FM 3-60

Army Targeting

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Army Targeting

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Preface

FM 3-60 provides guidance on targeting processes and procedures used by the United States Army. This manual has applicability in any theater of operations. The manual offers considerations for commanders and staffs in preparing for challenges with targeting throughout the competition continuum yet is flexible enough to adapt to a dynamic situation. FM 3-60 will replace Army Techniques Publication (ATP) 3-60, Tactics, Techniques, and Procedures for the targeting process. FM 3-60 is written to align with other operations, intelligence, and fires doctrinal publications.

Readers of FM 3-60 should read and understand many aspects of Army operations as captured in ADP 3-0 and FM 3-0, Operations. Specifically, the reader must understand multidomain operations as the Army's operational concept, large-scale combat operations, the Army's role in unified action, Army operations across the strategic contexts, operational art, the operations process, and the warfighting functions. Additionally, because of the close relationship between targeting and intelligence, readers should be familiar with the key aspects of the following Army intelligence doctrinal publications:

- FM 2-0, Intelligence.
- ATP 2-01.3, Intelligence Preparation of the Battlefield.
- ATP 2-01, Collection Management.

The principal audience for FM 3-60 is all members of the profession of arms. Commanders and staffs of Army headquarters serving as joint task force or multinational headquarters should also refer to applicable joint or multinational doctrine concerning the range of military operations and joint or multinational forces. Trainers and educators throughout the Army will also use this publication.

Successful targeting requires that commanders and their staffs possess—

- An understanding of the functions associated with the targeting process.
- The knowledge of the capabilities and limitations of organic and supporting collection, target acquisition and delivery systems.
- An appreciation of the key aspects of each domain and the physical, information, and human dimensions of the operational environment.
- Decisive points necessary to reach convergence for each echelon.

Commanders, staffs, and subordinates ensure that their decisions and actions comply with applicable United States, international, and in some cases, host-nation laws, and regulations. Commanders at all levels ensure that their Soldiers operate in accordance with the law of war, law of armed conflict and the rules of engagement. FM 6-27, The Commander's Handbook on the Law of Land Warfare states the terms "law of war", and "law of armed conflict" are used interchangeably in practice. This publication uses the term law of armed conflict. Law of armed conflict is that part of international law that regulates the conduct of hostilities and the protection of war victims. For more information, see FM 6-27.

FM 3-60 uses joint terms where applicable. Selected joint and Army terms and definitions appear in both the glossary and the text. Terms for which FM 3-60 is the proponent publication (the authority) are italicized in the text and marked with an asterisk (*) in the glossary. Terms and definitions for which FM 3-60 is the proponent publication are boldfaced and italicized, and the definitions are boldfaced. For other definitions shown in the text, the term is italicized, and the number of the proponent publication follows the definition.

FM 3-60 implements North Atlantic Treaty Organization (NATO) Standard Agreements (STANAGs) 2934 NATO Joint Fire Support Procedures for Land Operations.

FM 3-60 applies to the Active Army, Army National Guard/Army National Guard of the United States, and United States Army Reserve unless otherwise stated.

The proponent for FM 3-60 is the Commanding General, United States Army Fires Center of Excellence and Fort Sill. The preparing agency is the United States Army Fires Center of Excellence, the Army Multidomain Targeting Center and the Directorate of Training and Doctrine. Send comments and recommendations on a Department of the Army (DA) Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Directorate of Training and Doctrine, 700 McNair Avenue, Suite 128 ATTN: ATSF-DD, Fort Sill, OK 73503; by e-mail to: usarmy.sill.fcoe.mbx.dotd-doctrine-inbox@army.mil; or submit an electronic DA Form 2028.

Introduction

Field Manual (FM) 3-60, describes the tactics, techniques, and procedures associated with effectively applying a targeting methodology to integrate and synchronize capabilities to create desired effects on targets and enable positions of relative advantage during the conduct of operations. Targeting is critical to synchronize operations from competition to crisis and into armed conflict. During worldwide staffing of the FM 3-60, significant input was received with valuable recommendations from the force. The Army Multidomain Targeting Center (AMTC) in conjunction with the Directorate of Training and Doctrine (DOTD), Intelligence Center of Excellence (ICOE), and the Combined Arms Doctrine Directorate (CADD) collectively revised the FM to ensure we captured all force requirements, concerns, and recommendations.

Army targeting fed by focused intelligence support is critical to operational success. Some of the new doctrinal aspects of FM 3-0 drive the need for a sophisticated targeting effort. For example, Army forces must account for the three dimensions (physical, information, and human) of the operational environment and nested decisive points and effects to execute an effective targeting methodology across the strategic contexts. Detailed intelligence on the operational environment supports detailed targeting.

Key elements of this revision are—

- Emphasizes targeting as an operations integrating process.
- Focuses on echelon specific requirements.
- Introduces Operational Framework.
- Introduces intelligence support to targeting appendix.
- Re-introduces target types and a codified list of desired effects, which will enhance the ability to articulate intent.
- Added information on the assessment working group within the targeting process as assessments are the foundation of effective targeting.
- Aligns the Army's targeting manual with FM 3-0, *Operations* and JP 3-60, *Joint Targeting*.

FM 3-60 is designed to be applicable and useful to all members of the Army Profession. This includes commanders, staffs, leaders, and targeting team members of a Theater Army, Corps, Division, and Brigade. The publication also provides the foundation for Army training and education curricula on targeting. FM 3-60 describes how targeting is conducted at echelon, as part of a joint or multinational force. This publication addresses targeting requirements and processes in support of the Army targeting methodology of decide, detect, deliver, and assess (D3A) and the integration of the joint targeting cycle, as needed, to support operations. Targeting is a command responsibility that requires participation of key members of both the coordinating and special staffs.

The intent of this version is to provide targeting teams at echelon an easy to use and valuable resource that is relevant to individual needs. We are striving to ensure this release is applicable to the changing environment, useful at echelon, and most importantly provides the doctrinal foundation expected from a targeting FM.

Although the Army faces a substantial amount of change through the transition from counterinsurgency to large-scale combat and multidomain operations, it is imperative that we emphasize the effectiveness of the targeting process and the requirement to plan early. Using the targeting process effectively and efficiently will enable targeting teams to set conditions during planning and minimize unplanned or unanticipated targets from derailing friendly schemes of maneuver or impacting the ability to achieve the Commanders intent.

The commander establishes the environment that determines the quality of the targeting effort and targeting often determines the commander's success or failure. The focus of this publication is on the targeting process from brigade to theater level. The Targeting methodology is not new or revolutionary. It consists of time-tested techniques organized in a systematic framework. Emerging organizations, all domain concepts, and large-scale combat operational considerations are also presented.

FM 3-60 has been updated to reflect current changes in terminology and techniques used for targeting. FM 3-60 contains five chapters and nine appendices.

Chapter 1 discusses the targeting guidelines and philosophy associated with targeting techniques and general responsibilities of targeting personnel.

Chapter 2 discusses the Army targeting process relating to lethal and nonlethal effects. It discusses the D3A methodology and the integration and synchronization with maneuver forces.

Chapter 3 discusses targeting at the brigade level to include battlefield framework, functions, planning, and battle rhythm synchronization.

Chapter 4 discusses targeting at the division and corps level to include battlefield framework, functions, planning, and battle rhythm synchronization.

Chapter 5 discusses targeting at the theater level to include battlefield framework, functions, planning, and battle rhythm synchronization.

Appendix A provides a comprehensive checklist for decide, detect, deliver, and assess.

Appendix B provides an overview of intelligence support to targeting.

Appendix C provides a table of desired effects and the desired outcomes, and target categories.

Appendix D provides an example of targeting tools and formats.

Appendix E provides targeting working group and targeting coordination board individual responsibilities and examples of battle rhythm products.

Appendix F provides examples of a target information folder.

Appendix G provides example of a CARVER target value analysis tool.

Appendix H describes target-numbering procedures.

Appendix I describes alternate targeting methodologies.

NEW, RESCINDED, AND MODIFIED TERMS

FM 3-60 becomes the proponent of the following Army terms. See Introductory table 1.

Introductory Table 1. Modified terms

Term	*Remarks*
high-payoff target list	FM 3-60 becomes proponent.
high-value individual	FM 3-60 becomes proponent.

Chapter 1
Foundational Guidelines

Targeting is a complex and multi-disciplined effort that requires coordinated interaction among many groups. Army forces meet a diverse array of challenges and contribute to national objectives across a wide range of operational categories, including large-scale combat operations, limited contingency operations, crisis response, and support to security cooperation. While the overwhelming majority of operations conducted by Army forces occur either below the threshold of armed conflict or during limited contingencies, the focus of Army readiness is on large-scale combat operations.

Army forces conduct operations in support of joint campaigns which for the most part occur as part of a larger coalition operation. Leaders must understand the interdependencies between their own assigned forces and the forces or capabilities provided by others to generate the complementary and reinforcing effects of combined arms approaches. Army forces employ joint and other unified action partner capabilities to the degree they are available. However, because peer threats can contest the force in all domains, Army forces must be prepared to conduct operations when some or all joint capabilities are unavailable to support mission accomplishment.

Army forces employ organic capabilities in multiple domains, and they continuously benefit from air and maritime strategic transportation and space and cyberspace capabilities that they do not control, including global positioning, satellite communications, and intelligence, surveillance, and reconnaissance. Lower echelons may not always notice the opportunities created by higher echelons or other forces that operate primarily in other domains; however, leaders must understand how the absence of those opportunities affects their concepts of operations, decision making, and risk assessment.

The Army's multidomain operations concept accounts for the constant nature of war and the changing character of warfare. Its balanced approach guides how Army forces operate across the competition continuum given the prevailing characteristics of anticipated operational environments (OEs) now and in the near future. For more information on war, warfare, and multidomain operations see FM 3-0.

In order to be successful throughout the range of military operations, across the competition continuum, and overcome the challenges presented by a very diverse OE, Army Commanders and staff use several integrating processes to synchronize forces and the warfighting functions within the military decision-making process (MDMP). An integrating process consists of a series of steps that incorporate multiple disciplines to achieve a specific end. Key integrating processes that occur within the MDMP include:

- Intelligence preparation of the battlefield.
- Information collection.
- Targeting.

- Risk management.
- Knowledge management.

This manual will highlight the key integrating process of Targeting and discuss its use in support of Army operations.

The targeting methodology is an iterative, and logical means necessary for the development, planning, execution, and assessment of target engagements. Commanders establish a targeting team to assist in planning. Key staff components working together are referred to as the targeting team and include, but are not limited to, enablers such as fire support (FS), intelligence, operations, plans cells and information advantage assets. Representatives from these cells and elements are essential to a comprehensive targeting process. Other members of the staff may help them in the planning and execution phases of targeting. Close coordination among all cells and elements is crucial for a successful targeting effort.

The commander establishes the environment that determines the quality of the targeting effort and targeting often determines the mission's success or failure. This success is dependent upon the shared understanding of the targeting team, and the use of a standard lexicon outlined in the following sections.

