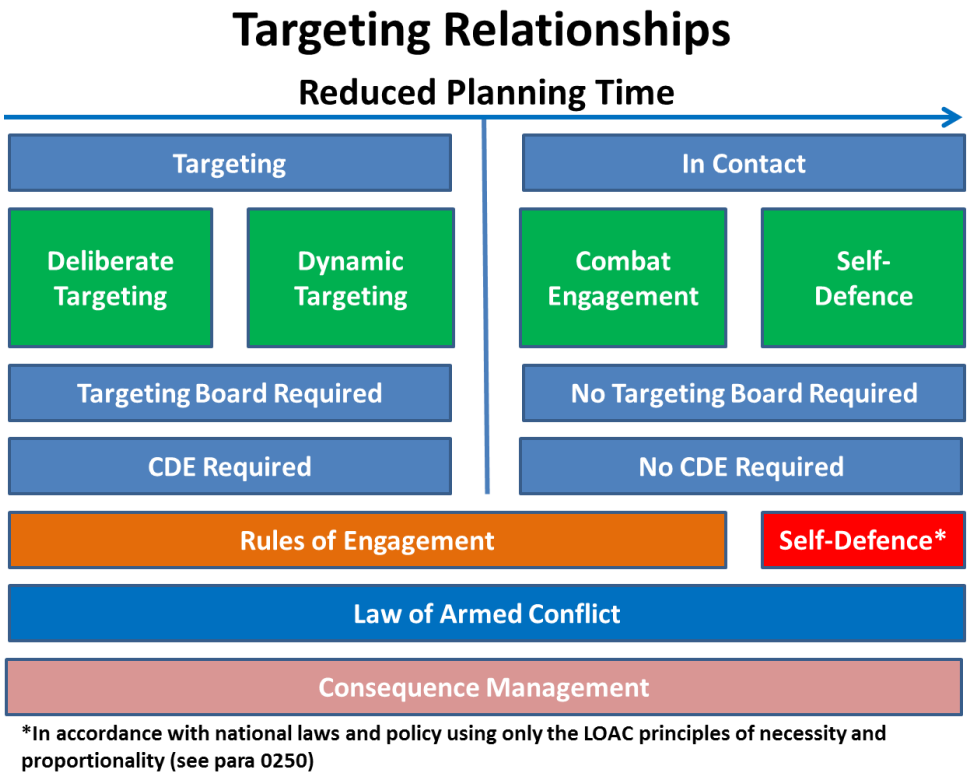

Figure 1.3 - Targeting Relationships

0114. **A full spectrum approach**. Traditionally, the land targeting process has been used to plan, refine and execute lethal activities against targets. It is

[6] Note that combat engagement and self-defense procedures are only relevant to lethal actions. There is no equivalent to a combat engagement for Information Activities. Cognitive activity involves the delivery of messages designed to change behaviours and perceptions. Fleeting opportunities require detailed analysis and pre-planning as part of Dynamic Targeting

important to recognize that this process is just as relevant when planning and coordinating activities to create non-lethal effects. Focused information activities against prioritised targets or target audiences should be coordinated, synchronised and integrated as part of the land targeting process. This makes the land targeting process applicable to the whole range of military activities in either offensive, defensive or stabilizing operations[7].

Section III – Target lists and target management

0115. **General.** When operating on the NATO SECRET system, components, and their subordinate units, can use the NATO integrated database (IDB) to support their targeting process.

0116. Primarily designed to support the joint targeting process, the 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 operations (AOO). Allied Command Operations (ACO) will request that nations submit 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.

0117. The Target Nomination List (**TNL)**[8] from a component command, contains target nominations prioritised in accordance with the guidance provided by the component commanders (CC). It is forwarded to the Joint Targeting Coordination Board (JTCB) for consideration. The TNL contains two types of nominations:

a. Completely new target nominations, not currently on the Joint Target List (JTL), that are forwarded through the joint targeting cycle for inclusion on the JTL (the ICC-JTS Database Manager will confirm that they are indeed new targets). These target nominations may also be nominated to the Joint Prioritised Target List (JPTL);

b. Targets already on the JTL being nominated for the JPTL for engagement.

[7] See AJP 3.9 , Chapter 1, para V
[8] In some countries the TNL is called a Component Prioritized Target List (CPTL)

0118. The Joint Target List (**JTL)** is managed by the JTCB with oversight maintained for the JFC by the Joint Coordination Board (JCB). It provides all fixed targets and some mobile targets within the AOO for the campaign. The targets on the JTL are validated military targets but not yet legally cleared against ROE, relevant international law, national and NATO caveats until such time as they are selected for engagement (i.e. nominated for the JPTL). Mobile targets and mobile target sets, and restricted targets, will be highlighted in the database to ensure they are easily and unmistakably identified.

0119. The Joint Prioritised Target List (**JPTL)** is a list of targets that have been legally scrutinised, risk assessed and have been prioritised in line with campaign objectives by the JTCB. It is derived from the JTL and is the end product of the target development phases. The engagement, by lethal and non-lethal means, of targets on the JPTL is coordinated and deconflicted with all components and relevant organisations of the joint force to ensure synergy of effort and the absence of conflict. The JPTL should include the means of attack, both lethal and non-lethal, and will be issued as an annex to the JCO. The JPTL will also show the components responsible for engaging the targets and may include recommendations covering the collection of intelligence for the subsequent assessment.

0120. A Prioritised Target List (**PTL**) is a target list derived from the JPTL that allocates prioritized targets to individual components. Each component will have a separate PTL relevant to its allocated targets. A PTL will normally be based on the requested target nominations made by the component itself earlier in the process, but may well also include other targets (or exclude expected targets that have been reallocated or prioritised) that have been allocated in support of other CC during the co-ordination process. Additional coordination between components is required to ensure de-confliction and/or synchronization of joint operations.

0121. The Restricted Target List (**RTL**) is a sub-set of the targets on the JTL of which some may be on the JPTL. These targets are lawful targets that are temporarily or permanently restricted from engagement by NATO's own decision-making process. These targets require special consideration, usually where simple destruction is not sought. Special consideration may be warranted because of: the particular sensitivity of the site; the need to de-conflict any proposed action with other activities; the entity is assessed to have a significant intelligence value; the wish to use a unique weapon; the desire to exploit the target, or post-conflict reconstruction considerations.

0122. The land targeting process feeds the joint targeting process, where the joint targeting process guides and directs the land targeting process. Targets identified at the tactical level that directly contribute to the objectives of the operational level can be nominated to the joint targeting process. Both the land and joint targeting processes are linked and use the same or similar terminology.

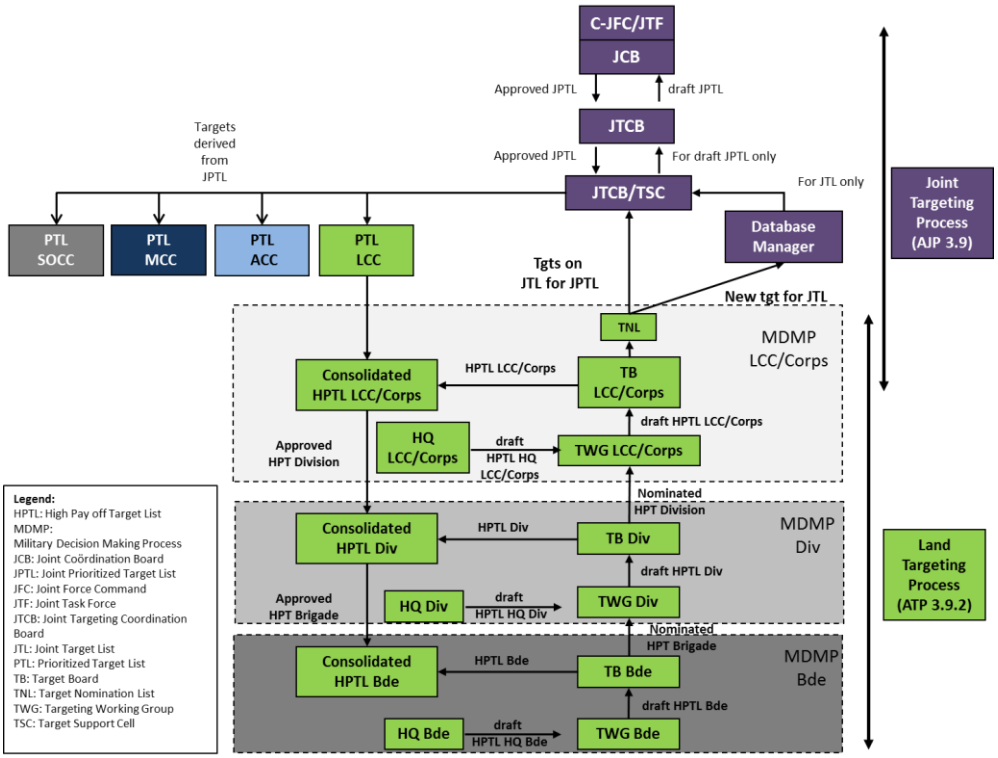

Figure 1.4 - Target (List) Management[9]

Note: The No-Strike List (**NSL**) is comprised of entities that are designated by the North Atlantic Council (NAC) as protected. Engagement of NSL entities, based on International Humanitarian Law (IHL),could violate international laws, the LOAC, agreements, conventions, NAC policies or ROE. 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. No-Strike entities must have their removal from this list approved prior to prosecution as directed through Supreme Allied Commander Europe (SACEUR). Entities on the NSL are

[9] Although not doctrinal (yet), there is a need to track prosecuted/affected targets for assessments and list it.

initially drawn from the modernized integrated database (MIDB). The NSL is maintained by the JFC.

For legal, political cultural or other reasons, objects on the NSL are particularly sensitive. They should not be deliberately or inadvertently damaged by own force actions and should be protected from attack using all means possible. Special consideration should be given when assessing the proportionality of an attack nearby military objectives where collateral damage to a NSL object is a possibility. The inherent right of self-defence under national laws and policy is not affected. Entities on the NSL can be engaged as part of self-defence, although the LOAC principles of necessity and proportionality should be observed at all time

CHAPTER 2 – The Land Targeting Process

Section I – Introduction

0201. The English definition of the word ‘targeting’ is the direction of efforts towards an objective or result[10]. The process of selecting and prioritizing targets and matching the appropriate response to them, taking account of operational requirements and capabilities is the NATO definition of targeting[11]. This process consists of activities to identify, select, prioritise, acquire, engage and assess targets with the aim to create a desired effect. The process is called the joint targeting process at operational level and the land targeting process at tactical level.

0202. The land targeting process utilises the land targeting cycle, decide, detect, deliver, assess (D3A). The D3A methodology integrates tactical targeting activities within the operations process, including the military planning and decision-making processes, the intelligence process and legal considerations. It describes the process from the identification of a single target up to the criteria and identification of capacity, necessary for assessment after engagement. Examples of some products are provided in annex B to assist the staff involved in the targeting process. The products are included for guidance purposes and the suggested formats are not prescriptive.

0203. Land targeting is an iterative, active and cyclical process. The process must adapt to the changing operating environment. The tools and products described in this chapter must be updated based on assessments and situation understanding. It is seldom the case that decisions are made without any information from a previous targeting cycle. Intelligence from external agencies or intelligence previously generated feeds the decision-making.