SECTION I - TERMINOLOGY

1-1. A *target* is an entity or object that performs a function for the threat considered for possible engagement or other action (JP 3-60). Targets include a wide array of mobile and stationary forces, equipment, and capabilities that span the physical, information, and human dimensions and that a threat can use to conduct operations. A target's importance is determined by its potential contribution to achieving a commander's objectives or otherwise accomplishing assigned tasks or reaching an effect. Targets are continuously refined or adjusted as an operation unfolds.

1-2. *Targeting* is the process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities (JP 3-0). It is an integral part of the operations process that organizes the efforts of the commander and staff to integrate and synchronize fires in operations. Targeting seeks to create specific desired effects through lethal and nonlethal actions.

1-3. Targeting encompasses many processes, all linked and logically guided by the joint targeting cycle. Units may use the Army targeting process or the joint targeting cycle as appropriate according to organizational echelon to integrate and synchronize capabilities, across warfighting functions and information advantage, into operations, creating the desired effects in time and space. The targeting team recommends targeting guidance to the commander, develops targets, selects targets for attack, and coordinates, integrates, and assigns organic or allocated joint, interagency, and multinational fires to specific targets and target systems.

SECTION II – PRINCIPLES

1-4. Targeting proceeds from the commander's objectives to an assessment of the results achieved by the executed course of action (COA). Participants in the targeting process should adhere to these targeting principles for creating the desired effects while diminishing undesired or adverse collateral effects. The targeting principles are:

- Focused. Targeting focuses on achieving the commander's objectives. It is the function of targeting to achieve efficiently those objectives within the parameters set at the operational level, directed limitations, the rules of engagement (ROE), or rules for the use of force, the law of war, and other guidance given by the commander. Every target nominated must contribute to attaining the commander's objectives.

- Effects-based. Targeting seeks to create specific desired effects through lethal and nonlethal actions or capabilities. Target analysis encompasses all possible means to create desired effects, drawing from all available capabilities. The art of targeting seeks to create desired effects with the least risk and expenditure of time and resources.
- Interdisciplinary. Targeting is a command function that requires the participation of many disciplines. This entails participation from all elements of the unit staff, other organizations, and multinational partners in planning, preparation, execution, and assessment of targeting tasks.
- Systematic. A targeting methodology is a rational and iterative process that methodically analyzes, prioritizes, and assigns assets against targets systematically to create those effects that will contribute to achieving the commander's objectives. During the course of the operation, targets are systematically analyzed, prioritized, and assigned assets to create effects that will contribute to the achievement of the commander's objectives. If the desired effects are not created, targets may be considered again in the process or operations may have to be modified.

SECTION III – OPERATIONS, PLANNING, AND TARGETING

1-5. Targeting plays an important role supporting the Army's operational concept, multidomain operations. *Multidomain operations* are the combined arms employment of joint and Army capabilities to create and exploit relative advantage to achieve objectives, defeat enemy forces, and consolidate gains on behalf of joint force commanders (FM 3-0). Employing Army and joint capabilities makes use of all available combat power from each domain to accomplish missions at least cost. Multidomain operations are the Army's contribution to joint campaigns, spanning the competition continuum.

1-6. Targeting is related to all the tenets of operations: agility, convergence, endurance, and depth. FM 3-0 specifically recognizes the overlap of convergence and targeting. Convergence is an outcome created by the concerted employment of capabilities from multiple domains and echelons against combinations of decisive points in any domain to create effects against a system, formation, decision maker, or in a specific geographic area. Convergence requires the synchronization of specific targets and broad objectives by the senior tactical echelon below the land component command. The ability to achieve convergence is dependent on many things to include synchronizing the employment of capabilities to generate simultaneous, sequential, and enduring effects against the enemy system; and assessing individual effects and the probability the overall effect has been achieved.

1-7. Targeting is also related to planning. *Planning* is the art and science of understanding a situation, envisioning a desired future, and determining effective ways to bring that future about (ADP 5-0). Planning is a continuous activity of the operations process-the major command and control (C2) activities performed during operations: planning, preparing, executing, and continuously assessing the operation (ADP 5-0). Commanders use the operations process to drive the conceptual and detailed planning necessary to understand an (OE); visualize and describe the operation's end state and operational approach; and direct, lead, and assess operations. Plans and orders provide the necessary context to conduct targeting.

1-8. Targeting helps shape operations to meet objectives and the commander's targeting guidance. Successful targeting requires a close interrelationship between the fires and intelligence warfighting functions. Intelligence preparation of the battlefield (IPB) and intelligence situational development is critical to ensure successful FS planning and targeting. In order to conduct successful targeting efforts, Army echelons must be aware of the operation and contingency plans, target systems analysis (TSA), and threat assessments produced at the national level to support their operations.

SECTION IV – KEY DOCTRINAL CONCEPTS

1-9. The commander’s targeting guidance must be articulated clearly and simply to enhance understanding. The guidance must be easily understood by all warfighting functions. Targeting guidance must focus on essential threat capabilities and functions that could interfere with the achievement of friendly objectives. Commanders describe the desired effects to be generated.

TARGETING GUIDANCE

1-10. The targeting team ensures that the proposed commander's targeting guidance includes targeting priorities, operational objectives, HPTs, desired effects, target selection standards (TSS), authorized actions against targets, any delegated responsibilities for target validation and approval, and the desired endstate. These elements will be described in further detail in chapter 2. The commander should leverage all available capabilities to create desired effects.

1-11. The commander can also provide restrictions as part of their targeting guidance. Restrictions at the tactical level are different than restrictions at the Joint level. Army forces use FS coordination measures to include no fire areas, target list worksheets, and ROE. Joint forces promulgate the joint force commander's (JFCs) no-strike list (NSL) and the restricted target list (RTL). RTLs apply to all subordinate echelons.

1-12. The NSL consists of objects or entities protected by—

- Law of war.
- International laws.
- ROE.
- Other considerations.

1-13. An RTL is a valid target list with specific restrictions such as—

- Limit collateral damage.
- Do not strike during daytime.
- Strike only with a certain weapon.
- Proximity to protected facilities and locations.

Note. See FM 1-04, FM 3-57, JP 3-57, JP 2-0, and JP 3-60 for additional information on legal considerations and targeting restrictions.

TARGETING CATEGORIES

1-14. There are two targeting categories: deliberate targeting and dynamic targeting see figure 1-1. The two categories were adopted from joint doctrine but do not directly correlate to operations at the tactical echelons. Deliberate targeting generally allows for more time and a larger pool of resources in which to leverage against a target, while dynamic targeting is generally restricted by time, resources available, and command priorities.

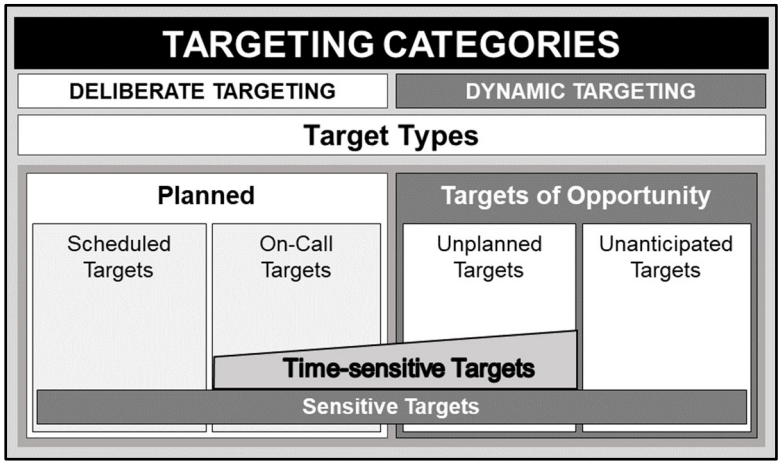


Figure 1-1. Targeting categories

DELIBERATE TARGETING

1-15. Deliberate targeting prosecutes planned targets. These targets are known to exist in the area of operations (AO) and have actions scheduled against them. Examples range from targets on target lists in the applicable plan or order, targets detected in sufficient time to be placed in the joint air tasking cycle, mission type orders, or FS plans.

1-16. There are two types of planned targets: scheduled and on-call. The differences are as follows:

- Scheduled targets exist in the AO and are located in sufficient time so that fires or other actions upon them are identified for engagement at a specific, planned time.
- On-call targets have actions planned, but not for a specific delivery time. The commander expects to locate these targets in sufficient time to execute planned actions.

Target Development

1-17. All Army forces conduct target development. Target development procedures in Army formations are often less formal and typically standard operating procedure (SOP) dependent. Army units are not typically manned or equipped to conduct to standard joint target development tasks in accordance with CJCSI 3370.01D. Augmentation my come from external sources, requiring targeting teams to understand targeting tasks, required skills, and necessary equipment.

1-18. *Target development* is 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 (JP 3-60). Target development includes functions such as target research, nomination, deconfliction, aimpoint recommendation, target materials production, and collateral damage estimation.

1-19. Target development includes but is not limited to, the function, criticality, and vulnerabilities of each potential target, linking targets back to targeting objectives and measures of effectiveness. Target development is often dependent on the time and assets available. Development may take weeks to months at joint echelons and potentially minutes to hours at tactical echelons.

Target types

1-20. Before beginning target development, the type of entity target must be established. There are five types of entity targets. Often referred to as the FIVE-O target types, they are Facilities, Individuals, Virtual, Equipment, and Organizations.

1-21. Facility. A facility is a physical structure, group of structures, or area that performs one or more functions that contributes to a threat capability. In the context of entity-level target development, these measurable geophysical parameters define the real property boundary and ensure no target duplication or boundary conflicts break unique identification. All facility target elements must reside within the facility boundary.

1-22. Individual. An individual is a person who provides one or more functions that contribute to a threat capability. Reserve the individual entity type for personnel that offer unique or critical functions to the threat. If an individual is only valuable due to their contribution to another target (for example, common soldiers or workers), the individual belongs to the personnel element of that target.

1-23. Virtual. A virtual entity is a collection of programs, files, or code dependent on each other to perform a function for the threat. Consider programs, files, data, data paths, signals, and code with the purpose of enabling equipment to function as a virtual element of equipment. This equipment may in turn be an element of an organization, facility, or individual.

1-24. Equipment. An equipment entity is an object made up of any number of devices and components, integrated and codependent, upon which engagement of one-component results in an effect upon the whole. Consider mass produced equipment (to include tanks, aircraft, and trucks) as target elements of the target type to which they contribute.

1-25. Organization. An organization is a group or unit that provides a function that contributes to a threat capability. The joint force will differentiate between organizations and target systems. For example, a front company (an entity) that ships lethal aid (a function) for the terrorist network (the threat) would be a target. Target elements of an organization could include facilities, individuals, equipment, and virtual entities; however, facilities and individuals will most often be associated targets instead of elements.

Target Vetting

1-26. Vetting occurs at all Army echelons. The term vetting is commonly used within Army tactical units at battalion (BN) through corps. When used in this setting, vetting more closely describes the dictionary definition of applying screening criteria to a piece of information. Staffs at echelon assess and analyze targets to determine and confirm location, function, and target type for execution. In principle, vetting in a joint environment is typically external to the organization and a formal process. Within Army processes, vetting is typically internal to the organization, and a less formal process.

1-27. *Vetting* is a part of target development that assesses the accuracy of the supporting intelligence to targeting (JP 3-60). Vetting is a key component of the target development process to establish a reasonable level of confidence in a candidate target's functional characterization. In target vetting, the intelligence officer coordinates an intelligence community review of the target data for accuracy of the supporting intelligence. An assessment of the supporting intelligence will include a minimum of target identification, significance, collateral damage considerations, geospatial or location issues, impact on the enemy or friendly forces, impact of not conducting operations against the target, environmental sensitivity, and intelligence gain or loss concerns. Vetting does not include an assessment of compliance with the law of war or ROE. Vetting in a joint environment is prescriptive and includes correspondence with one or more of the intelligence community members, dependent on authorities (see the most current version of CJCSI 3370.01D for more details).

Target Validation

1-28. Target validation must occur to receive command approval to perform engagements against targets. Within Army processes, validation is a commander’s approval of targets to a target list worksheet or a high-payoff target list (HPTL).

1-29. *Validation* is a part of target development that ensures all candidate targets meet the objectives and criteria outlined in the commander's guidance and ensures compliance with the law of war and rules of engagement (JP 3-60). Multinational considerations should be evaluated when validating targets. Target vetting and validation should be revisited as new intelligence becomes available or the situation changes.

1-30. Target validation is presented by targeting personnel, in consultation with the planners, servicing judge advocate general, and other experts and agencies, as required. Validation in a joint environment is the approval of candidate targets to a joint target list (JTL) or an RTL.

Target Nomination

1-31. Target nominations in a joint environment are targets selected by the combatant command staff, components, subordinates, and task forces from the JTL and RTL to compile target nomination lists to nominate targets for engagement (see the current version of CJCSI 3370.01D). Within Army processes, target nominations from corps and below functioning as a tactical headquarters (HQ) is a lower echelon asking a higher echelon to execute a target on behalf of the requesting echelon. The higher HQ for all aspects of targeting to include development and execution owns approved target nominations.

Target Recommendation

1-32. Within Army processes, target recommendations from corps and below functioning as a tactical HQ are targets that meet execution criteria passed from the intelligence and other staff elements to the fire support element (FSE) for execution. The distinction between the joint and Army environment target recommendations is that candidate targets are not yet validated, whereas target recommendations are valid targets. Target recommendations in a joint environment are called candidate targets submitted by component

commanders, appropriate agencies, or the JFC staff for further development and inclusion on the JTL or RTL or moved to the NSL (see the current version of CJCSI 3370.01D).

DYNAMIC TARGETING

1-33. *Dynamic targeting* is targeting that prosecutes targets identified too late or not selected for action in time to be included in deliberate targeting (JP 3-60). Dynamic targeting accounts for the unpredictability of the threat and prosecutes targets of opportunity during current operations. Targets of opportunity are targets identified during execution that require the targeting team to account for changes to the previously planned actions, current assets available and risks to immediate execution.

1-34. There are two types of targets of opportunity: unplanned and unanticipated. The differences are as follows:

- Unplanned targets are known to exist in the AO, but no action has been planned against them. The target may not have been detected or located in sufficient time to meet planning deadlines. Alternatively, the target may have been located, but not previously considered of sufficient importance to engage.
- Unanticipated targets are unknown or not expected to exist in the AO.

TIME-SENSITIVE TARGETS

1-35. A *time-sensitive target* is a joint force commander-validated target or set of targets requiring immediate response because it is a highly lucrative, fleeting target of opportunity or it poses (or will soon pose) a danger to friendly forces (JP 3-60). A time-sensitive target (TST) is of such high importance to the accomplishment of the JFC mission and objectives or one that presents such a significant strategic or operational threat to friendly forces or allies, that the JFC dedicates intelligence collection and attack assets to ensure success.

1-36. TSTs comprise a very small or limited number of planned targets due to the required investment of assets and potential disruption of planned execution and are only those targets designated by the JFC and identified as such in the JFC guidance and intent. TSTs are normally executed rapidly; however, to be targeted successfully, they require considerable deliberate planning and preparation within the joint targeting cycle. Army units should be aware of the theater TST matrix.

COMPONENT CRITICAL TARGETS

1-37. Echelons designated as the land component commander (LCC) will identify and nominate component critical targets. Service component commanders may designate high-priority targets that present significant risks to, or opportunities for component forces and missions. These are generally targets that the Service component commander(s) have nominated to the JFC TST list but were not approved as TSTs. This class of targets known as component critical targets may still require dynamic execution with cross-component coordination and assistance in an expedited manner. The JFC and Service component commanders should clearly designate these targets prior to execution of military operations. These targets should receive the highest priority possible, just below targets on the JFC TST list.

SENSITIVE TARGETS

1-38. Certain targets require special care or caution in treatment because failure to engage them or to engage them improperly can lead to major adverse consequences. Examples include leader targets (high-value individuals [HVI]) that must be handled sensitively due to potential political repercussions; targets located in areas with a high risk of collateral damage; and weapons of mass destruction facilities, where an attack can lead to major long term environmental damage. Such targets are often characterized as "sensitive" in one respect or another, without having the intrinsic characteristics, by definition, of a sensitive target. Nonetheless, the way they are attacked is sensitive and may require coordination with and approval from the JFC or higher authorities. In most cases, it is best to establish criteria for engaging such targets in as much detail as possible during planning, before combat commences. For a comprehensive definition of sensitive targets see the current version of CJCSI 3122.06E.

SECTION V – GENERAL RESPONSIBILITIES

1-39. Targeting team members are competent experts in doctrine and the processes and procedures associated with operations and targeting. The team understands existing authorities and critical staff capabilities enabling the creation and assessment of effects to support the commander's intent.

KEY TARGETING PERSONNEL

1-40. Furthermore, they understand their targeting duties and requirements enough to accomplish coordination both vertically and horizontally. They are adaptive and have the flexibility to recognize changes in the OE and makes timely coordination to affect targeting. Key targeting personnel may not exist at all echelons. Higher echelons provide support if specific skills are required.

1-41. Contribution to effective targeting, requires a common understanding of warfighting functions and staff officers' duties and responsibilities. The following paragraphs highlight key tasks and responsibilities to the targeting process (not all inclusive). Any echelon specific task or reference will be listed explicitly. All other references to a staff section will be listed with a "G" series but can be substituted for a J or S as applicable (J/G/S-3, J/G/S-2). For example, the battalion or brigade intelligence staff officer (S-2) and the battalion or brigade operations staff officer (S-3).

COMMANDER

1-42. The commander issues targeting guidance in support of the concept of operations. The commander's concept of operations and mission statement contribute to the commander's intent, are structured to facilitate shared understanding, and provide focus for the targeting team. Commanders are the final approval authority on targeting activities and acceptable levels of risk. Commanders can delegate or withhold targeting authorities and approvals.

1-43. Additional commander targeting responsibilities include directing the formation, composition, and responsibilities of a targeting board. The commander chairs the targeting board or appoints a delegated authority. They also ensure the integration of the targeting effort throughout the operation process, and provide targeting guidance and priorities for shaping deep, close, and rear area operations. The commander approves the HPTL, TSS, targeting synchronization matrix (TSM), attack guidance matrix (AGM), and the collection plan.

DEPUTY COMMANDER/ CHIEF OF STAFF (OR DESIGNATED REPRESENTATIVE)

1-44. The commander may delegate control of the unit's targeting process to include targeting battle rhythm events, to a deputy commander, chief of staff, executive officer, assistant chief of staff, operations (G-3) or fire support coordinator (FSCOORD). This delegate is responsible for supervising the unit's targeting process and ensuring integration with higher and subordinate HQ.

STAFF JUDGE ADVOCATE

1-45. The staff judge advocate (SJA) provides legal advice and support to the targeting team during all phases of operations. Members of the SJA team participate in targeting battle rhythm events.

1-46. In conjunction with the G-3 and chief of fires/FSCOORD, the SJA ensures the law of armed conflict, operational ROE, general restrictions, precautions in attack, separation of military activities, special protections, national sovereignty, environmental considerations, and the commander's targeting authorities are disseminated and followed throughout all staff sections and subordinate commands. As needed, liaises with higher HQ to attain authorities currently not delegable.

INTELLIGENCE OFFICER

1-47. The assistant chief of staff, intelligence (G-2) is the chief of the intelligence warfighting function and the principal staff officer responsible for providing intelligence support to targeting, current and future

operations, and plans. The G-2 identifies, monitors, and assesses threats as they adapt and change over time to determine their ability to affect mission accomplishment.

1-48. Together with the G-3, the G-2 helps the commander coordinate, integrate, and supervise the execution of information collection. The G-2 supports targeting tasks or activities, by refining higher HQ threat(s)/declared hostile force(s) systems and conducting component analysis. At a minimum the G-2 identifies threat forces combat power to include functions, composition and disposition of enemy units two levels down with further refinement as the situation requires or as directed by the commander.

1-49. The G-2 supervises development of the threat event template depicting capabilities, capacity and requirements tied to enemy decision points and differences in enemy courses of action. In addition, they provide information on the current enemy situation, estimates of current enemy capabilities by function, and conduct target value analysis (TVA), high-value target (HVT) identification, and the development of high-payoff targets (HPTs). A *high-payoff target* is a target whose loss to the enemy will significantly contribute to the success of the friendly course of action (JP 3-60). A *high-value target* is a target the enemy commander requires for the successful completion of the mission (JP 3-60). The G-2 provides assessments of enemy activity, syncing with the ATO cycle to better project likely enemy locations for collection and targeting. The G-2 will send a knowledgeable representative to all targeting battle rhythm events.

STAFF WEATHER OFFICER

1-50. The staff weather officer briefs the terrestrial and extra-terrestrial weather forecast to include light, weather data, and space weather anomaly(s) for the next 96 hours. The light weather terrestrial data impacts friendly air operations for fixed-wing and rotary-wing aircrafts. The extra-terrestrial data impacts precision guided (GPS) munitions point of impacts. The staff weather officer (SWO) describes the effects and impacts to friendly and enemy forces and sensors. Not usually found at echelons below division these tasks are normally performed by S-2 personnel.

INTELLIGENCE TARGETING OFFICER IN CHARGE

1-51. This is an echelon specific position at the division and above. The intelligence-targeting officer integrates intelligence support to targeting and maintains the target database. The intelligence-targeting officer applies the criteria for timeliness and accuracy from the TSS, and reports HPTs to the field artillery intelligence officer (FAIO).

1-52. The intelligence targeting officer participates in the targeting working group and ensures the G-2/S-2 and analytic elements possess the most current HPT, TSS and AGM. They coordinate with the collection manager to ensure adequate intelligence collection to support targeting to include recommendations for any named area of interest (NAI) and target area of interest (TAI). The intelligence-targeting officer also coordinates with the analytic element for targeting intelligence support to organizational fires. They conduct and maintain battle damage assessments (BDA), provide re-attack recommendations to the identified decision authority, and participate in targeting battle rhythm events.