0204. The D3A methodology provides a logical, continuous and flexible cycle for land targeting. The land targeting process is applicable to both the deliberate and dynamic approaches. The activity within each function of the methodology and the coordination between these functions make up the land targeting process. Each function could require involvement of the plans, current operations and/or intelligence process. This makes the land targeting process an integrated part of the operations process.

[10] Oxford English Dictionary
[11] AJP 3.9 or AAP-6 NATO Glossary

0205. Targeting spans all staff functions and links these functionalities together (see fig 6). The expression `targeting` is used for the targeting process as a whole, but also for separate activities related to this process. It is understood that this is sometimes confusing to those unfamiliar with targeting.

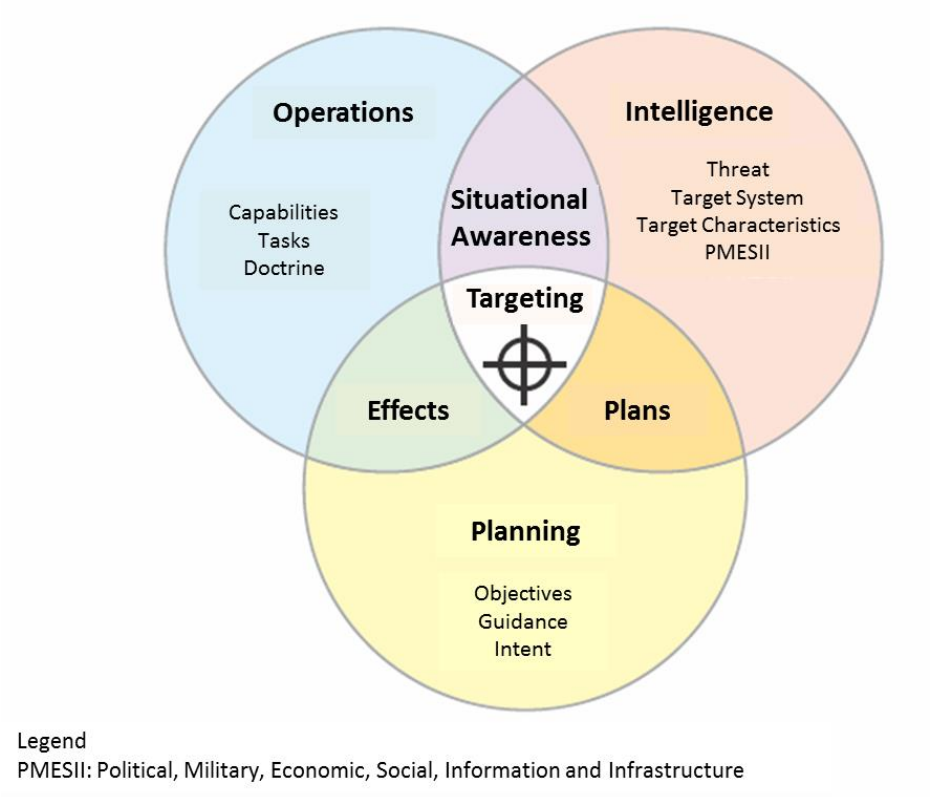

Figure 2.1 - Targeting linkages

0206. An effective targeting process identifies the focused options, both lethal and/or nonlethal that support the commander’s objectives. The D3A methodology facilitates the acquisition and engagement of the right target with the right asset at the right time.

0207. The land targeting process identifies the coordinated actions aimed at creating desired effects on targets in accordance with the commander’s priorities to achieve the mission. These effects are realised through the coordination, synchronisation and integration of lethal and non-lethal capabilities.

0208. The land targeting process provides a methodology that aids decision-making by linking effects with the appropriate prosecution of prioritised targets and the assessment of effects generated. It is flexible enough to be adapted to any type of operation. The targeting process is focused to provide the commander a recommendation for prosecution of high pay-off targets from an approved list of high-value targets[12].

0209. It is important to prepare actors in the battle space for the execution of activities. Targeting is the process used to identify and synchronize the most appropriate actions to support the overall operations plan, some of which may be conducted in close proximity to the local populace. Often, the success of these operations is partly due to the commander's actions taken to prepare the actors within the AOO. This preparation includes capitalizing on reasons, results of successes and failures for military operations, including the use of lethal activities. The land targeting process is useful in identifying the target or target audience that should be engaged through information operations.

0210. A common understanding of the land targeting process and adherence to its principles enable the formation staff to:

a. Comply with higher level objective, guidance and intent. These are founded on NAC, Military Committee (MC) and SACEUR direction and guidance;

b. Assign the most appropriate capability to the prioritised target, as resources permit;

c. Coordinate, synchronise and de-conflict actions, minimizing duplication of effort;

d. Fully integrate lethal and non-lethal capacities as appropriate (full spectrum approach;

e. Rapidly respond to HPTs that present limited opportunities for action;

f. Expedite assessment of target engagements in accordance with approved measures of effectiveness (MOE).

Section II – Terminology

12 For definitions see section II

0211. A **Target** is an area, structure, object, person[13] and/or group of people against which lethal and/or non-lethal activity can be directed to create specific psychological and/or physical effects[14].

0212. The design of the mission and the planning and control of operations structures targets by necessity and urgency.

a. A **High-value target** (HVT) is defined as *a target identified as critical to an actor or organization for achieving its goal.* Successfully influencing such a target will seriously hamper or support the actor or organization.

b. A **High pay-off target** (HPT) target is defined as *a high-value target, the successful influencing of which will offer a disproportionate advantage to friendly forces*. HPT are defined by the value they offer to friendly forces rather than other actors.

Once identified/, HPTs are engaged based on their priority. This priority is normally valid for one cycle of the target approval process[15], an operation or a phase of the operation.

0213. **Time-sensitive targets** (TST) are derived from NAC-approved TST categories TSTs are those JFC-designated 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. Overall responsibility for command, control and coordination of TST remains with the JFC.

[13] Person includes their mindset, thought processes, attitudes and behaviours.
[14] AJP 3.9: 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
[15] Also known as Target Board, Target Clearance Board, Target Approval Board, etc. depending on national doctrine

Section III – The Land Targeting Process

0214. The land targeting process, is outlined as a cycle and includes four phases.

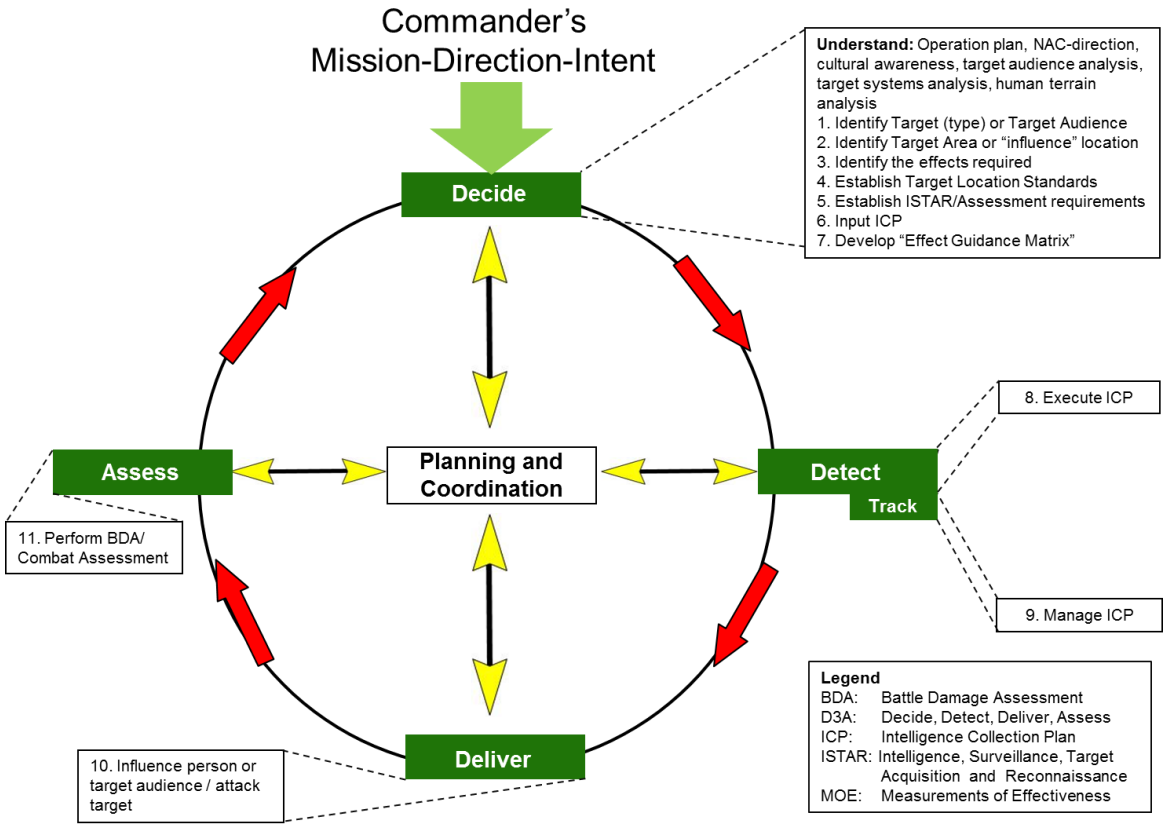

Figure 2.2 – The land targeting process outlined as a cycle

Decide

0215. The 'decide' phase is the initial and most involved part of the process. This phase takes place in parallel, and is integrated with, the component operations planning process and intelligence collection planning[16]. The decide phase utilizes the direction and guidance provided by the next higher echelon. This guidance is translated by the formation commander into the endstate, objectives, decisive conditions and supporting effects. Analysis of this translation, together with the commander's instructions, direct the selection and priority of targets and the accuracy to which they can be acquired 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

[16] Intelligence requirements management and collection management (IRM&CM) processes.

develop an understanding of the physical and psychological target sets available to them. At the same time, the staff will consider what measures of effectiveness (MOE) will be used, including criteria for combat assessment.[17] The outputs from the decide phase will include target nominations and a variety of other products such as the high pay-off target list (HPTL) and target selection standards (TSS).[18] The formation commander nominates targets to higher headquarters that he has identified as HPTs but lacks the capacity or capability to detect, track, or engage that target.

0216. Within the 'decide'- function seven clear steps can be identified:

a. **Identify target (type) or target audience.**

(1). The identification of targets and target audiences starts in the Intelligence Preparation of the Operational Environment (IPOE), based on factor integration and actor analysis. Target Development[19] and Target Value Analysis (TVA)[20] are used to identify the relative value of targets/target audiences to their organisation. Elements not belonging to an adversary organisation, person or target audience, that may give a military advantage are also considered. As an example legitimate targets may include, infrastructure objects (e.g. bridges) which determine the route to move assets or a medium (e.g. radio station) to spread a message.

(2). Some targets will be selected based on their relative worth for the execution of activities or military advantage for an organisation or person. These selected targets are addressed as HVTs and labelled as such in a target-database. The labelling of selected targets as HVTs in a target-database enables the production of an HVT list (HVTL).

(3). **Determination of HPT.** The priority of targets is determined initially during course of action (COA) development. The starting point for the determination of the priority is the HVTL. The extent to what level a HVT, when successfully affected, contributes to the success[21] of the commander's mission and endstate determines which HVTs should become HPTs. This allows the production of a prioritized HPTL. An HPTL

[17] This includes BDA, MEA and Re attack recommendation
[18] Target selection standards are criteria that are applied to targets to determine what degree of accuracy and timeliness is required from detection systems to enable their successful engagement.
[19] Analysis of target sets into single targets.
[20] Analysis of relative worth of targets related to the target set they belong to, compared to the guidance of the commander.
[21] Success of the commander is defined by the achievement of his intent and objectives.

is a list that shows HPT in order of priority. The HPTL is valid for the operation, a phase of the operation or a cycle of the battle rhythm.

(4). **Nominations.** HPTs that cannot be developed or prosecuted by the formation itself should be passed to the next higher level as a nomination. HPTs estimated to contribute to the success of the higher formation's plan should also be passed to the next higher level. Target nominations must be made as early as possible to allow for subsequent planning within the higher headquarters (HQ). To aid this process, formations should consider the exchange of trained liaison staff between target cells.

(5). The target folders of the nominated targets may not be fully mature. When the next higher level accepts the nominated target for inclusion in its target list, it thereby accepts the responsibility to develop the target folder to full maturity.

(6). The **Targeting Working Group (TWG)** is responsible for preparing HPTs for approval, proposed adjustments to the HPTL and proposed target nominations. The TWG is also responsible for the planning of the (integrated) activities to be employed against each HPT. The products are submitted to the Targeting Board, which authorises or rejects the target nominations.

b. **Identify target location.**

(1). A location estimated in the Intelligence Preparation of the Operational Environment (IPOE) as a probable place to gain information on a HPT is addressed as **named area of interest** (NAI).

(2). A **target area of interest** (TAI) is an area that offers the best opportunity to create the desired effect.

(3). A **Decision Point** (DP) or **Decisive Condition** is set to support the timing and the decision to employ an assigned capability against an HPT. The DP or Decisive Condition offers a last opportunity to decide whether or not to employ the assigned capability against the HPT.

(4). The location of the DP depends on the (estimated) time for the target to move into the TAI and the time necessary for the assigned capacity to react.

(5). A decisive condition defines the conditions for the most effective use of activities against an HPT.

c. **Targeting and Engagement Capabilities and Limitations**.

(1). Determination of the most appropriate asset for the delivery of the desired effect begins during the *decide* function and is reviewed during the *assess* function. The targeting staff should provide recommendations for the most appropriate asset to achieve the commander's intent. The targeting staff should consider collateral damage concerns, effectiveness, responsiveness, range, accuracy, vulnerability to adversary threats, indicators of change in attitude or behaviour, and associated risks of employment for the various systems available. Weapon-effects and target restrictions, including any legal caveats should also be considered before the final weapon effect and delivery system selection.

(2). **Selection of Effect.** The effect the commander wishes to achieve (commander's intent) and the effect of the individual asset used (in some countries referred to as 'Weapon Effect'[22]) should not be confused although selection of both take place during the 'decide' phase.

d. **Establish Target Selection Standards (TSS)**

(1). TSS address accuracy or other specific criteria that must be met before targets can be engaged. Knowledge of the target capability and equipment allows appropriate weapon to target matching of available assets. These standards are applied to targets to aid in determining if the target, when acquired or observed, meets the threshold for engagement. Ideally a TSS has been staffed and authorised by the Targeting Board (TB), including an authorized Target Engagement Authority (TEA)[23]. When a single target requires engagement and it does not meet the TSS, it requires an alternative engagement plan. This plan is briefed to the proper engagement authority and prosecuted after approval.

[22] Weapon effect is an action used to achieve the commander's desired effect
[23] TEA is the level of command required to authorize an engagement at each CDE-level. (AJP 3.9, LEX-8)

(2). TSS should include the target location error (TLE)[24] and acquisition time[25]. TLE accounts for the capabilities of available Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) and engagement systems and will dictate the accuracy with which a weapon effect can be delivered. TLE directs the available ISTAR systems and dictates the Intelligence Collection Plan (ICP).

(3). When considering the most appropriate delivery system, due account must be taken of the need to minimise collateral damage, the risk of fratricide and to mitigate undesirable effects.

(4). TSS is based on friendly system availability and the enemy activity under consideration by using the following:

(a). Acquisition system TLE driven by attack system CEP;

(b). Size of the enemy activity (point or area);

(c). Status of the activity (moving or stationary); and

(d). Timeliness (dwell-time) of the information

(5). TSS are employed to synchronise acquisition systems with attack assets to deliver the desired effect on the target. For example, an enemy artillery battery may have a 150 meter TLE for attack by tube artillery and a 1 km TLE for attack helicopters. Targeting staff need to coordinate with intelligence, fires, and acquisition personnel when determining TSS.

e. Establish ISTAR - assessment requirements

(1). The targeting staff must decide what change to the target will create the desired effect. This is more than assessing whether the weapon was delivered accurately. It is the establishment of measurable criteria which, if achieved, indicate that the desired effect was created on a target. The desired effect must therefore be something measurable.

(2). Battle Damage Assessment, as part of combat assessment, is used to measure effectiveness. To assess effectively, assessment criteria must

[24] Expressed in Circular Error 90% (CE90)
[25] Acquisition time is the maximum accepted time between acquisition and the report to the designated weapon system based on estimated dwell-time of the target .Dwell time is normally based on doctrinal norms, in theatre experience, and understanding of enemy TTP's.

be set. Once established, the criteria will require ISTAR-resources to provide information at the target before and after prosecution. The requirement for ISTAR-resources to conduct assessment must be considered during ISTAR-resource planning.

f. **Input to the Intelligence Collection Plan (ICP)**

(1). When a HPT is identified, additional information is required to develop the target folder. These information requirements, once approved by the commander, are added to the Priority Information Requirements list and are included in the Intelligence Collection Plan (ICP).

(2). Identifying HPT, NAI, TAI and DP/Decisive Condition and determining battle damage criteria provide a focus for intelligence collection efforts and synchronisation of ISTAR-systems.

g. **Development of the Effects Guidance Matrix (EGM)**

(1). The EGM[26] is a staff product and provides an overview of the commander's decision of when, where, and how to engage targets. The inclusion of targets in the EGM means that they have been approved by the commander or the commander's delegated representative for specific effects to be delivered against them. Restrictions may be applied to any number of factors relating to the effect and the target, including the type of delivery system that can be used and the time and/or location where the capability can be delivered.

(2). The matrix is a consolidated, tabulated support tool that shows capabilities and their priorities scheduled against HPT. It links the effect required with the associated HPT and TSS, and acts as an executive order that provides the operations and targets staff an overview of the effort of resources. This allows rapid engagement decisions to be made during operations. However, it is highly likely that the commander will require the targets staff to conduct additional checks (staff checks) before allowing effects to be created in accordance with the EGM.

(3). The orders issued by the targets staff should include the unit or units that are to take action, the action required, the target to be affected, the time or event and location where the effect is to be created and the target

[26] When an EGM is only focused at lethal capabilities the EGM is also referred to as Attack Guidance Matrix (AGM).

acquisition system that will provide the information to initiate the engagement.

(4). The trigger for the potential action will be the target or target activity identified at the Decision Point (DP), or the conditions as described in the Decisive Condition, with the capability being delivered into the associated TAI or within the AO.

(5). The draft EGM is developed during COA analysis and finalised after the COA decision brief. The EGM is synchronised during the TWG and authorised in the TB. For an example of an EGM see Annex B.

Detect

0217. The ‘detect’ function includes the collection activities required to find, recognise, track and positively identify HPT to the point where the capability is to be delivered. Detect and track are indivisible. The collection activities are supervised and coordinated by the G2 staff in accordance with the ICP.

0218. NAIs and DP/Decisive Condition should be monitored by ISTAR-assets in addition to the activity required to collect information to satisfy the Commanders Critical Information Requirements (CCIR). HQs should establish mechanisms to receive information, intelligence and liaisons from non-organic ISTAR-assets into the G2 and ISTAR cells. This provides the ICP with some redundancy and allows ISTAR capabilities to be overlaid on each other. This layering effect, while resource intensive, can improve detection and successful tracking and therefore confirmation of the target.

0219. It will be necessary to integrate ISTAR systems such that a target may be passed from one ISTAR asset to another during tracking until such time as the decision has been taken to act against the target and any subsequent capability delivered on the target. Information collected during the initial detection and subsequent tracking activity is passed to the controlling HQs for analysis by G2 cells or passed directly to the analysing agency. The intelligence, and occasionally the raw information, is passed to the targets staff to inform the decision as to whether to act against the target.

0220. Information collected on the target can be used to update the EGM and to inform the commander’s decision. ISTAR assets tasked with locating the target to enable the delivery of a specific capability must have the ability to transmit the information required to meet TSS criteria.

0221. The G2 and ISTAR staffs circulate information and intelligence relating to targets to the targets staff in order to facilitate the delivery of appropriate capabilities. The basic information requirements are as follows:

a. Report originator;

b. DTG of acquisition;

c. Acquisition system;

d. Target description;

e. Target function/assessment;

f. Target location;

g. Target location error (related to the acquisition system);

h. Anticipated dwell time of target;

i. Whether the target is static or moving (include direction of moving).

Deliver

0222. The primary activity during the deliver phase is to coordinate delivery of capabilities against authorised targets as they are acquired in accordance with the EGM or the approved Course of Action (COA). Secondary activities include prosecution of targets that were not selected for action in sufficient time to be included during deliberate targeting.

0223. Not all targets within the AoO are planned for engagement. Sometimes anticipated and unanticipated targets appear that meet criteria specific to the commander’s intent or guidance. These targets need an evaluation to determine engagement requirements including when to engage. Resources may be required to complete target development and may require redirecting assets.

0224. Activities planned against HPTs are reflected in an engagement plan. An engagement plan can be relatively simple, for example, a fire order to an artillery unit. A more extensive example is the decision to commit the TF-reserve.

0225. The engagement plan is normally prepared by the members of the TWG. This plan should include the integration of lethal and non-lethal capabilities and should

outline how the information activities are integrated with the scheme of manoeuver. The aim of Information activities[27] is to achieve an effect against the will and understanding of an array of actors. An actor's decision-making process is a function of will, understanding, and capability. Ideally, the information activities for local actions are nested within the higher headquarters information activities.

0226. The plan for target engagement is presented in the TB, or a closed group when necessary. The commander, or the person with delegated engagement authority, will approve the plan. Once the plan is approved, the activities can be executed.

0227. Target engagement by non-lethal capabilities are part of the deliver function. Non-lethal capabilities include but are not limited to: Psychological Operations (PSYOPS), Presence Posture and Profile (PPP) of units, Electronic Warfare (EW), Cyber Operations and Key Leader Engagement (KLE).

0228. **Collateral damage estimation** (CDE) methodology is an estimate of the probability, but not a certainty, of collateral damage for a specific weapon system during a planned engagement and facilitates the LOAC consideration of proportionality. CDE should be conducted prior to the delivery of a weapon effect when required by either ROE or national policy.