COLLECTION MANAGER

1-53. Collection management is integral to Army targeting. The collection manager supports the targeting process through integration and synchronization of organic collection resources and the development of priority intelligence requirements (PIRs) and targeting intelligence requirements for organic, adjacent, coalition, mission partner environment, theater/joint, and national assets. The collection manager supports targeting by providing understanding of all available collection assets and coordinating for any additional assets required.

1-54. Targeting intelligence requirements, balanced against PIRs and other information requirements, are incorporated into the collection management plan. The collection manager prioritizes collection assets in support of the commander's objectives and assists in the development of NAIs and TAIs. In addition, the collection manager ensures collection times are synchronized with the TSM to support operations and participates in targeting battle rhythm events.

OPERATIONS OFFICER

1-55. The G-3 ensures warfighting functions are integrated and synchronized across the planning horizons in current operations, future operations, and planning cells. The operations officer authenticates all plans and orders per commander's guidance. The G-3 supervises tasks in support of targeting by publishing the commander's daily guidance, which includes objectives and targeting guidance.

1-56. The G-3 ensures adherence to ROE during operations in coordination with the SJA and other staff sections/agencies as required. The G-3 disseminates targeting objectives, effects, TAI, and targeting tasks to subordinate commands, and chairs the target coordination board when necessary.

PLANS OFFICER

1-57. The assistant chief of staff plans in conjunction with the G-3 prepares Annex A (Task Organization), Annex C (Operations), and Annex M (Assessment) to the operation order (OPORD) or operation plan (OPLAN). The plans officer supervises the execution of targeting tasks by developing operational endstates in support of the commander's intent to include objectives in the long-range planning horizon.

1-58. The plans officer provides projected changes in task organization, joint apportioned resources, and command and support relationships to include providing updates on branches or sequels to the current plan and changes to the commander's intent or endstate. The plans officer ensures incorporation of targeting effects into the operations assessment plan (enabled by the operations research and system analysis (referred to as ORSA).

1-59. The plans officer provides operations assessments and commander's guidance to targeting battle rhythm events and recommends targeting tasks and effects to support the commander's decision points. They participate in targeting battle rhythm events as required.

FUTURE OPERATIONS OFFICER

1-60. The future operations officer is responsible for planning operations in the midrange planning horizon. The future operations officer supervises performance of targeting tasks by providing adjustments including positioning or maneuvering of forces in depth that facilitate continuation of the current operation.

1-61. The future operations officer provides friendly schemes of maneuver for mid-range planning horizons, and provides updates or changes to task organization, commander's guidance, current objectives, task and purpose, or graphic control measures. The future operations officer provides the commander's decision point(s) (referred to as DPs) and participates in targeting battle rhythm events.

CURRENT OPERATIONS OFFICER

1-62. The current operations officer integrates the approved TSM into the unit's current operations synchronization matrix. The current operations officer performs targeting tasks or activities by executing and assessing the approved targeting tasks per the commander's execution guidance. They conduct tasking/re-tasking of assets to support engagement of dynamic targets and TSTs and participate in targeting battle rhythm events when able.

CHIEF OF FIRES

1-63. The *chief of fires* is the senior fires staff officer at echelons above corps who advises the commander on the best use of available fires resources and provides input to the necessary orders (ADP 3-19). The chief of fires is located in the Theater Army fires cell or joint task force (JTF), joint fires element that does not have a theater fires command to execute joint fires.

1-64. The chief of fires facilitates the fires warfighting function and works closely with the G-3 to ensure mutual understanding of all aspects of planning, preparation, execution, and assessment of fires in support of operations. The chief of fires targeting responsibilities are similar to those of the FSCOORD.

FIRE SUPPORT COORDINATOR

1-65. The *fire support coordinator* is the senior field artillery commander for the theater, corps, division, and brigade combat team who is the maneuver commander's primary advisor to plan, coordinate, and integrate field artillery and fire support in the execution of assigned tasks (FM 3-09).

1-66. The FSCOORD works closely with the chief of staff or executive officer, the G-2 and G-3 to ensure mutual understanding of all aspects of planning, preparation, execution, and assessment of fires in support of operations. The FSCOORD supervises the execution of targeting tasks or activities by coordinating with respective higher HQs, Joint Air Operations Center, battlefield coordination detachment (BCD), and other unified action partners as needed.

1-67. The FSCOORD establishes the targeting process based on the commander's guidance and intent, by ensuring integration and synchronization of targeting battle rhythm events into the unit's battle rhythm vertically and horizontally across commands. They establish the targeting working group and targeting coordination board agenda.

1-68. The FSCOORD oversees the development and management (with assistance from the G-2 and SJA) of the HPTL, JTL/RTL and NSL as applicable at echelon. They oversee the development of the target nominations list for external support and recommend engagement procedures for targets of opportunity. The FSCOORD chairs the targeting working group and facilitates the targeting coordination board as delegated.

AIR LIAISON OFFICER

1-69. The air liaison officer (ALO) is responsible for advising on air operations. The ALO is the senior Air Force officer with each tactical air control party. The ALO supervises the execution of targeting tasks or activities by advising the targeting team on the employment of air assets.

1-70. The ALO facilitates the integration of air capabilities to support target execution efforts and ensures digital communications are established with the air component to support targeting. They participate in targeting battle rhythm events as necessary.

TARGETING OFFICER

1-71. Targeting officers are assigned to field artillery BNs, field artillery brigades (FAB), division artillery (DIVARTY), combat aviation brigades, FSEs from brigade combat team (BCT) through corps, fires cells at echelons above corps (EAC), cyber mission teams, and special forces units. Targeting officers drive the unit's targeting process and are technical experts on all matters relating to Army and joint targeting.

1-72. Targeting officers ensure the targeting process, systems integration, personnel training, and supporting procedures comply with Army and joint standards. Targeting officers participate in the MDMP and coordinate with other staff members in the development of targeting products (HPTL, TSS, AGM, TSM) to support the unit's mission.

1-73. Targeting officers advise the commander and staff on all facets of targeting and oversee digital targeting systems integration at echelon. The targeting officer references TSA and outputs from MDMP, IPB, joint intelligence preparation of the operational environment, identifies HPTs, and develop opportunities within all domains. They assist in measure of performance (MOP), and measure of effectiveness (MOE) development, and supports the targeting team in the development of BDA criteria. For more information on TSA see JP 3-60.

1-74. Targeting officers recommend entities for inclusion on targeting lists and conduct target development and nomination (at echelon). They develop and submit unit targets requiring the sensitive target approval and review process. Targeting officers facilitate targeting battle rhythm events and conduct battle handoff of targeting products with current operation. They ensure ROE (with the SJA) and authorities are communicated and adhered to by the targeting team; and develop and ensure the publication of targeting guidance; and ensure changes to the approved targeting lists and other targeting-related products are published in fragmentary orders.

FIELD ARTILLERY INTELLIGENCE OFFICER

1-75. FAIOs are assigned at FSEs from BCTs through corps, and fires cells at EAC. They are integrated within the unit's intelligence function to facilitate target development, nomination, prioritization, and execution. They participate in MDMP and assist with drafting the HPTL recommendation, TSS, AGM, and assessment criteria. They are responsible for the fires and intelligence systems integration to support target detection, execution, and assessment.

1-76. FAIOs coordinate with adjacent and higher HQs, subordinate intelligence elements military intelligence brigade-theater (MIB-T), expeditionary military intelligence brigade (E-MIB), analysis and control element (ACE), and military intelligence company, to develop, nominate, and prioritize targets. They provide direction and guidance to intelligence elements on HPTL, TSS, and TSM, and assists in the refinement of enemy order of battle (artillery and air defense focused). The FAIO assists in NAI and TAI development and coordinates with the collection manager and organic and external intelligence organizations to create potential targets.

1-77. The FAIO when serving in a joint role typically co-locates with the deputy directorate for targets of a joint staff (referred to as J2T) for basic target development, intermediate target development, and advanced target development. They assist the intelligence section with combat assessment and confirm the fires to intelligence digital systems architecture for responsive target execution. They facilitate execution of targets detected with current operations and participate in targeting battle rhythm events as available.

CYBER ELECTROMAGNETIC WARFARE OFFICER

1-78. The cyber electromagnetic warfare officer (CEWO) leads the cyberspace electromagnetic activities (CEMA) section and works closely with the FSE, G-2, operations planning officers, and communications operations officers to plan, prepare, and execute cyberspace and spectrum management operations to meet the commander's objectives.

1-79. The CEWO supervises the execution of targeting tasks or activities in conjunction with the G-2 to identify threat cyberspace and electromagnetic warfare (EW) intent, critical capabilities, requirements, and vulnerabilities. In conjunction with the intelligence section and the FAIO, the CEWO conducts TVA of threat critical capabilities which are enabled by cyberspace and the electromagnetic spectrum operations for determining cyberspace and EW related HVT.

1-80. The CEWO develops threat objectives and use of cyberspace and the electromagnetic spectrum operations and identifies dual-use capabilities. They nominate cyberspace and EW related HPTs, NAIs, and TAIs, and provide information requirements to the intelligence cell for collection and analysis to assist in the target development and selection effort. The CEWO identifies cyberspace and EW capabilities of adjacent, joint, mission partners, and civilian organizations in the assigned AO.

1-81. The CEWO develops MOP and MOE criteria during targeting to evaluate the effectiveness of offensive cyberspace operations and electromagnetic attack. When designated, the CEWO serves as jamming control authority for ground or airborne electromagnetic attacks. The CEWO assists in the development of TSS, AGM, collateral effects evaluations, and BDA for threat cyberspace and EW. In addition, the CEWO submits requests for support to higher HQ and joint partners and participates in targeting battle rhythm events.

INFORMATION OPERATIONS OFFICER

1-82. The information operations (IO) officer is responsible for integrating and synchronizing information capabilities in support of operations. The IO officer combines all information related actions and incorporates them into targeting objectives to achieve decision dominance in support of the commander's objectives. The IO officer performs targeting tasks by leading the IO working group to synchronize and deconflict information capabilities in support of targeting objectives.

1-83. The IO officer contributes to the threat and vulnerability assessment and develops IO-related HVTs. The IO officer provides IO input to targeting guidance and objectives and deconflicts and coordinates potential HPTs. The IO officer submits IO information requirements to the G-2 and executes attacks in accordance with the AGM. They evaluate effects of attacks and participate in targeting battle rhythm events.

SPACE OPERATIONS OFFICER

1-84. A space operations officer is in charge of the space support element and is responsible for providing space-related tactical support, coordination of space capabilities, and may conduct integrated joint special technical operations (referred to as IJSTO) available to the command. The space support element performs targeting tasks or activities by providing the targeting team with space domain awareness.

1-85. The space support element under the supervision of the space operations officer provides implications of the Denied, Degraded, and Disrupted Space Operational Environment (referred to as D3SOE) on targeting operations. In conjunction with the G-2 intelligence section, they identify adversary space-based and space domain targets reliant or enabling capabilities.