Assess

0229. **Measuring effect**

a. **Measures of performance (MOP)** uses a system of indicators to evaluate the accomplishment of friendly forces actions. The MOP allow progress to be measured, intending to answer the question: are the actions being executed as planned or functions as expected? If, during execution, the desired effects are not being created, 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?

b. **Measures of Effectiveness** (MOE) [28]quantify the results of an action on a target and relate the effect on the actor's ability to use a capability or his ability

[27] Information Activities (AJP 3-10, para 0108) Actions designed to affect information or information systems. Information systems are defined as: an assembly of equipment, methods and procedures, and if necessary personnel, organized to accomplish information processing functions.
Information Activities can be performed by any actor and include protection measures.
[28] MOE: Metrics that measure results

to pursue a specific COA. Failure to achieve the required level of effectiveness may indicate the need for further action, i.e. a requirement to re-engage or the adoption of a different COA. In simple terms, did we do the right things?

0230. During the assessment[29] phase, information about the results of the engagement are analysed to determine whether the desired effects have been created. The output of this step is assessment of success to support a possible re-engagement decision or the need for follow-up actions (both could involve using a completely different capability). In the case of an HPT, a rapid, initial assessment is vital if an opportunity to re-engage is to be exploited. MOP and MOE, set during the "decide" function, are the criteria used to facilitate the assessment.

0231. **Battle Damage Assessment**[30] (BDA) aims to provide timely and accurate snapshots of the effect of actions on the enemy. It supports the MOE and MOP. BDA analyses and reports what has been achieved through applying a capability (lethal or non-lethal) against a target.

0232. BDA is the assessment of effects resulting from the application of military action, either lethal or non-lethal, against a military objective[31]. BDA provides commanders an estimate of the enemy's combat effectiveness, capabilities and intentions after a strike or action has been executed. The physical, cognitive or virtual effect created is compared with the level of change that was assessed to be required to create the desired effect. BDA provides evidence of whether the desired effect was created and identifies areas where a re-attack might be required. Although BDA is primarily an intelligence function, it has implications for, and requires planning with, both the planning and operations staffs.

0233. **Principles of BDA**. Three guiding principles of BDA are:

a. **Relevance.** BDA should assess the effects on targets that are important to the commander;

b. **Objectivity**. BDA must be objective and be based on known facts or reasonable interpretation of the anticipated damage/change;

[29] AAP-06 defines assessment as: *the process of estimating the capabilities and performance of organizations, individuals, materiel or systems*.
[30] 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*. BDA is a part of Combat Assessment, which is composed of three interrelated components: BDA (as mentioned), Munitions Effectiveness Assessment (MEA) and re-attack recommendations. At the tactical level it's likely that only BDA and re-attack recommendation will be conducted.
[31] AAP-6

c. **Verification**. To ensure accuracy of reporting, BDA should be verified by more than one ISTAR system, where resources allow.

0234. BDA employs a 3-phase approach:

a. Phase 1 BDA (initial assessment) 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. For physical effects it estimates the quantitative extent of physical damage by an individual attack against a single target or critical element, and includes an initial assessment of collateral and additional damage. For all other effects, BDA estimates the change in behaviour, function or attitude exhibited by the target. However, the use of non-lethal capacity may not produce an immediate or easy recognisable effect, which subsequently may require additional time and resources to conduct the assessment. In some cases phase 1 BDA will generate a re-attack recommendation. The use of phase 1 BDA can also address the requirement of ensuring that the weapon functioned correctly and was delivered on target.

b. **Phase 2 BDA** (functional damage assessment) assesses the damage caused to the target's ability to perform its intended function. In order to make an accurate assessment, both phase 1 BDA and additional intelligence are likely to be required. This assessment can be difficult without appropriate resources and can be resource intensive as the target may require monitoring for a considerable period before an accurate assessment can be made. Phase 2 BDA includes estimation of the time required for recuperation or replacement of the target function. Phase 2 BDA is usually carried out by the land component command (LCC).

c. **Phase 3 BDA** (target system assessment) assesses the results of military action on the overall functioning of the target system and the consequent changes in the adversary's behaviour and is an activity conducted by the staff at the Operational level HQ.

0235. Assessment of information activities are not ideally suited to assess using BDA. Commanders 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 use of a broad range of collection assets from the higher echelon 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, but not having measurable physical damage. A change of attitude is unlikely to be measurable until reflected in the target's behaviour and so the MOE should focus on behaviour – and collection mechanisms tasked accordingly. For example, KLE details are recorded immediately after a meeting with individuals or groups (Post Meeting Minutes or Post Engagement Minutes), which provide an insight about the atmospherics of the engagement. The Post Meeting Minutes or Post Engagement Minutes are important to assess the development of the target over a period of time.

0236. Future engagement recommendations are derived from analysis of BDA and comparing the result with predetermined MOP and MOE developed during the decide phase of the targeting cycle. Where the desired effect is created the commander will be advised to review and update his targeting priorities. Where the desired effect has not been created the commander will be provided with future attack recommendations.

Section IV – Meetings and Battle Rhythm

0237. There are a number of targeting focused meetings that personnel will attend as part of fulfilling their duties and responsibilities. These may differ in name and frequency from one level to another. All serve the purpose of ensuring that targeting is an integral part of mission planning and execution.

0238. Targeting focused meetings are designed to:

a. Identify which target sets[32] exist in the AOO, select HVT from the target set and determine HPT to be engaged in accordance with the commander's intent, guidance and priorities;

b. Plan, prioritize and synchronize HPT engagements with other planned activities;

c. Coordinate HPT engagements; and

d. Assess the effectiveness of these HPT engagements in order to advise the commander and influence re-attack recommendation, target selection and future planning.

[32] Target set: explained at AJP 3.9 para 0303 and 0304

0239. Targeting focused meetings consist of:

a. Targeting Working Group (TWG);

b. Target Board (TB); and

c. TEA brief [33]

0240. Recommendations concerning engaging targets are prepared by the TWG and approved by the TB. The Targeting focused meetings should be included as part of the HQ's Battle Rhythm. It is important to understand that formal targeting meetings at the lower tactical echelons will take place if there is sufficient time and if the commander deems it necessary.

Targeting Working Group

0241. **Role**. The TWG drafts the engagement plan and target nominations for the TB. The Battle Rhythm defines the routine sequence of the TWG meetings. However, coordination between TWG members outside the TWG should take place regularly in order to support the land targeting process. Targeting working groups (TWG) can be combined with other elements of the battle rhythm .The TWG should consider:

a. Assessment of previous target engagements;

b. The current HVTL;

c. Which HVTs should become HPTs;

d. The desired effects to the HPTs;

e. The synchronization of time and conditions required for engagement;

f. Availability of ISTAR capacity; and

g. Capabilities (lethal and non-lethal) to create the desired effect

0242. **Tasks and responsibilities**. These include the following items:

[33] Related to theatre specific ROE

a. Support the development of the HVTL;

b. Development of recommended prioritized HPTL;

c. Recommendation of desired effects on targets;

d. Development of the targeting products (see B follow);

e. When required, development of plans to engage targets. This could include the preparation of a target brief;

f. Target nominations to higher echelon for detection or prosecution;

g. Preparation of products for the TB;

h. Identify recommendation for additions or deletions of the NSL and the RTL; and

i. Identify requirement for ROE change.

0243. **Participants.** The composition of the TWG varies by echelon and will be dictated by the mission. The targets cell chief (as designated by the commander) chairs the TWG. The targets cell chief will designate a secretary to record and provide an audit trail of target engagement decisions. The remainder of the TWG is normally composed of representatives from: Intel, Operations, Plans, Legal Advisor (Legad), PSYOPS, Information Operations (Info Ops), Fire Support, ISTAR, Engineer and Assessment. At minimum participants should include targets cell chief, Legad and an intelligence representative.

Target Board (TB)

0244. **Role.** The purpose of a TB is to assist the commander in the approval of analysed targets and ensure that there are no circumstances that would lead to a conclusion that the target is no longer valid. A formal TB is required before offensive action (Fire Support, Information Activities or Cyber) can be undertaken, except in self-defence or during combat engagement (see fig 3 (H1)) Targets prosecuted through deliberate targeting may only be cleared for engagement at a TB by a commander with an appropriate level of delegated authority. The approved and authorised targets are reflected on the HPTL and the EGM. These products can be valid for the entire operation, a single phase or for one cycle of the battle rhythm.

0245. **Tasks and responsibilities.** The TB can make several decisions on the targets being considered. These could include the following items:

a. Guidance and direction for future targeting;

b. Approval and authorisation of:

(1). HPTL and AGM/EGM or course of action to prosecute a target ("clear for engagement");

(2). Target Nominations to higher echelon;

(3). ROE (change) request.

c. Reject a target, often with a request for or guidance on further development; and

d. Approve or deny recommendations for additions or deletions of the NSL and the RTL for forwarding to higher echelon as required[34].

0246. **Participants.** The composition of the TB varies by echelon and will be dictated by the mission. The TB is normally chaired by the commander or by a person who has been designated as an engagement authority, though in most cases, this will be the chief of staff (CoS) or Fire Support Coordinator. The targets cell chief will be the secretary of the TB. Other staff will be present, including: Intel, Operations, Plans, Legad, PSYOPS, Polad, Info Ops, Fire Support, Engineer, Assessment.

0247. **TEA-Brief**. Prosecution of targets through dynamic targeting requires approval of the Target Engagement Authority. This authority is briefed in the TEA brief which is conducted on an ad-hoc basis, due to the nature of dynamic targeting. The information in the target folder will be used to create a target package to facilitate consideration of the target. The structure and composition of this brief may differ between organisations but, as a minimum, it will include the Targets Cell chief, LEGAD and the commander. It should to also include the G2 or a G2 targeting representative.

Section V – Legal Considerations

[34] Only applies to Corps-level and above

0248. International conventional and customary law, together with the domestic law of the participating nations, governs the conduct of NATO operations[35]. This imposes boundaries upon targeting decisions and actions. While, for policy and other reasons, targeting direction and guidance may be more restrictive than that permitted by international law, it may never be more permissive.

0249. Military commanders must conform to international law of armed conflict (LOAC), Rules of Engagement (ROE) and be supported by 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 targeting process, it is imperative that a formal record is kept of the decision-making process and any advice given during that process.

0250. The wide utility of information activities expands the need for legal compliance beyond that normally associated with the employment of lethal capabilities. The information environment is pervasive, with few clear boundaries of identity ownership and attribution. Activities intended to have an influence on a particular target may affect third parties not involved in the crisis and/or those outside the AOO.

Legal principles

0251. The international security situation may require a broad range of responses, sometimes within a single operation. This may include using force within the context of an armed conflict, supporting humanitarian goals, aiding in the stabilization and reconstruction of a failed or failing state and enforcing a NATO mandate which may, or may not, occur within a situation of armed conflict. Consequently, operations may occur within a complex legal framework regulating the use of force.

0252. 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 international legal principles related to targeting are below:

[35]AJP-01(D), Allied Joint Doctrine, paragraph 0520.

a. **Military Necessity.** Any target prosecuted must offer a definite military advantage[36]. 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.** This principle forbids the infliction of unnecessary suffering, injury or destruction not necessary for the accomplishment of legitimate military purposes. Once a military purpose is achieved, further infliction of suffering is unnecessary.

c. **Distinction.** Offensive action must only be directed against military objectives and combatants, making a clear distinction between them and civilian objects and civilians. All feasible precautions are to be taken in the choice and methods of any target prosecution to avoid, or at least minimise, incidental loss of civilian life or other unwanted effects. Particular care must be taken when considering sites of religious or cultural significance and specially protected objects.

d. **Proportionality.** No engagement may be launched, and any engagement in progress must be stopped, in which the expected collateral damage would, in total, be excessive in relation to the concrete and direct anticipated military advantage. Note that the application of this rule is judged not on the actual collateral damage or the actual military advantage of the attack, but upon the collateral damage 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 strategic goals.

0253. **Other Considerations**

a. **Determining Military Objective.**

(1). Where entities are concerned, military objectives are those legal objects and individuals (as determined by LOAC) which by their nature, location,

[36]**military necessity / nécessité militaire:** The principle whereby a belligerent has the right to apply any measures that are required to bring about the successful conclusion of a military operation and that are not forbidden by the Law of War. (AAP-6, 2016)

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 usually be military objectives, for example, soldiers, fighter aircraft, submarines and ammunition depots.

(2). Some entities that have both military and civilian uses (sometimes referred to as 'dual use' facilities) are more difficult to identify as legitimate military targets. Examples of these entities include, bridges, electrical systems, fuel, communication nodes, vaccine and chemical plants. Before attack, these entities must be carefully analysed, 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, and the entity will retain its protected status.

b. **Responsibility.** Individual responsibility to comply with the LOAC rests at all levels. Commanders are also responsible for preventing violations of the LOAC and are responsible for the acts of subordinates if the commander knew, or due to the circumstances at the time, should have known that violations of the LOAC were about to be committed, and failed to take all necessary and reasonable measures within their power to prevent or repress their commission. Those carrying out the attack have a responsibility to apply, consistent with international law, the higher level targeting guidance, approved ROE and LOAC. They will apply that ROE and LOAC 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, target decisions and actions are not legally judged based on perfection, or that of hindsight. Those involved however, must take all those precautions that were reasonably feasible at the time of their decision or actions and in the circumstances prevailing at that time. However, this objective standard also means that recklessness, negligence and wilful blindness provide no excuse to unlawful prosecution of targets.

Section VI – Collateral Damage Considerations

0254. **Collateral damage** is the unintentional or incidental physical damage to non-combatants, non-military objects and/or environment arising from engagement of a legitimate military target. The formation staff receives targeting guidance from the

higher echelon. This targeting guidance is incorporated in the coordinating instructions and appropriate annexes of the operation plan (OPLAN) and/or operation order (OPORD). This guidance will describe the level of command required to authorize an engagement at each CDE-level, referred to as the target engagement authority (TEA)[37].. Beyond this level the formation commander must seek the authority of the higher echelon to approve target engagement.

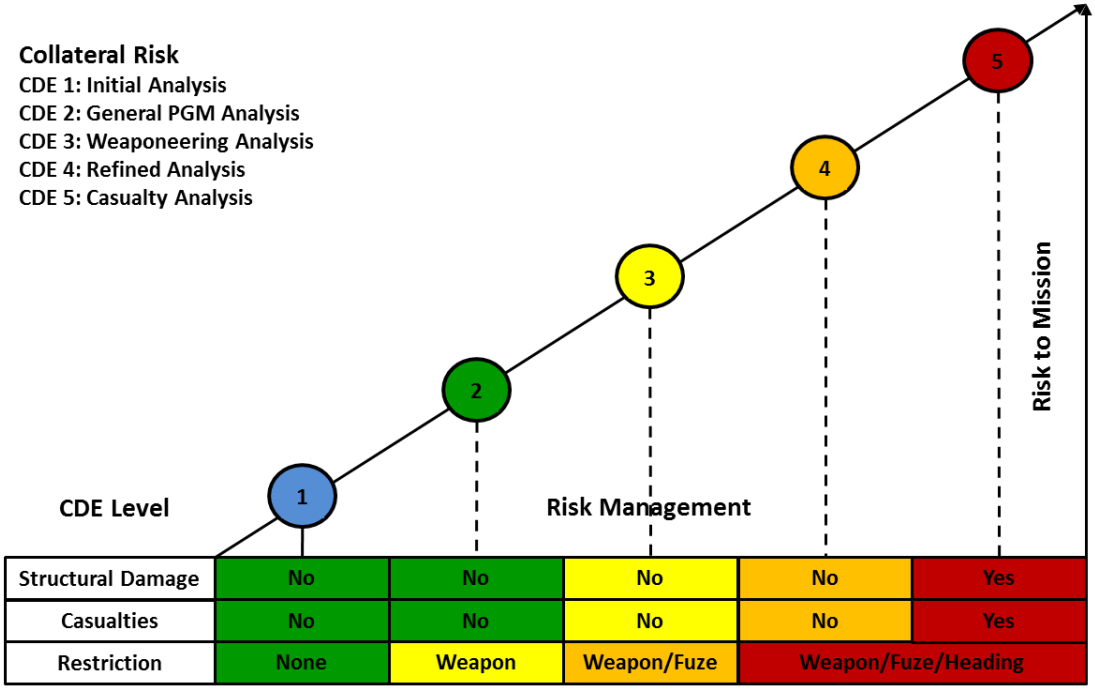

Figure 2.3 - CDE-level diagram

0255. **Collateral damage estimation (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 analysts who are trained and have maintained their currency. CDE analysts consider target parameters, such as proximity to non-military entities, by analysing the potential variables, such as the nominated type of weapon system(s) and the method, or time of engagement in order to estimate the risk of collateral damage.

0256. CDE provides the formation commander with an understanding, but not a certainty, of the risk of collateral damage. The CDE methodology, combined with legal considerations, are used to inform the formation commander's targeting

[37] AJP 3.9, LEX-8

decision. CDE facilitates compliance with the legal principles of distinction and proportionality. When estimating collateral damage, the desired weapon effect on the target is the primary consideration; mitigating collateral damage is secondary. Even within approved collateral damage levels, the formation must decide if any expected collateral damage would be excessive or not, related to the military advantage offered by prosecution of each target and take all reasonably feasible precautions to avoid it. The methodology and policy for CDE should be specified in the OPLAN or the OPORD.

0257. **Delegated authority for collateral damage**. SACEUR will draft the recommended CDE approval levels for submission to the NAC for authorisation. The NAC will authorise the specific level of collateral damage for each major operation or campaign. SACEUR will promulgate the authorisation and establish the TEA for each CDE level. SACEUR may retain some engagement authority at his level. The JFC is then able to authorise targets within this delegated authority (including delegating TEA to subordinate organizations). TEA allows subordinate commanders the flexibility to engage targets within delegated collateral damage levels and ROE.

0258. **National considerations for collateral damage**. Each contributing nation normally authorises national levels of delegated authority for collateral damage. National legal interpretation and policy constraints may be more restrictive than SACEUR directives. The national authority will dictate the nation's constraints and caveats to a senior national representative[38] supported by national legal, policy and targeting advisors. The senior national representative refers any targets that fall outside his delegated authority back through his national chain of command for clearance.

0259. **Consideration of collateral psychological effects**[39]. Lethal and non-lethal engagements often create psychological effects, some of which may be undesirable. A deeper understanding of the human environment[40] allows a better definition of desired and undesired psychological effects, which 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

[38] Often referred to as Red Card Holder.
[39] Some countries use the term unintended effects evaluation (UEE) or psycho-cognitive CDE.
[40] Human terrain is the social, political and economic organization, beliefs and values and forms of interaction of a population.

methodology, commanders and their staffs should reduce the risk by understanding the human environment through target audience analysis (TAA).

INTENTIONALLY BLANK

CHAPTER 3 – Role of Intelligence in the Land Targeting Process

Section I – Introduction

0301. Successful application of the land targeting process relies on the ISTAR and intelligence processes to provide timely accurate intelligence that enables engagement (lethal and non-lethal) against a point in time and space at which a target is present. Targeting staff, intelligence staff and ISTAR staff should ensure that there is coherence and visibility within and between the three functional areas. In addition, the staff's frequent contact ensures that there is mutual understanding of developments within each other's area of concern.

Section II – IPOE and D3A

DECIDE

0302. The intelligence role in land targeting is dependent on commander's guidance and mission end states for specific plans. At the tactical level, Intelligence Preparation of the Operational Environment (IPOE) enables the identification and selection of targets. A target database is made available by the higher echelon[41] or national resources, and targets are pulled from this database or from own analysis. Refinement of targets for the tactical level follows the process of target development and is focused to identify significant target audiences, threat/adversary, military entities, economic and political elements that are important to the mission and meet the commander's intent.

0303. Target discovery, through continual refinement of IPE and an evolving environment, refines and adds to the target database through identification of potential targets for development. This is a G2 function.

0304. **Target development**. Intelligence provides the basis for target development. Target development entails the systematic examination of potential target systems, their components, individual targets and even elements of targets. Target development for information operations follows the traditional methodology of identifying target systems[42], components and their critical elements using a

[41] See AJP 3.9 and AD 80-70
[42] Known as Target Audience Analysis (TAA) which includes Human Terrain Analysis (HTA)

broader scope that accounts for information systems that might be new to the target analyst.

0305. Integral to target development are target vetting and target validation. Target vetting assesses the accuracy of the supporting target intelligence and guarantees target coordination throughout the AOO and across agencies and organisations with potential interest. In addition, targets should be checked against the Restricted Target List (RTL) and the NSL. Target validation determines whether a target remains a viable element in accordance with direction and guidance of the commander and whether it is a lawful target under LOAC and ROE.

0306. Target development includes functions such as target analysis and identification of collection and exploitation requirements. Target development results in lists of targets and contributes to target folders, collection and exploitation requirements, and target briefs. A detailed analysis should characterize the function, criticality, and vulnerabilities of each potential target. One of the keys to successful target development is to understand the relationships between and within targets in order to identify vulnerabilities and critical elements. Target analysts must include the impact of, and reliance on, information in investigating these relationships.

0307. **Target analysis** is a military led multi-agency examination of potential targets to determine relevance to commander's guidance, military importance, and priority of engagement. Target analysis, in the IPE process, evaluates a target's capabilities, vulnerabilities, doctrinal and cultural principles, and preferred tactics, techniques, and procedures. This evaluation identifies key systems[43] and critical elements as potential targets.

0308. While a single target may be significant because of its own characteristics, the real importance lies in its relationship to other targets within a system. Through the examination of the function of a target in its system, the intelligence staff considers the targets criticality and vulnerability. For example, enemy indirect fires consists of several critical elements, including a sensor, a C2 node, a shooter and a sustainment capability. Target analysis determines the vulnerabilities for each of the critical elements. Engagement of any one of these critical elements affects the function of the enemy's indirect fire system.

0309. During the construction of situation overlays or scenario's, potential targets are identified for a specific AOO or event and enemy course of action (ECOA).

[43] Known as Target Systems Analysis

Concurrent with development of the situation overlay or scenario, the threat/adversary commander's decision cycle and points/events associated with each potential ECOA are examined and key assets become apparent. Those key assets are the potential targets associated with that particular ECOA or phase of an ECOA. The time and resources required to find, develop and analyse a potential target is not confined to a fixed timeline.

0310. The intelligence and operations staff elements assist in creating the event overlay and decision support overlay (DSO) to depict current and predicted threat/adversary locations. The locations where targets are anticipated are designated as named areas of interest (NAI) on the DSO. Once identified, NAIs can then be used to confirm or deny threats, adversary's activities or adoption of a particular ECOA. Additionally, threat/adversary decision points (DP) or decision phase lines, target areas of interest (TAI), and HPTs are identified during the COA analysis.