1-86. In coordination with the G-2 and G-3, identifies space-based and space domain capabilities of adjacent, joint, mission partners, and civilian organizations in the assigned AO. They conduct TVA of space-based capabilities and space domain systems to develop potential targets. Working with the targeting officer and FAIO they contribute to TSS, AGM, and BDA development for space-based and space domain targets. The space operations officer participates in targeting battle rhythm events.

CIVIL AFFAIRS OFFICER

1-87. The assistant chief of staff, civil affairs operations (referred to as the G-9) is responsible for evaluating the civil environment during mission analysis, planning, and execution. The G-9 uses the understanding of the interaction of the operational and mission variables to identify critical capabilities for addition to the NSL, RTL/JTL, and potential sensitive targets. The G-9 participates in targeting battle rhythm events.

PSYCHOLOGICAL OPERATIONS OFFICER

1-88. The psychological operations officer's responsibilities include advising the commander and unit staff on military information support operations. They identify potential targets such as HPTs to be influenced and provide input to the command targeting guidance.

1-89. The psychological operations officer coordinates military information support operations focused targeting with relevant sections such as fires, information operations, civil affairs, and the deception officer. They conduct planning and evaluate military information support operations effectiveness with the G-2.

AIR AND MISSILE DEFENSE OFFICER

1-90. The air and missile defense officer is the senior advisor to the commander on all air and missile defense operations and activities. The air and missile defense officer coordinates the defense of the commander's specified critical assets against air and missile threats.

1-91. The air and missile defense officer supervises the execution of the following targeting tasks or activities by supporting the intelligence section in the identification of integrated air defense system, HVTs, and to determine target characteristics. They assist the FAIO and intelligence section with integrated air defense system TSS, and BDA criteria. The air and missile defense officer nominates integrated air defense system HPTs, and TAIs, and participates in targeting battle rhythm events.

CHIEF OF PROTECTION

1-92. The chief of protection has coordinating staff responsibilities for the chemical, biological, radiological, and nuclear (CBRN) officer; the explosive ordnance disposal officer; the operations security officer; the personnel recovery officer; the provost marshal; and the safety officer.

1-93. The chief of protection supervises the execution of the following targeting tasks or activities by identifying threat CBRN effects, critical capabilities, requirements, and vulnerabilities. They conduct TVA of threat CBRN capabilities and characteristics to determine their HVTs and nominates HPTs and TAIs to affect threat CBRN capacity.

1-94. Under the supervision of the chief of protection they contribute to TSS, AGM, and BDA development for threat CBRN capabilities and provide updates to the NSL. They nominate targets to the RTL/JTL and

conduct area analysis to identify potential medical and environmental hazards and threats. The chief of protection participates in targeting battle rhythm events.

ENGINEER OFFICER

1-95. The engineer officer assists the assistant chief of plans and G-3 with planning and assessing mobility and countermobility capability. The engineer officer identifies threat engineering critical capabilities, requirements, and vulnerabilities. They conduct TVA of threat engineer capabilities and characteristics to determine their HVTs.

1-96. The engineer officer nominates HPTs and TAIs to affect threat engineer capacity. They contribute to TSS, AGM, and BDA development for threat engineering capabilities, and recommends obstacles that deny the enemy freedom of movement across the depth of the AO. The engineer officer identifies critical infrastructures along the main and supporting line of communication for inclusion on the RTL/JTL and participates in targeting battle rhythm events.

LOGISTICS OFFICER

1-97. The assistant chief of staff, logistics (G-4) is the principal staff officer for sustainment plans and operations, supply, maintenance, transportation, services, and operational contract support. The G-4 (in conjunction with the G-2 and G-3) is responsible for the logistic preparation of the battlefield.

1-98. G-4 supervises the execution of targeting tasks or activities by recommending sustainment priorities. At the theater level, the G-4 recommends controlled supply rates for critical munitions and capabilities to the commander for approval. Subordinate G-4s determine subsequent rates at their level. In conjunction with the chief of fires, the FSCOORD recommends the distribution of critical munitions to the commander for approval.

1-99. The G-4 nominates key facilities and infrastructure on the main line of communications for inclusion on the RTL. The G-4 provides updates on threat logistics, tactics, equipment, capabilities, vulnerabilities, and intent. They identify threat supply/resupply routes and logistic HVTs and participate in targeting battle rhythm events.

LIAISON OFFICERS

1-100. Liaison officers present their commander's concept of operations, targeting requirements, target nominations, and requests for support in lieu of FSEs. Liaison officers participate in targeting battle rhythm events.

Chapter 2

The Targeting Process

In large-scale combat operations, targets in all domains are arrayed across the depth and breadth of the OE. These targets far exceed the number of resources available to acquire and create desired effects. It is paramount that higher HQ provide adequate guidance and must anticipate requirements subordinates may have. Targeting is a top-down driven process with a substantial need for bottom-up refinement. This will be applicable in any circumstance requiring lead time or insertion into supporting planning or execution cycles. The importance of what targets to attack and with what available capabilities must be planned and prioritized. This chapter explains how the Army conducts targeting using the D3A methodology.

GENERAL TARGETING METHODOLOGY

2-1. The targeting process provides an effective method for matching friendly force capabilities against enemy targets in order to achieve the commander's desired effects to achieve the commander's objectives. There are two general ways to frame the D3A methodology. During planning and the MDMP, the staff uses the methodology as a process to assist in product development and visualization. The methodology is applied to analyze commanders' guidance in order to determine the right targets, at the right place, at the right time. It is used through MDMP to make these decisions and apply the required assets to create desired effects. Further, the methodology is discussed through developing courses of action and wargaming them. It is also applied to assessment requirements and the analysis needed to facilitate future decisions. As an integrating process during execution, the second application enables the staff to apply the targeting products (HPTL, TSS, AGM, intelligence collection synchronization matrix (ICSM), and TSM) to facilitate operations. The staff is continuously making decisions, adjusting detection methods or location, and revising delivery options based on changes to threat courses of action. D3A is a flexible, simple, repeatable four-function process and is not designed to be time constrained or rigidly sequential. Figure 2-1 is a visual depiction of the D3A methodology.

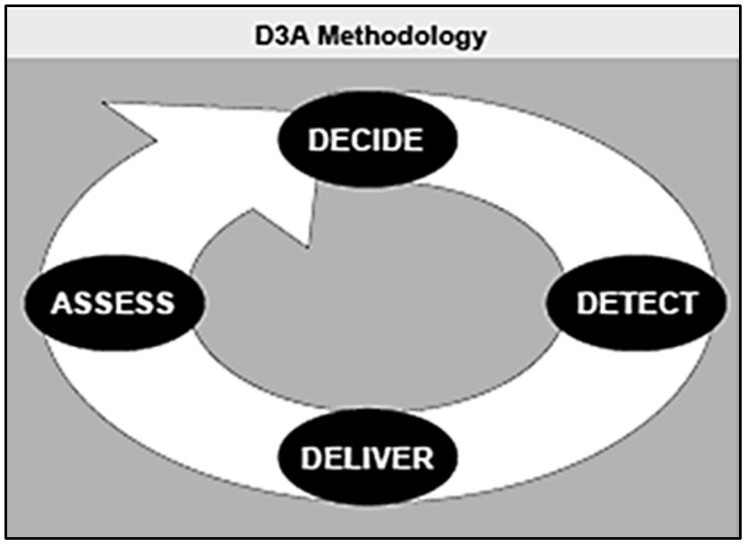


Figure 2-1. Decide, detect, deliver, and assess methodology

2-2. The delineation of targeting duties and responsibilities are necessary to prevent the duplication of effort and misuse of resources. Targeting team members at echelon must understand the ground scheme of maneuver to ensure synchronized coordination measures to facilitate attack of targets.

2-3. Targeting is cyclic and must keep up with the constantly changing OE. The tools and products explained later in this chapter, must be updated based on combat assessment. Decisions are rarely made without information from previous targeting cycle.

DECIDE, DETECT, DELIVER, ASSESS

2-4. D3A consists of four functions:

- Deciding what, when, where, and how to employ capabilities against targets.
- Detecting targets.
- Delivering appropriate capabilities to create desired effects (conducting the operation).
- Assessing the effects of engagement(s).

DECIDE

2-5. The decide function begins the targeting cycle and is applied throughout the Operations Process (Plan, Prepare, Execute, Assess). Decisions made during planning will be evaluated and revisited during preparation and execution, ultimately leading to effective assessments. The targeting team must be conscious of the decisions made and adjust them during rehearsals, individual, and collective training. The endstate is to ensure the proper capabilities are integrated and synchronized in the proper geographic locations, at the right time to create desired effects. Following engagement, how and what assessment must be decided upon. The application of commander's guidance is implemented throughout the steps of MDMP and refined until mission completion.

2-6. The outcome of success results in efficient employment of capabilities, favorable force ratios, and the accomplishment of all assigned tasks and objectives. The following are the consequences of failure:

- Enemy prevents friendly forces from achieving tasks and objectives potentially leading to mission failure.
- The commander is presented with unachievable solutions (capabilities are out of range).
- Resources are misused (inaccurate weaponeering or firing solution, mismanagement of ammunition, employment of wrong capability).
- Force ratios are unfavorable (Failure to see the enemy, lack of anticipation to support subordinates).
- Subordinate echelons improperly resourced (Task organization, information collection, delivery capabilities).

2-7. With this information, the targeting team and appropriate staff officers can prepare their respective running estimates. From the standpoint of targeting: the FS, intelligence, information capabilities, influence capabilities, and operations estimates are interrelated and closely coordinated among each cell.

2-8. This function provides the overall focus and sets priorities and criteria for information collection and engagement planning. The decide function draws heavily on the staff's knowledge of the enemy (to include their tactics, culture, and ideology), a detailed IPB, and continuous assessment of the situation. Targeting priorities must be addressed for each phase or critical event of an operation. The targeting team works in concert to draft targeting guidance and priorities for the commander. Once approved, the decisions made are reflected in the following foundational products:

- HPTL.
- TSS.
- AGM.
- ICSM.
- TSM.

Note. For further information on these products see Appendix D.

Intelligence Preparation of the Battlefield

2-9. IPB helps the commander to selectively apply and maximize combat power at critical points in time and space. IPB helps the commander and staff visualize the operating environment, how the natural environment affects friendly units and likely enemy COAs.

2-10. IPB is a continuous staff planning activity undertaken by the entire staff. *Intelligence preparation of the battlefield* is the systematic process of analyzing the mission variables of enemy, terrain, weather, and civil considerations in an area of interest to determine their effect on operations (ATP 2-01.3). Although the G-2/S-2 leads the IPB, various staff sections contribute to it. IPB, sets the context for operational planning and targeting. The process is flexible and well suited to account for lethal and nonlethal considerations (across the physical, information, and human dimensions) during operations. IPB:

- Describes the totality of the OE that may impact friendly, threat, and neutral forces at that echelon.
- Accounts for all relevant domains and dimensions of the OE that may impact friendly and threat operations.
- Identifies possible defeat mechanisms and relative advantages that friendly forces might be able to create and exploit.