0311. Using the results of staff COA analysis, the staff decides which HVTs will become HPTs. The HVTs are kept, modified, or replaced by other targets the staff identifies. That process results in a list of prioritized and time-phased HPTs that need to be acquired and engaged for the friendly mission to succeed. This list of HPTs provides the overall focus and sets the priorities for intelligence synchronization and planning for engagements.

0312. Once the commander has validated and approved a target as a HPT at the TB, the intelligence staff conduct a target and objective studies in order to produce a target intelligence package (TIP) to support mission planning. A TIP contains detailed intelligence products that aid in gaining influence at a specific target set or area. This influence can be gained by the application of fires, the manoeuvre of forces or executing information activities. These studies are graphically oriented or scenario-based and may use many of the graphics derived during the IPOE process. The TIP generates the target folder.

0313. **Identification of Collection and Exploitation Requirements.** The target development process will identify additional intelligence requirements. These requirements must be articulated as early in the intelligence process as possible. To support target development and other assessments, requests for information (RFI) should be submitted through collection managers. RFIs must clearly articulate what pieces of information are needed to complete target development. Target development is an iterative process continuing throughout the land targeting process.

0314. **Information Operations Considerations for Target Development**. Target development focused at information operations do not differ from those of traditional target development. The traditional methodology of identifying critical elements in a system of targets remains valid. However, the widening of the IPE scope to take in information processing systems, demands an increase in the quantity and fidelity of intelligence collection. This requires additional technical and analytical expertise.

0315. Long lead times are usually required to fulfil information operations related collection requirements. Target analysts should work to determine information gaps for those targets as early as possible. Because of competition for intelligence collection resources, full data sharing should be coordinated among target analysts and planners developing these targets.

0316. Effective target analysis will discern all the dimensions of information systems and their inter-relations. System dimensions include human factors, communication architecture, network topology, information flow and functionality, among others. Target intelligence specialists should seek to include these interrelated elements when analysing processes/systems in order to identify their critical elements.

DETECT

0317. During the detect function, targets selected in the decide function and labelled as HPT are acquired for engagement. The intelligence staff participates in the detection and tracking of each target selected for the HPTL and the EGM. The intelligence synchronization manager will focus on acquiring previously not located threat/ adversary assets and confirm the location of previously acquired targets within the AOO using NAIs. Locations of threat/adversary units and targets, developed through intelligence synchronization and analysis, will be displayed on the current intelligence situation map.

0318. The DSO and the intelligence synchronization matrix are management tools used to determine how the HPTs can be acquired. They allow COA analysis participants to record their assessment of sensor systems and engagement systems to acquire and engage HPTs at a critical event or phase of the battle. If the result of the COA analysis indicates that timeliness is critical, the intelligence synchronization manager plans and coordinates for the direct dissemination of targeting data from the collection asset to the engagement asset, to shorten the reaction time between acquisition and engagement. The data should be passed simultaneously to the

intelligence staff for additional analysis to confirm or change previous IPE products.

DELIVER

0319. The deliver function in the targeting process focuses on the engagement of targets through lethal and non-lethal action. Based on the available target information developed during the decide function, a determination of the desired effect (e.g. influence, divert, limit, disrupt, delay, destroy etc.) and available weapons systems determine the appropriate engagement system.

0320. During the COA analysis, DPs are developed and linked to events, areas (NAIs and TAIs), or points in the AOO. These DPs cue the command decisions and staff actions where and when tactical decisions are needed.

ASSESS

0321. The key element of the assess function from the perspective of IPE is coordination of post engagement assessment, which provides:

a. a series of timely and accurate “snapshots” of the effect activities are having on the target; and

b. commanders with the information they need to quickly allocate or redirect forces to make the best use of available resources and combat power, which includes battle damage assessment, munitions effect assessment, and recommendation to re-engage.

The results of collection for combat assessment are also incorporated into the IPE process for continued analysis of the environment.

0322. Assessment/MOE. While the assessment cell has the responsibility to determine overall mission status and transition points. Achievement of MOEs is determined through intelligence collection and analysis in the assess function. Careful consideration should be given to collection requirements against MOE indicators following a target engagement to determine second and third order effects. This is particularly important in assessing information operations or information activities objectives.

INTENTIONALLY BLANK

Annex A – Targeting Activities

Section I – Targeting Activities and the Intelligence Preparation of the Operational Environment (IPOE)

A01. IPOE is a tool to assist the commander and his staff in planning, decision making and the execution of a plan. IPOE provides much of the information for the Intelligence Estimate and is the foundation for the Targeting Process. The products of IPOE record graphically the results of the analysis of the ground, the enemy likely/worst case COA (from analysis of his doctrine, objectives and capabilities (TVA) applied to the ground on which he is operating). The IPOE process is a dynamic and continuous process and the products will be adjusted as enemy actions are either confirmed or identified, and as the plan is adjusted to meet the changing situation. The relationship of the components of the Targeting Process to the IPOE and the activities that take place within the MDMP is depicted in figure A.1.

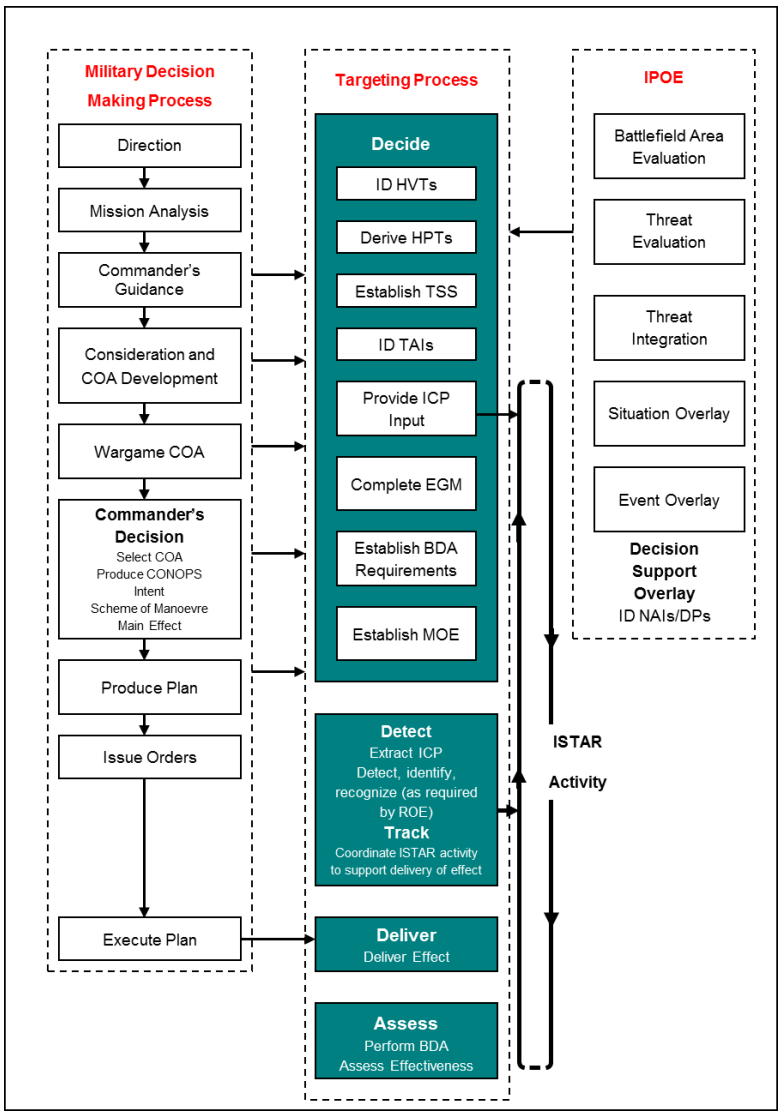

Figure A.1

Section II –Targeting Activities and the MDMP

A02. The MDMP is used when conducting more deliberate planning of problems that are more complex. It consists of analysis in six linked stages. The MDMP requires concurrent, as well as sequential analysis, and is designed to enable commanders, supported by the staff, to understand the problem, identify the art of the possible, select a winning concept and translate it into a workable plan within the available time. The six stages, associated activities, outputs, and related targeting activities, are shown in figure A.2.

STAGE	ACTIVITY	OUTPUT	TARGETING ACTIVITY
Step 1 Review of the Situation (establish the operational context for the tactical problem)	IPOE commences: Calculate time available for estimate. Logistic assessment/availability	Warning Order	Review Targeting Directive (if applicable) and identify: -Higher HQs targeting objectives. -Targeting restrictions. -Specified and implied tasks. -ROE & CDE issues. Monitor IPOE process. Review availability and capabilities of ISTAR, and assets to support both Joint Fire Support and Information Activities

STAGE	ACTIVITY	OUTPUT	TARGETING ACTIVITY
Step 2 Identify and Analyse the Problem. **2A** Mission Analysis (Conducted by the Commander) **2B** Initial Object Analysis (Conducted by the Staff) Commander's initial conclusions	(2A and 2B conducted concurrently) Consider what has to be done and why? IPOE continues: Consider the object or principal focus for the mission (normally the enemy). Consider/wargame enemy COAs (Most likely/Most dangerous). Establish the art of the possible. Commander and staff maintain mutual understanding. Focus Staff's effort on most feasible options	Planning Guidance to Staff. Focused Questions. Tasks Identified thus far CCIRs. Clarification upwards. Constraints. Effects Schematic Planning Guidance. Tasks Identified Timeline. Draft synchronisation matrix. CCIRs Clarification upwards Warning Order 2. Effects Schematic. Outline Task Org. COM guidance on Recce limitations	Identify HVTs by phase. Develop potential NAIs to inform initial ICP as a result of CCIRs Initiate TAA against identified Target Audience. Identify actions required to achieve Effects (Effects Schematic). Assess sensor requirements to resource ICP. Identify initial TAIs and DPs. Plan resourcing of effects in TAIs. Integrate ISTAR assets to confirm/deny ECOAs in NAIs/DPs. Integrate Actions (Effects Synchronisation Matrix)
Step 3 Formulation of Potential COAs	Develop own COAs. Consider use of Deception and OPSEC. Develop Deception Plan. Object. Target. Story. Measures to shield intentions. Examine relative capabilities	COAs ICP by COA	HVT by phase and COA HPT by phase and COA

Step 4 Development and validation of COAs	Develop and validate COAs. Synchronise activities. Consider Reserves. Develop Logistic Estimate. Refine ISTAR and Fires requirements	Intent Schematic. Effects Schematic. Comds CONOPS. Draft DSO & schematic. Draft Synch matrix. Draft ICP	HVTL. Draft HPTL. Draft EGM (refine NAI/DP/TAI) Draft TSS Develop draft IA & O plan, including messaging themes.
Step 5 COA Evaluation	Wargaming and Operational Analysis of COAs Select COA	Develop CONPLANS	
Step 6 Commander's Decision	Decide on COA	Warning Order 3. The Plan, directives and Orders. ICP.	HVTL. EGM (HPTL/EGM/Effects schematic). ESM. IA & O plan, Message Themes and draft messages. MOE development

Fig A.2.

Annex B – Example Targeting Staff Formats

Section I – General

B01. Products developed during the land tactical targeting process are tools that allow the commander and targeting staff to control and synchronize the targeting process in an effective and efficient way. There are no prescribed formats that will meet all situations and environments.