2-11. Initial IPB, which occurs during mission analysis, is important as a means to focus the staff on various aspects of the OE specific to that unit, mission, time, and place, as well as a means to create products that are important to subsequent planning and targeting. As planning progresses, beyond mission analysis, IPB products are refined to support planning and targeting. Some of the more important products include the modified combined obstacles overlay, threat models (with generic HVTs), situation templates, event template, event matrix, and draft HVT list. See Appendix B and ATP 2-01.3 for more information.

High-Payoff Target List

2-12. The ***high-payoff target list*** i**s a prioritized list of high-payoff targets by phase of the operation**. The HPTL is a key element commander's guidance and communicates priority to the staff. Other considerations include the following:

- The sequence or order of appearance of the system, function, or capability being targeted.
- The ability to detect, identify, classify, and track the target. (This decision must include sensor availability and processing timeline considerations).
- The degree of accuracy available from the acquisition system(s).
- The ability to engage the target.
- The ability to create the desired effects based on attack guidance.

2-13. Targets are prioritized according to the considerations above within specific time windows. The targeting working group recommends priorities for the targets according to its judgment and the advice of the targeting officer and the FAIO. Target list worksheets give a recommended priority and engagement sequence. If the target list worksheet or war gaming departs from the commander's guidance, it is noted on the proposed HPTL to inform the commander of the conflict. The target category of the HPT is shown, either by name or by number, on the list. The category name and number are shown on the target list worksheet. The number of target priorities should not be excessive. Too many priorities will dilute the intelligence collection acquisition and engagement efforts. The approved list is shared with the targeting team and staff. It is used as a planning tool to determine attack guidance and to refine the collection plan. This list may also indicate the commander's operational need for BDA of a specific target and the time window for collecting and reporting it.

Note. Any format for prioritizing HPTs serves the purpose of a HPTL for linking targets with phases of battle.

2-14. One way to organize the HPTL is to group all HPTs into target sets that reflect the capabilities and functions the commander has decided to engage. Target sets are identified and prioritized for each phase of the operation. Within the sets, individual targets are ordered by target value, sequence of appearance, importance, or other criteria that satisfy the commander's desired effects. Additionally, the HPTL may be broken down based on individual targets within a system. Rather than listing integrated fires commands or integrated air defense systems, a systems approach to analysis may highlight key components of those systems. Staffs must understand the criticality of the system or system components when constructing their HPTLs. In this way, the targeting working group reduces, modifies, and reprioritizes HVTs while ensuring that HPTs support the concept of operations.

2-15. The commander's guidance may require changes, which should be annotated on the HPTL. The target name or number and description are placed on the list for specific HPTs in each category. Once the commander approves or amends the HPTL, it goes back to the targeting working group to help them develop the AGM and collection plan. See appendix D for a sample HPTL.

Target Selection Standards

2-16. TSS are criteria applied to enemy activity (acquisitions and battlefield information) and used in deciding whether the activity is a target. TSS put nominations into two categories: targets and suspected targets. Targets meet accuracy and timeliness requirements for engagement. Suspected targets must be confirmed before any engagement. See Appendix D for a sample TSS worksheet. Units may develop their own worksheet format.

2-17. TSS are based on the enemy activity under consideration and available weapon systems by using the following:

- Weapon system target location accuracy requirements such as target location error (TLE).
- Size of the enemy activity (point or area).
- Status of the activity (moving or stationary).
- Timeliness of the information.

2-18. Different TSS may exist for a given enemy activity based on different weapons system. For example, an enemy artillery battery may have a 150-meter TLE requirement for attack by cannon artillery and a 1-kilometer requirement for attack aircraft. TSS are developed by the FSE in conjunction with the intelligence section. Intelligence analysis use TSS to quickly determine targets from battlefield information and pass the targets to the FSE. Weapon system managers such as FSEs, fire control elements, or fire direction centers use the TSS to identify targets for expeditious attack. Commands can develop standard TSS based on threat characteristics and doctrine matched with the standard available weapon systems.

2-19. TSS worksheets are given to the intelligence officer by the FSE. The FAIO uses TSS to confirm or verify targets that are forwarded to an FSE. Intelligence analysts evaluate the source of the information as to its reliability and accuracy, confirm that the size and status of the activity meet the TSS, and then compare the time of acquisition with the dwell time. Accurate information from a reliable source must be verified before declaring it a target if the elapsed time exceeds dwell time.

Note. Dwell time is the length of time a target is doctrinally expected to remain in one location.

2-20. Some situations require intelligence assets to confirm positive identification before approval to engage is given. HPT that meets all the criteria should be tracked until they are attacked in accordance with the AGM. Location of targets that do not meet TSS should be confirmed before they are attacked. See appendix D for a sample TSM.

Attack Guidance

2-21. Knowing target vulnerabilities and analyzing the probable effect an engagement will have on enemy operations allows a staff to propose the most efficient available engagement option. Emphasis is placed on the desired effect and commander’s guidance. During war gaming, decision points linked to events, areas of interest, or points on the battlefield are developed.

2-22. The *attack guidance matrix* is a targeting product approved by the commander, which addresses the how and when targets are engaged and the desired effects (FM 3-09). The AGM is a compilation of engagement criteria in a format that can be easily understood. Attack guidance applies to both deliberate and dynamic targets and incorporates lethal and nonlethal engagement against both target types. One AGM may be produced for execution at any point in the operation, per targeting cycle, or by phase.

2-23. Based on commander's guidance, the targeting working group recommends how each target should be engaged in terms of the desired effects and engagement options. Desired effects are translated into automation system default values to engage targets more effectively.

2-24. The decision of what engagement means or system to use is made at the same time as the decision on when to acquire and engage the target. Coordination is required when deciding to engage with two or more means such as electromagnetic attack, information capabilities, or attack aviation. Joint Munitions Effectiveness Manual Weaponeering Software (referred to as JWS) is the digital weaponeering tool used to assist in attack guidance decisions.

2-25. The commander, with recommendations from the targeting working group, must approve the attack guidance. Attack guidance may address specific or general target descriptions and is provided to weapons systems managers via the AGM. This guidance should detail the following:

- A prioritized HPTL.
- When, how, and desired effects of engagement.
- Any special instructions.
- BDA requirements.

Attack Guidance Matrix

2-26. The AGM is a tool usually disseminated as a matrix. The AGM includes as a minimum:

- Phase or time period covered by the AGM.
- Specific HPT.
- Timing of engagement.
- How targets are engaged.
- Desired Effects.
- Remarks to include restrictions.

Note. A sample AGM is shown in appendix D.

Information Collection Synchronization Matrix

2-27. The information collection plan focuses the collection effort to answering PIRs and identifying HPTs. To support the detection of HPTs on the battlefield, the targeting cell provides indicators and specific information requirements (SIRs) to the collection management team for each HPT. The information collection matrix accounts for PIRs and other intelligence requirements. The collection management team accounts for targeting intelligence requirements, if developed, in a targeting addendum to the information collection matrix. If the collection management team does not develop a targeting addendum, the team must graphically account for TAIs and HPTs through other means. For example, the team could add both TAIs and HPTs as columns to the information collection matrix or develop a supporting crosswalk of HPTs with supporting SIRs, NAIs, TAIs, an NAI, and collection assets.

Targeting Synchronization Matrix

2-28. The TSM visually illustrates the HPTs and is designed to list specific targets with locations, in each category. The matrix has entries to identify if a target is covered by a NAI; the specific detect, deliver, and assess assets for each target; and engagement guidance. Once completed, the TSM serves as a basis for updating the information collection plan and issuing a fragmentary order once the targeting working group and targeting board concludes their sessions. In addition, the TSM facilitates the distribution of results

produced by the targeting working group and targeting board. The TSM ensures planned activities are coordinated and execution is feasible in time and space.

DETECT

2-29. Operations officers, at all levels, are responsible for directing the effort to detect HPTs identified in the decide function. To identify the specific who, what, when, and how for target acquisition, operations officers must work closely with the targeting team. The collection manager is a critical piece of this effort. The detect function is planned during the decide function and conducted during the execution of the OPORD.

2-30. The outcome of success achieves relative advantage in all dimensions, (human, information, and physical). It provides for positional, information, capability, and decision advantage. Successful detection enables timely and accurate employment of capabilities. The following are outcomes and consequences of failure to detect:

- Enemy prevents friendly forces from achieving tasks and objectives potentially leading to mission failure.
- PIR/information requirements remain unanswered and decision points are affected.
- The enemy retains critical capabilities to achieve mission success.
- HPTs are not affected, and friendly objectives remain unaccomplished.
- May require rapid decision making and synchronization process (RDSP).
- Increased risk to mission and risk to force.

2-31. The effective and efficient delivery of capabilities is achieved through a comprehensive collection plan. Detect and track targets by the maximum use of all available capabilities to create an effective layered collection plan. A *collection plan* is a systematic scheme to optimize the employment of all available collection capabilities and associated processing, exploitation, and dissemination resources to satisfy specific information requirements (JP 2-0). The collection manager must focus the collection efforts on approved PIRs, targeting intelligence requirements and other information requirements. The collection manager considers the availability and capability of all collection assets. The collection manager translates PIR and targeting intelligence requirements into indicators and specific information requirements. Dissemination of targeting information from collection will be through pre-determined channels and in accordance with unit SOPs.

Information Collection

2-32. The accurate and timely detection of targets is dependent upon a comprehensive collection plan and facilitates effective and efficient employment of capabilities. The collection manager must focus the collection efforts on approved PIRs, targeting intelligence requirements and other information requirements. The collection manager considers the availability and capability of all collection assets. The collection manager translates PIR and targeting intelligence requirements into indicators and specific information requirements. Dissemination of targeting information from collection will be through pre-determined channels and in accordance with unit SOPs.

2-33. HPTs must be detected in a timely and accurate manner, and reported in sufficient detail to enable the commander, through various lethal and nonlethal capabilities, the ability to produce the desired effects. Clear and concise tasks must be given to the reconnaissance units, information collection elements, weapons locating radars or any asset that can detect a given target within the information collection plan (Annex L). Information collection assets collect information and report back within operations and intelligence or targeting channels. Some collection assets provide actual targets, while other assets must have their information processed to produce valid targets. Processing, exploitation, and dissemination (PED) capabilities play an important role within targeting. The target priorities developed in the decide function are used to expedite the processing of targets. As the situation changes during operations the current operations or staff, led by the collection management team, assesses collection, and updates the collection management plan as needed to meet new requirements. For more information see ATP 2-01.

2-34. The information collection plan focuses the collection effort to answering PIRs and identifying HPTs. To support the detection of HPTs on the battlefield, the targeting cell provides indicators and SIRs to the

collection management team for each HPT. The information collection matrix accounts for PIRs and other intelligence requirements. The collection management team accounts for targeting intelligence requirements, if developed, in a targeting addendum to the information collection matrix. If the collection management team does not develop a targeting addendum, the team must graphically account for TAIs and HPTs through other means. For example, the team could add both TAIs and HPTs as columns to the information collection matrix or develop a supporting crosswalk of HPTs with supporting SIRs, NAIs, TAIs, an active NAI, and collection assets.

2-35. The information collection matrix and information collection synchronization matrix are products used by the collection manager to ensure that collection tasks are tied to the scheme of maneuver in time and space, effectively linking reconnaissance and surveillance to maneuver and effects.

2-36. The target priorities developed in the decide function are used to expedite the processing of targets. As a part of information collection, successfully acquiring and identifying HPTs, tracking HPTs, and conducting BDA are often critical to the success of the mission. This effort is collection asset-, intelligence analysis-, and support-intensive. Depending on circumstances, this effort is often controlled out of the current operations cell in conjunction with the targeting team and intelligence section. In some situations, a unit may choose not to conduct BDA on an HPT, but then the unit assumes an operational risk because it will not know the effects of fire on and the status of the HPT.

Actions Within Detect

2-37. The first portion of the detect function is positive identification. This is confirming the threat entity acquired in collection is in fact an HPT. Depending on the collection capability of this initial acquisition it may require the cueing of another asset to confirm identification of the HPT.

2-38. Mobile HPTs present an additional requirement within the detection function. Tracking is often required to maintain a current target location. Tracking priorities are based on the commander's concept of the operation and targeting guidance. Target tracking requires a specific level of timeliness, accuracy, and detail necessary to support the execution of fires. The HPT is tracked as it either moves to the TAI as planned or as subsequent planning occurs to develop a new TAI to engage the target. In accordance with the TSS, the FSE tells the collection manager the degree of accuracy required and dwell time for a target to be eligible for engagement. The collection manager must match accuracy requirements to the TLE of the collection systems. If the target type and its associated signatures (for example, electronic, visual, and thermal) are known, the most capable collection asset can be directed against the target. The asset is positioned according to estimates of when and where the enemy target will be located.

2-39. When an HPT is detected, the information is quickly disseminated to the FAIO, or designated targeting officer, located in the intelligence cell for necessary action. These actions include validating if the target is an HPT, and determining the target’s priority, and if the target complies with TSS. In those cases where identification of the HPT is too uncertain, the collection manager and current operations integration cell must cue other information collection assets to conduct further collection and the FAIO, or designated targeting officer, must notify the intelligence cell and targeting team of the need for subsequent analysis.

2-40. As the assets collect information, it is forwarded to the intelligence analysts of the ACE. The ACE uses the information in developing situational awareness (SA) and situational understanding and target refinement. Continuous updates to the collection plan and ICSM are required as targets are detected. Once an HPT is identified, it is passed from G-2 to operations.

Essential Target Information

2-41. Target recommendations are passed from the G-2 to the FSE by a number of means either digital or analog. It is important that the essential information be passed for proper analysis and engagement to take place. At a minimum, the target report (digital or analog) must include the following:

- Reporting agency.
- Sensor type.
- Report Date Time Group.
- Acquisition Date Time Group.

- Target Description.
- Posture.
- Activity.
- Size of the target.
- Target location.
- TLE.
- Dwell time.

2-42. See appendix D for a sample target report.

DELIVER

2-43. Deliver is the third function in the Army targeting methodology and occurs during the execution portion of the operations process. This function executes the target attack guidance and supports the commanders battle plan once the HPTs have been located and positively identified. The main objective is to create effects as planned in the decide phase and in accordance with the commander's guidance. Additional activities include the prosecution of targets that were not selected for action in sufficient time to be included in deliberate targeting. The selection of a capability or a combination of capabilities to meet the desired effect requires a synchronized time of engagement dependent on the tactical situation and the technical solution for the selected capability.

2-44. The outcome of success allows friendly forces to achieve relative advantage in the human, physical and information dimensions. Consequences of failure are as follows:

- Tasks, Objectives, and End-states not met resulting in mission failure.
- Attrition of Friendly Forces and unfavorable force ratios.
- Increase in human and material cost.
- Loss of initiative, inability to shape/set conditions.

2-45. Targeting products developed during the decide phase of the targeting process simplify and expedite delivery decisions during execution. A dedicated effort by the targeting team during planning enables predictability and assists the staff in executing the commander's guidance in support of the decision support matrix (DSM). During the initial targeting product development, when more time is available, the staff may not have all necessary information. As operations progress, the staff will inherently gain additional information. This will force the transfer of considerations into execution under increased time constraints and potentially reduced asset availability. This ultimately causes the targeting team to react to operational changes. When deviating from planned guidance (AGM, TSS), the decision maker needs to weigh the operational risks of tactical patience balanced with the immediacy of directed action.

2-46. Unplanned or unanticipated targets always have the potential to be identified during operations. Unforeseen variables in the operation can cause a change in commander's or attack guidance.

2-47. Dynamic targets or targets of opportunity are processed the same as planned targets. Targets of opportunity are first evaluated to determine when, or if, they should be engaged. The decision to engage targets of opportunity follows the engagement guidance and is based on a number of factors such as the:

- Criticality of target compared to other targets being processed for engagement.
- Activity of the target (risk to friendly forces).
- Dwell time.

2-48. If the decision is made to engage immediately, the target is processed further. The availability and capabilities of assets to engage the target are assessed. If the target exceeds the capabilities or availability of the unit delivery asset, the target should be sent to a higher HQ for immediate engagement. If the decision is to defer the engagement, then continue tracking, determine decision point(s) for engagement, and modify collection tasking as appropriate.

Engagement Considerations

2-49. The engagement of targets must satisfy the targeting guidance developed in the decide phase and be integrated with the friendly scheme of maneuver. The plan for target engagement is typically developed via the targeting working group and presented for approval in the targeting board. Target engagement requires several decisions and actions. These considerations fall into two categories: tactical and technical.

2-50. Tactical considerations:

- Time of the engagement.
- Desired effect, degree of damage, or both.
- Capability to use for engagement.
- Potential for collateral damage.

2-51. Technical considerations:

- Number, type, and duration of effect (munition/payload/action).
- Unit/agency/organization to conduct the engagement.

Tactical Considerations

2-52. Tactical considerations include the time of engagement, desired effects, capabilities, and collateral damage. These considerations are described in the following paragraphs.

Time of Engagement

2-53. The time of engagement is determined according to the type of target: planned target or target of opportunity. Time of engagement is a critical consideration when synchronizing multiple capabilities to create desired effects on the target. The targeting team must be conscious of each decision and the second and third order of effects created.

Desired Effects

2-54. The desired effects to be created from targeting efforts are critical elements of the commander targeting guidance. Desired effects should result in measurable and observable changes in the OE to enable assessment for follow on actions. A complete list can be found in appendix C.

2-55. A trained observer or analyst is required to properly assess effects. It is important that each target has a primary and alternate observer. Each observer must understand the desired effects to include when and for how long they are required.

Capabilities

2-56. The next consideration is the selection of the appropriate delivery mechanism. For planned targets, this decision is made during the decide function of the targeting process. A check must be made to ensure that the selected target engagement capability is still available and can conduct the engagement. If not, the targeting working group must determine the best delivery mechanism available to engage the target.

2-57. Weaponeering is a key part of determining the appropriate method of engagement. *Weaponeering* is the process of determining the specific means required to create a desired effect on a given target (JP 3-60). Weaponeering also considers such things as enemy actions (the effects of actions and countermeasures), munition delivery errors and accuracy, damage mechanism and criteria, probability of kill, weapon reliability, and trajectory. The commander's intent and end state, desired effects, tasks, and guidance provide the basis for weaponeering assessment activities. Targeting personnel quantify the expected results of fires against prioritized targets to produce desired effects. Since time constraints may preclude calculations of potential effects against all targets, calculations should proceed in a prioritized fashion that mirrors the HPTL.

2-58. The weaponeering process, across all domains, is achieved through multiple approaches. The use of the Joint Munition Effectiveness Manual Weaponeering Software (referred to as JWS) is the automated system for employment of lethal munitions. Information capabilities such as Space, Cyber, special technical operations (referred to as STO), and CEMA have structured procedures (access, placement, resources, and

planning horizons) to take into account during weaponeering analysis. Other information capabilities such as information, public affairs officer, civil affairs and psychological operations assess employment and effectiveness.

Collateral Damage

2-59. Collateral damage estimation is a methodology that assists the commander in staying within the law of armed conflict and ROE. The law of armed conflict requires:

- Reasonable precautions to ensure only legitimate military objects are targeted.
- Combatants to refrain from intentionally targeting civilian or noncombatant populations or facilities through lethal means.
- Anticipated civilian or noncombatant injury or loss of life and damage to civilian or noncombatant property incidental to engagements must not be excessive in relation to the expected military advantage to be gained.

Note. See the current version of CJCSI 3160.01D for more information on No-strike and collateral damage.

2-60. Failure to observe these obligations could result in disproportionate negative effects on civilians and noncombatants and be considered a law of war violation. Furthermore, United States leadership and the military could be subject to global criticism, which could adversely affect achievement of current and future military objectives and national goals. Finally, adversaries and enemies may call attention to any U.S. and ally missteps through propaganda to decrease legitimacy and undermine support for operations.

2-61. During targeting the staff has the responsibility to mitigate the unintended or incidental risk of damage or injury to the civilian populace and noncombatants, structures in the immediate area, targets that are on the NSL, RTL, livestock, the environment, civil air, and anything that could have a negative effect on military operations. This will assist the commander in weighing risk against military necessity and in assessing proportionality within the framework of the MDMP.

2-62. The targeting working group determines the delivery means subject to the maneuver commander's approval. All available engagement assets should be considered when delivering an information capability to create a nonlethal effect the targeting team must account for unintended collateral effects. This is SOP dependent until a formal methodology is published.

2-63. The availability and capabilities of each resource is considered using the following:

- Desired effects on the target.
- Degree of risk in the use of the asset against the target.
- Impact on friendly operations.

Technical Considerations

2-64. Technical considerations include the number, type and duration of the effect, and the unit, agency, or organization to conduct the engagement. Technical considerations are discussed in the following paragraphs.

Number, Type, Duration of Effect

2-65. At the recommendation of the FSCOORD and targeting team the G-3 directs the appropriate asset to engage the target once the tactical decisions have been made. This can be in an OPORD or as the tactical situation dictates. The targeting team evaluates all available capabilities against approved targets to determine appropriate options available for engagement and develops the best possible solution under given circumstances. A careful analysis is necessary to employ all capabilities efficiently and effectively with the appropriate number, type and required duration to create the desired effect.

Unit/Agency/Organization to Conduct the Engagement

2-66. The systems or asset managers, tasked unit, or agency determine if their system or capability can create the desired effects. The targeting team is notified when a capability is unable to provide the desired effects. There are various reasons a capability may not be able to create the desired effects which may include the following:

- System, asset, capability not available at the specified time.
- Required munitions, asset, or authority not available.
- Targets out of range.

ASSESS

2-67. Assessment occurs at all levels and across the range of military operations. Staffs help the commander by monitoring the numerous aspects that can influence the outcome of operations and provide the commander timely information needed to make decisions.

2-68. During the planning and preparation for operations, the targeting team must take all aspects of assessment into consideration. Assessments are difficult and time consuming. They require dedicated personnel and resources and must be included in the collection plan and synchronized through the collection and targeting working group. The staff must prioritize the use of collection assets and consider the risk of tasking assets for assessment versus other requirements. For further information on assessment see FM 5-0.