The purpose of this annex is to provide a menu of formats and a focus on the information and knowledge the commander and staff requires. The formats may be modified by the targeting working group to support requirements of the command.

Section II – Formats

B02. **High Pay-off Target List** (HPTL)

A High Pay-off target list is a list that shows of High Pay-off targets in order of priority. The HPTL is valid for the operation, a phase of the operation or a cycle of the battle rhythm. The HPTL, as shown in fig A.1, is an example of the basic format described in Chapter 2.

Event or Phase of the Operation: ….			
Priority	**Category**	**High Pay-off targets**	**Desired Effect**
1.	Population	Civilians in combat zone	Non-combatants convinced to evacuate out of combat area
2.	Fire Support	BM 21 Bty	BM 21 Neutralized
3.	Combat	(Enemy) Recce	Target acquisition denied
4.	Leadership	Local Mayor	Mayor is convinced to support our actions
5.	C2	Insurgent Leadership	Captured
6.	Combat	VBIED cell	VBIED cell destroyed

Fig B.1 - Example HPTL

Note: the example HPTL in fig A-1 shows random examples of mixed and matched targets in multiple phases.

B03. The **Target Selection Standards** (TSS) matrix

Target Selection Standards are usually comprised of the essential elements necessary to attack a target and listed in a matrix. TSS are always enemy focused. See fig B.2

Target Selection Standards				
HPTL	Accuracy (TLE)	Size of unit	Static / Moving	Acquisition Time
(a)	(b)	(c)	(d)	(e)
Rgt HQs	< 500m	-	static	1 hr
MRL	< 150m	bty	static	10 min
SA-11	200m	section	static	10 min
Bn HQs	200m	-	static	30 min
Insurgent Team Leader	50 m	-	static	5 min

Fig B.2 – Example Target Selection Standards

A target that meet all the criteria in the TSS is considered a valid target for attack.

- Column (a) refers to the designated HPT that the IRM &CM manager is tasked to acquire.
- Column (b) refers to the accuracy of target information. Valid targets must be reported to the weapon system meeting the required TLE criteria. The TLE criteria are the least restrictive TLE considering the capabilities of available weapon system.
- Column (c) refers to the minimum size of the target
- Column (d) refers to the activity of the target
- Column (e) refers to the maximum accepted time between acquisition and report to the designated weapon system.

B04. The **Attack Guidance matrix** (AGM)

The (simple) AGM shown in fig B-3 provides guidance on what HPT should be attacked and when and how they should be attacked.

Note: AGM is (only) focused on lethal capabilities, all HPTs on the AGM should also be listed on the EGM

Attack Guidance Matrix				
Event or Phase:				
High-Payoff Target	**When**	**How**	**Effect**	**Remarks**
BM 21 Bty	A	Field Artillery	Neutralize	CFFZ and CFZ in place and active
Recce Plt	A	Combat unit	Destroy	
Bn HQ	P	Electronic Attack	Neutralize	JAM comms at H-1
Insurgent Team Leader	I	SOF	Neutralize	Preferably captured
VBIED cell	A	UAS	Destroy	
Legend: A = as acquired; P = planned; I = Immediate CFFZ= Call For Fire Zone; CFZ = Critical Friendly Zone				

Fig B.3 – Example Attack Guidance matrix

The AGM shows the following elements:

- The High Pay-off target column is a prioritized list of HPTs by an event or by phase of the operation
- The WHEN column indicates the time the target should be engaged (see the legend bottom fig B.3)
- The WHO column indicates the weapon system that will engage the target
- The desired effects on the target are stated in the EFFECT column
- Remarks concerning whether or not BDA is required, whether coordination must take place and any restrictions are indicated in the REMARK column
- The matrix is intended to act, as far as practical, as an executive document allowing rapid engagement decisions to be made during current operations

B05. **Effect Guidance matrix (EGM)** or **Target Synchronization Matrix**

The sample EGM or Target Synchronization Matrix as shown in fig B.4 is a combination of the HPTL, the TSS and the AGM. It is used to synchronize the targeting process by assigning responsibilities to detect, deliver and assess actions on specific HPTs. The HPTs are listed by category in the Decide column as directed by the commander. Units are listed under the Detect, Deliver and Assess columns across from the specific HPTs for which they are responsible. As responsibilities are fixed, the asset envisioned to be used is also indicated. This provides the targeting working group the checks to ensure all assets are used. The matrix could also be prepared for a specific event for each phase of the battle.

B06. The following steps are recommended to complete the matrix:

a. Select, or update the HPTL. These targets are derived from the HVTL.

b. Determine and prioritize collection assets responsible for detecting, confirming or denying the location of each suspected target or HPT. This information should then be entered into the “DETECT” portion of the matrix. Be specific, state what unit and asset must detect , confirm or deny the location of each specific target. Clear and concise tasking must be given to acquisition assets and resources. Mobile HPT must be detected and tracked to maintain current target location. Assets and resources should be placed in the best position according to estimates of when and where the targets will be. Consider assigning a NAI (or TAI; column (d) and (g)) to the target and enter the number on the matrix (use column Remarks when another matrix is used then fig B.4 shows).

c. Determine which attack asset or resource will be used to attack each target once detected or confirmed by using the list of assets and resources available. Enter this information into the “DELIVER” part of the matrix. The lethal and non-lethal effects and applicable aspects of electronic warfare and information related capabilities are considered depending on the commander’s guidance and desired effects. Consider redundant means to attack each target.

d. When determining an attack asset or resource for each target, the attack guidance is also determined and entered. Determine for each delivery means when to attack the target (immediately, as acquired or planned) and the effects to be achieved by attacking the target.

e. Determine and prioritize which assets will assess how well the attack was executed and whether desired effects were achieved on targets. Enter this information into the “ASSESS” portion of the matrix.

f. Both lethal and nonlethal assets may be included in the same matrix.

Effects Guidance Matrix (EGM)											
DECIDE		**DETECT**		**DELIVER**					**ASSESS**		**Remarks**
Prio	**HPT**	**ISTAR-asset**	**NAI**	**TSS**	**When**[44]	**TAI**	**How** (Strike asset)	**Effect required**	**BDA asset**	**BDA criteria**	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
	MRL BM 21	AN/TPQ 37	16/001	1: <300m 2: bty 3: static 4: 10 min	A	18/005	Field Artillery	Neutralized	UAS	3 launchers destroyed	CFFZ and CFZ in place and active
	MRL BM 21	TA pod AH-64	16/002; 16/005; 16/009; 16/015	1: <500m 2: bty 3: static/moving 4: 15 min	A	17/003; 17/004; 17/008	AH 64	Neutralized	Gun camera	Fire direction centre destroyed	Airspace Control Measures in place and active
	Recce element	Counter recce	16/004	1: <150m 2: platoon 3: static 4: 15 min	A	18/002	Field Artillery	Destroyed	UAS	50% WIA/KIA	
	Bn HQ	ELINT	16/007	1: <300m 2: bty 3: static 4: 10 min	P	16/007	Electronic Attack	Neutralized	ELINT	50% reduction in comms output	JAM comms at H-1
	Town Council leader	HUMINT	KLE	Mayor	P	KLE	CO Bde	Convinced	SIGINT	Refugees reduced by 30%	
	Insurgent Team Leader	NIC's/ ELINT	NA	1: 50m 2: - 3: static 4: 5 min	I	NA	SOF	Neutralized	SOF	Insurgent Team Leader in custody	Preferably Captured
	VBIED cell facility	ELINT/ NIC's	16/013	1: 50m 2: 4 PAX 3: static 4: 10 min	A		Field Artillery	Destroyed	UAS	Facility destroyed; no comms output	5 x PGM required
		NIC = National Intelligence Cell	NA= not applicable	1: required TLE 2: size of unit 3: static or moving 4: acquisition time	A=as acquired; P=planned I=Immediate					Criteria is minimum effectiveness. If not met, consider re-attack	

Fig B.4: Example Effect Guidance Matrix (EGM)

[44] The 'when' column (f) works when a multitude of weapon systems are available. In case of limited availability of weapon systems the HPTs need to be prioritized (column 'Prio' (a))

INTENTIONALLY BLANK

Annex C – Responsibilities

Section I – General

C01. There is a misconception that the Chief of Targets or the Targeting Officer is the only element responsible for contributing to the targeting process within the HQ. Many actors and organisations contribute to the targeting function yet it is often described as one job or employment. A Chief of Targets or Targeting Officer does not analyse, plan, execute and assess alone. Intelligence analysts, ISTAR staff, Joint Fire Support personnel and information operations personnel will all be involved in the discrete elements of targeting. Weaponeering, target mensuration and collateral damage estimation (CDE) all has to be carried out for deliberate and dynamic targeting and this could include many personnel. Similarly, potential targets are identified by the intelligence staff that are also preparing the (electronic) target folders.

C02. It is accepted that the targeting process at brigade is similar to that of higher formations, though the HQ staff, particularly plans, is less represented. In addition, the intelligence staff officers do not have as robust of a capability to develop targets as in higher HQs. There is unlikely to be a G2 Targets at brigade, with G2 Plans providing intelligence support to deliberate targeting and the brigade G2 providing intelligence support to dynamic targeting. The majority of targeting activity at brigade is coordinated by the (Joint) Fire Support Coordination Centre.

Section II –Responsibilities Key HQ staff

C03. Figure C.1 illustrates responsibilities of key staff at the tactical level. The position titles may vary from Nation to Nation and may change from one tactical level to another but, in essence, the functional area remains extant.

Post	Targeting Responsibilities
Commander	Overall responsible for the targeting effort Provides targeting guidance Final approval authority to nominate targets requiring higher approval and for target clearances for subsequent strikes
COS	Establishes battle rhythm Chairs targeting meetings Approves targeting decisions on behalf of the commander
CO Arty Reg (Div) / CO Arty Bn (Bde)	Advises the commander on targeting and Joint fires Oversees all lethal and non-lethal fires execution Supervises the targeting process Approves preliminary HPTL[45], TSS[46] and EGM[47] Co-ordinates Targeting Boards (TB) when required Chairs Targeting Working Groups (TWG) when required

[45] High Payoff Target List
[46] Target Selection Standards
[47] Effect Guidance Matrix

	Develops and maintains Formation targeting procedures and SOPs
Chief Joint Fire Support	Recommends targeting priorities and FSCMs[48] for current and future operations that support deliberate targeting
Chief of Targets / Targeting Officer	Coordinates the actions and functions of the targeting cell Nominates targets for inclusion on target lists in accordance with the commander's targeting priorities Provides status of targeting resources Plans use of targeting systems Recommends targets priorities for acquisition and attack Develops HPTL, EGM and BDA[49] requirements Develops guidelines for the TSS (with G2) Determines TLE[50] for effective target engagement Reviews BDA reports (with G2 and G3) and recommends re-attack where necessary Recommends methods of affecting targets Develops the MOP/MOE[51] for target assessments (with G2 targets and others) Manages the (Electronic) Target Folder and its audit trail Applies Rules of Engagement (ROE) and conducts CDE where applicable Manages and circulates the Target Summary Sheet Prepares Target Pack briefs when required Manages target lists Supervises or conducts target coordinate mensuration when applicable
G2 Targets	Analyses and identifies potential targets Prepares (Electronic) Target Folder Passes High Payoff Targets (HPTs) to Targeting Officer Contributes to development of HPTL, AGM and BDA requirements Provides input on TSS Maintains target database with the ASIC Provides IPB products to targeting Conducts Target Value Analysis (TVA) and develops the HVTL Recommends NAIs/TAIs to support targeting Reassesses HPTL, AGM and BDA requirements with Targeting Officer Integrates targeting into the Intelligence Collection Plan (ICP) Assists in conducting assessments, including MOE Conducts CDE where applicable Assists in conducting assessments, including MOE
FSCC	Responsible for all fire support planning and execution Coordinates striking of dynamic targets Works with G2 and Targeting Officer to integrate artillery targeting within the overall ICP Determines artillery targeting Information Requirements (IRs) Develops and performs TVA (with G2 Targets) Assists in TSS and AGM development Assists in maintaining and updating the HPTL Conducts Target Coordinate Mensuration (incorrectly known as Precision Point Mensuration (PPM)) where applicable Conducts artillery weaponeering

[48] Fire Support Coordination Measures
[49] Battle Damage Assessment
[50] Target Location Error
[51] Measures of Performance (MOP)/Measures of Effectiveness (MOE)

	Assists in conducting assessments, including MOE Conducts CDE where applicable Execute and coordinate counter-battery fires Coordinates airspace Requests, maintains and disseminates Air Control Measures (ACMs)
G3 Air	Advises on the employment of air support Coordinates approval of requests from (immediate) CAS Participates in developing targets Advises on the suitability of targets to attack with air assets Assists in conducting assessments, including MOE Provides the airspace C2 plan to support targeting Monitors the Air Tasking Cycle (ATC) Coordinates air activities with the EGM Assists in weaponeering where applicable Briefs JFACC Air Operations Directive (AOD) and its impact on fixed wing Recommends targets for inclusion to the Joint Priority Target List (JPTL) that are suited for air support
ISTAR staff	Coordinates and synchronises ISTAR assets to support deliberate targeting and assessments (Re-)Allocates ISTAR assets to support dynamic targeting Establishes sensor to shooter linkages as required Assists in conducting assessments, including MOE
Electronic Warfare staff	Contributes to development of HPTL, EGM and BDA requirements Assesses effectiveness of EW operations Conduct EW IPB and produces the EW overlay Assists in determining HPTs Assists in conducting assessments, including MOE
Engineer Support staff	Templates potential HVTs and/or HPTs as part of C-IED Conducts explosive hazard IPB Contributes to development of HPTL, EGM and BDA requirements Recommends HPTs/NAIs and TAIs to support the employment of artillery scatterable mines Assists in conducting assessments, including MOE
CBRN staff	Provides estimate of enemy's Weapons of Mass Destruction (WMD) capabilities Advises the targeting team on impact of employment of such WMD and the impact targeted storage/production sites could have
Information Operations staff	Ensure Information Activities are incorporated into all aspects of the deliberate and dynamic targeting processes Nominates targets for inclusion in target lists Assists in conducting assessments, including MOE Contributes to development of HPTL, EGM and BDA requirements Advises on effects of friendly operations on the civilian population Provides input to the Restricted Target List (RTL) Contributes to IPB Exploits and/or mitigates the 1st order effects on the civil and informational environment
CIMIC staff	Coordinates civil affairs support to the IPB and targeting processes
G6 staff	Provides space base information that can hinder precision guided munitions employment, SATCOM, GPS communication/tracking and combat assessment
LNOs	Presents their commander's targeting concept Provides feedback to their commanders on which targets are added to the HPTL Facilitate the exchange of target information

SOF	Coordinates SOF targeting requirements
LEGAD	Interprets and advises targeting team on Law of Armed Conflict (LOAC) and ROE Maintains visibility on Casualty Threshold (CT) in accordance with TD Provides input to no-strike policies Maintains visibility on NSL/RTL Provides targeting guidance for sensitive targets Advises targeting team on applicable international and domestic laws
POLAD	Advises the commander on any external political issues concerning National, Host Nation or other political and policy matters pertinent to targeting
CULAD	Advises the targeting team on host nation domestic cultural habits and attitudes (’do’s and don’ts / what to do and what not to do

Figure C.1: Overview Responsibilities Key HQ Staff

LEXICON

Part I – ACRONYMS AND ABBREVIATIONS

ACC	Air Component Command
ACM	Airspace Control Means / Airspace Control Measures
ACO	Allied Command Operations
AGM	Attack Guidance Matrix
AOD	Air Operations Directive
AOO	Area of Operations
ASIC	All Sources Information Centre
BDA	Battle Damage Assessment
Bde	Brigade
Bn	Battalion
CDE	Collateral Damage Estimation
CFZ	Critical Friendly Zone
CFFZ	Call For Fire Zone
CO	Commanding Officer
COA	Course of Action
COS	Chief of Staff
CULAD	Cultural Advisor
D3A	Decide, Detect, Deliver, Assess
DP	Decision Point
DSO	Decision Support Overlay
EGM	Effect Guidance Matrix
ETF	Electronic Target Folder
EW	Electronic Warfare

HPT	High Pay-off Target
HPTL	High Pay-off Target List
HTA	Human Terrain Analysis
HVT	High-Value Target
HVTL	High-Value Target List
ICC	Integrated Command and Control
ICP	Intelligence Collection Plan
IDB	Integrated Data Base
IHL	International Humanitarian Law
Info Ops	Information Operations
IPOE	Intelligence Preparation of the Operational Environment
ISTAR	Intelligence, Surveillance, Target Acquisition and Reconnaissance
JCB	Joint Coordination Board
JCO	Joint Coordination Order
JFC	Joint Force Command
JPTL	Joint Prioritized Target List
JTCB	Joint Targeting Coordination Board
JTF	Joint Task Force
JTL	Joint Target List
JTS	Joint Targeting System
KLE	Key Leader Engagement
LCC	Land Component Command
Legad	Legal Advisor
LNO	Liaison Officer
LOAC	Law of Armed Conflict

MC	Military Committee
MCC	Maritime Component Command
MDMP	Military Decision Making Process
MIDB	Modernized Integrated Data Base
MOE	Measure of Effectiveness
MOP	Measure of Performance
NAI	Named Area of Interest
NAC	North Atlantic Council
NATO	North Atlantic Treaty Organization
NSL	No Strike List
OPLAN	Operations Plan
OPORD	Operations Order
OPSEC	Operational Security
PMESII	Political, Military, Economic, Social, Information and Infrastructure
PPP	Presence, Posture and Profile
PSYOPS	Psychological Operations
POLAD	Political Advisor
PTL	Prioritized Target List
RTL	Restricted Target List
ROE	Rules of Engagement
SACEUR	Supreme Allied Command Europe
SOCC	Special Operations Component Command
SOLE	Special Operations Liaison Element
StratCom	Strategic Communication
TAA	Target Audience Analysis

TAI	Target Area of Interest
TB	Target Board
TD	Targeting Directive
TEA	Target Engagement Authority
TF	Task Force
TIP	Target Intelligence Package
TLE	Target Location Error
TNL	Target Nomination List
TSA	Target Systems Analysis
TSC	Target Support Cell
TSS	Target Selection Standards
TST	Time Sensitive Target(s)
TVA	Target Value Analysis
TWG	Targeting Working Group
WMD	Weapon(s) of Mass Destruction

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)

civil-military cooperation
The coordination and cooperation, in support of the mission, between the NATO Commander and civil actors, including national population and local authorities, as well as international, national and non-governmental organizations and agencies. (AAP-06)

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)

conduct of operations
The art of directing, coordinating, controlling and adjusting the actions of forces to achieve specific objectives. (NTMS – NATO agreed)

control
That authority exercised by a commander over part of the activities of subordinate organizations, or other organizations not normally under his command, that encompasses the responsibility for implementing orders or directives. (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)

critical element
1. An element of an entity or object that enables it to perform its primary function.
2. An element of a target, which if effectively engaged, will serve to support the achievement of an operational objective and/or mission task. Also called CE.(not NATO-agreed)

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

high pay-off target
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. (NTMS - NATO Agreed)

high-value target
A target identified as critical to an actor or organization for achieving its goal. (NTMS - NATO Agreed)

host nation
A nation which by agreement:
a. receives forces and materiel of NATO or other nations operating on/from or transiting through its territory;

b. allows materiel and/or NATO organizations to be located on its territory;
c. provides support for these purposes. (AAP-06)

indicator
An item of information which reflects the intention or capability of a potential enemy to adopt or reject a course of action. (AAP-06)

information activities
Actions 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) ((This is a new term; the definition will be processed for NATO Agreed status)]

information system
An assembly of equipment, methods and procedures and, if necessary, personnel, organized to accomplish information processing functions. (AAP-06)

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 fire support
The coordinated and integrated employment of land-, air- and naval fire support platforms delivering indirect fires to achieve the required effects on ground targets to support Land Operations in the full spectrum of conflict. [AArty P-5 (NATO Fire Support Doctrine)]

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)]

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

mensuration
The process of measurement of a feature or location on the earth to determine an absolute latitude, longitude, and elevation. (not 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 geographical 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)

psychological operations
Planned activities using methods of communication and other means directed at approved audiences in order to influence perceptions, attitudes and behaviour, affecting the achievement of political and military objectives. (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 or group of people against which lethal or non-lethal capability can be employed to create specific psychological or physical effects. Note: The term ‘person’ also covers their mindset, thought processes, attitudes and behaviours. (AAP-6; NTMS – NATO agreed)

target acquisition
The detection, identification, and location of a target in sufficient detail to permit the effective employment of weapons. Also called TA. (AAP 6; NTMS – NATO agreed)

target analysis
An examination of potential targets to determine military importance, priority of attack, and weapons required to obtain a desired level of damage or casualties. (AAP 6; NTMS – NATO agreed)

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 development The systematic examination of potential target systems—and their components, individual targets, and even elements of targets—to determine the necessary type and duration of the action that must be exerted on each target to create an effect that is consistent with the commander’s specific objectives.(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 folder
A folder, hardcopy or electronic, containing target intelligence and related materials prepared for planning and executing action against a specific target. (AAP 6; NTMS – NATO agreed)

target intelligence

1. Intelligence, derived from any source, that is used for targeting purposes (AAP 6; NTMS – NATO agreed)
2. Intelligence that portrays and locates the components of a target or target complex and indicates its vulnerability and relative importance (AAP 39; NTMS – NATO agreed)

target materials
Graphic, textual, tabular, digital, video, or other presentations of target intelligence, primarily designed to support operations against designated targets by one or more weapon(s) systems. (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)]

target value analysis
Analysis of relative worth of targets related to the target set they belong to, compared to the guidance of the commander (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)]

validation
1. A process normally associated with the collection of intelligence that provides official status to an identified requirement and confirms that the requirement is appropriate for a given collector and has not been previously satisfied. (AAP 39; Not NATO agreed)
2. A part of target development that ensures all vetted targets meet the objectives and criteria outlined in the commander's guidance and ensures compliance with the law of war and rules of engagement.(not NATO-agreed)

vetting
A part of target development that assesses the accuracy of the supporting intelligence to targeting. (not NATO-agreed)

weaponeering
The process of determining the quantity of a specific type of lethal or nonlethal means required to create a desired effect on a given target. (not NATO-agreed)

ATP-3.9.2(A)(1)