2-69. The outcome of success is effective targeting, efficient use of resources, and lower risk to mission and force. The following are consequence of failure to assess:

- Tasks, Objectives, and End-states not met resulting in mission failure.
- PIR/information requirements remain unanswered and decision points are affected.
- The enemy retains critical capabilities to achieve mission success.
- Inaccurate understanding of the operational situation.
- Inability to capture Munitions effectiveness or make reattack recommendations.
- Inability to measure effectiveness of target engagement.

2-70. *Combat assessment* is the determination of the overall effectiveness of force employment during military operations (JP 3-60). Combat assessment is composed of three elements:

- BDA.
- Munitions effectiveness assessment.
- Reattack recommendation.

2-71. In combination, BDA and munitions effectiveness assessment inform the commander of effects against targets and target sets. Based on this information, the enemies' ability to make and sustain war and centers of gravity are continuously estimated. During the review of the effectiveness of operations, reattack recommendations are proposed or executed.

Battle Damage Assessment

2-72. BDA includes known or estimated enemy unit strengths, degraded, neutralized, or destroyed enemy weapon systems, and all known captured, wounded, or killed enemy personnel during the reporting period. BDA in targeting pertains to the results of lethal and nonlethal engagements on targets designated by the commander. Producing BDA is primarily an intelligence responsibility but requires coordination with operational elements to be effective. BDA requirements may be translated into PIR. BDA accomplishes the following purposes:

- Commanders use BDA to get a series of timely and accurate snapshots of effects on the enemy. Assessment provides commanders an estimate of the enemy's combat effectiveness, capabilities, and intentions. This helps the staff determine when, or if, their targeting effort is accomplishing their objectives.
- As part of targeting, BDA helps to determine if a reengagement is necessary. The information is used to allocate or redirect weapon systems to make the best use of available combat power.

2-73. The need for BDA for specific HPTs is determined during the decide function. BDA requirements should be recorded on the AGM and the information collection plan. The commander's decision must be made with the understanding that an asset used for BDA may not be available for target development or target acquisition. BDA information is received and processed by the ACE, and the results of engagement are analyzed in terms of desired effects. The results are disseminated to the targeting working group. The targeting working group must keep the following BDA principles in mind:

- BDA must measure things that are important to commanders.
- BDA must be objective. The intelligence officer should verify BDA received from another echelon if time permits. Intelligence officers strive to identify and resolve discrepancies between the BDA results at different HQ at all echelons.
- The degree of reliability and credibility of the assessment relies largely upon collection resources. The quantity and quality of collection assets influence whether the assessment is highly reliable (concrete, quantifiable, and precise) or has low reliability (best guess). The collection manager plans and coordinates organic and nonorganic collection assets to obtain the most reliable information when conducting BDA for each HPT.

2-74. BDA has three components. They are:

- Physical damage assessment.
- Functional damage assessment.
- Target system assessment.

Physical Damage Assessment

2-75. Physical damage assessment estimates the quantitative extent of physical damage through munitions blast, fragmentation, and fire damage effects to a target. This assessment is based on observed or interpreted damage.

Functional Damage Assessment

2-76. Functional damage assessment estimates the effect of engagement on the target to perform its intended mission compared to the mission objective established against the target. This assessment is inferred based on all-source intelligence and includes an estimate of the time needed to replace the target function. A functional damage assessment is a temporary assessment (compared to target system assessment) used for specific missions.

Target System Assessment

2-77. Target system assessment is a broad assessment of the overall impact and effectiveness of all types of engagement against an entire target system capability, for example, enemy air defense artillery systems. It may also be applied against enemy unit combat effectiveness. A target system assessment may also look at subdivisions of the system compared to the commander's stated mission objectives. The target system assessment is a relatively permanent assessment (compared to a functional damage assessment) that will be used for more than one mission.

2-78. BDA may take different forms besides the determination of the number of casualties, or the amount of equipment destroyed. Other information of use to the targeting working group includes, but not limited to, the following:

- Whether the targets are moving or hardening in response to the engagement.
- Changes in enemy behavior and techniques.
- Increased communication efforts as the result of jamming.
- Whether the damage resulting from an engagement is affecting the enemy's combat effectiveness as expected.

2-79. BDA results may change plans and earlier decisions. The targeting working group must periodically update the targeting decisions and products made during the decide function.

Munitions Effectiveness Assessment

2-80. The operations officer, in coordination with the FSE and targeting working group, conducts munitions effectiveness assessment concurrently and interactively with BDA, as a function of combat assessment. Munitions effectiveness assessment is an assessment of the military force in terms of the weapon system and munitions effectiveness. Munitions effectiveness assessment is conducted using approved weaponeering software and provides the basis for recommendations to increase the effectiveness of:

- Methodology.
- Tactics.
- Weapon systems.
- Munitions.
- Weapon delivery parameters.

2-81. The targeting working group may recommend modifying commander's guidance concerning:

- Unit basic load.
- Required supply rate.
- Controlled supply rate.

Reattack Recommendation

2-82. Failure to achieve BDA, or failure to create necessary effects as a result of BDA, requires a decision from the commander. The targeting team and current operations must assess operational risks associated with the HPT and provide options to mitigate the risks. Based on the BDA and munitions effectiveness assessment, the intelligence officer in conjunction with the FSCOORD or deputy FSCOORD and operations officer consider the level to which objectives have been achieved and make recommendations to the commander. Reattack and other recommendations should address objectives relative to:

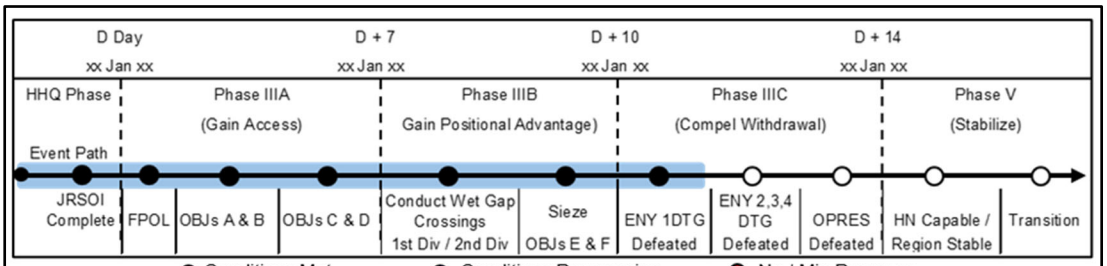
- Targets.
- Target critical elements.
- Target systems.
- Enemy combat force strengths.
- Friendly maneuver.

Battle Damage Assessment and Operational Assessment

2-83. Commanders continuously assess the OE and the progress of operations and compare them to their initial vision and intent. Commanders adjust operations based on their assessment to ensure objectives are met and the military end state is achieved. Figure 2-2 provides an example of an operational assessment.

2-84. Operational Assessment is normally performed only at echelons above brigade. At the echelons above brigade this is typically achieved through the assessments working group. The assessment working group is led by the plans or operations staff officers with participation from the entire staff. The key output of the assessment working group is the consolidated assessment of effects created during the assessed targeting cycle and assessed progress toward operational objectives. An example assessment working group agenda can be found in Appendix E Battle Rhythm Products. For more information on assessments working groups see FM 6-0 or ATP 5-0.3. At brigade and BN levels, commanders and their staffs normally execute tactical assessment. Tactical assessment is primarily concerned with the unit’s success or failure to set conditions for the close fight, focused on assessing:

- The unit’s success in detecting their HPTs.
- The unit’s success in attacking those HPTs as planned (lethally or nonlethally).
- The unit’s success in producing the desired effects against HPTs, the enemy or on the OE more broadly.



Defeat Enemy Forces (CDR's Intent)		
Force / System	**Desired Effect**	**Current State / Effectiveness**
1st DTG Defeated	Attrit to 50%	Overall: 60%; Postrure: Uncommitted Outlook: Monitoring for committal
2nd DTG Defeated	Attrit to 50%	Overall: XX%; Posture: Outlook:
3rd DTG Defeated	Remain Uncommitted	Overall: XX%; Posture: Outlook:
4th DTG Defeated	Attrit to 50%	Overall: XX%; Posture: Outlook:
OPRES Defeated	Attrit to 50%	Overall: XX%; Posture: Outlook:
1st IFC Defeated	Attrit to 30%	Overall: XX%; 2S7 47%, G6 60%, MRL 1% Outlook
1st IADS Defeated	CFACC Air Superiority	Overall: 52%; 1 x SA20 activation last 24 CFACC air superiority supported by ATACMS
HHQ C4I Neutralized	Unable to Mission CMD	Operations at the BDE level continues to indicate integration

Enable Host Nation Forces (CDR's Intent)

Objective	**Current State / Effectiveness**
Key Population Centers Secure	City A, B secured Locations C, D, E occupied by SPF
Power Generation Facilities Secure	Location 1, 2 secured Locations 3, 5, 5 controlled by SPF
HNP Security Capacity	NP: HNA: Special Ops
Territory Restored	58 of 70 Districts under HN / JFLCC control
HNA Capable	Pending defeat of Enemy Corps

Assessment (Based on End State Conditions)

- **Phase II/ III BDA assessment to HPTL**
- **Reattack recommendations**
- **Recommend moving to next objective/ setting conditions for critical event in line with scheme of maneuver**
- **Recommended updates to the DSM**

2S7 - 2S7 Pion is a 203 mm self-propelled gun, ATACMS - army tactical missile system, BDA - battle damage assessment, BDE – brigade, C4I - Command, Control, Communications, Computers and Intelligence, CDR – commander, CFACC - Combined Forces Air Component Commander, CMD – command, Div – division, DSM - decision support matrix, DTG - date time group, ENY – enemy, FPOL - forward passage of lines, G6 - G6 Rhino, is a 155 mm long-range self-propelled howitzer, HHQ - higher headquarters, HN - host nation, HNA - host-nation army, HNP - host-nation police, HPTL - high-payoff target list, IADS - integrated air defense system, IFC - integrated fires command, JAN – January, JFLCC - joint force land component commander, JRSOI - joint reception, staging, onward movement, and integration, Min – minimum, MRL - multiple rocket launcher, NP – national police, OBJ – objective, Ops – operations, OPRES – operational reserve, SA20 - long range surface-to-air missile system, SPF – special purpose forces

Figure 2-2. Example operational assessment

2-85. The assessment process is continuous and directly tied to the commander's decisions throughout planning, preparation, and execution of operations. Staffs help the commander by monitoring the numerous aspects that can influence the outcome of operations and provide the commander timely information needed for decisions. The commander's critical information requirement is linked to the assessment process by the

commander's need for timely information and recommendations to make decisions. Planning for the assessment process identifies key aspects of the operation that the commander is interested in closely monitoring, and where the commander wants to make decisions.

METHODOLOGY TOOLS

2-86. Understanding the D3A methodology itself is quite simple but the creative thinking and synchronization of resources required to be successful during operations takes repetition and experience. Tools are available to assist the targeting team with effective and efficient execution. A targeting checklist covering the D3A methodology can be found in Appendix A and the diagram below. Figure 2-3 provides a visual example of assets and desired effects that can be used during each function of the methodology.

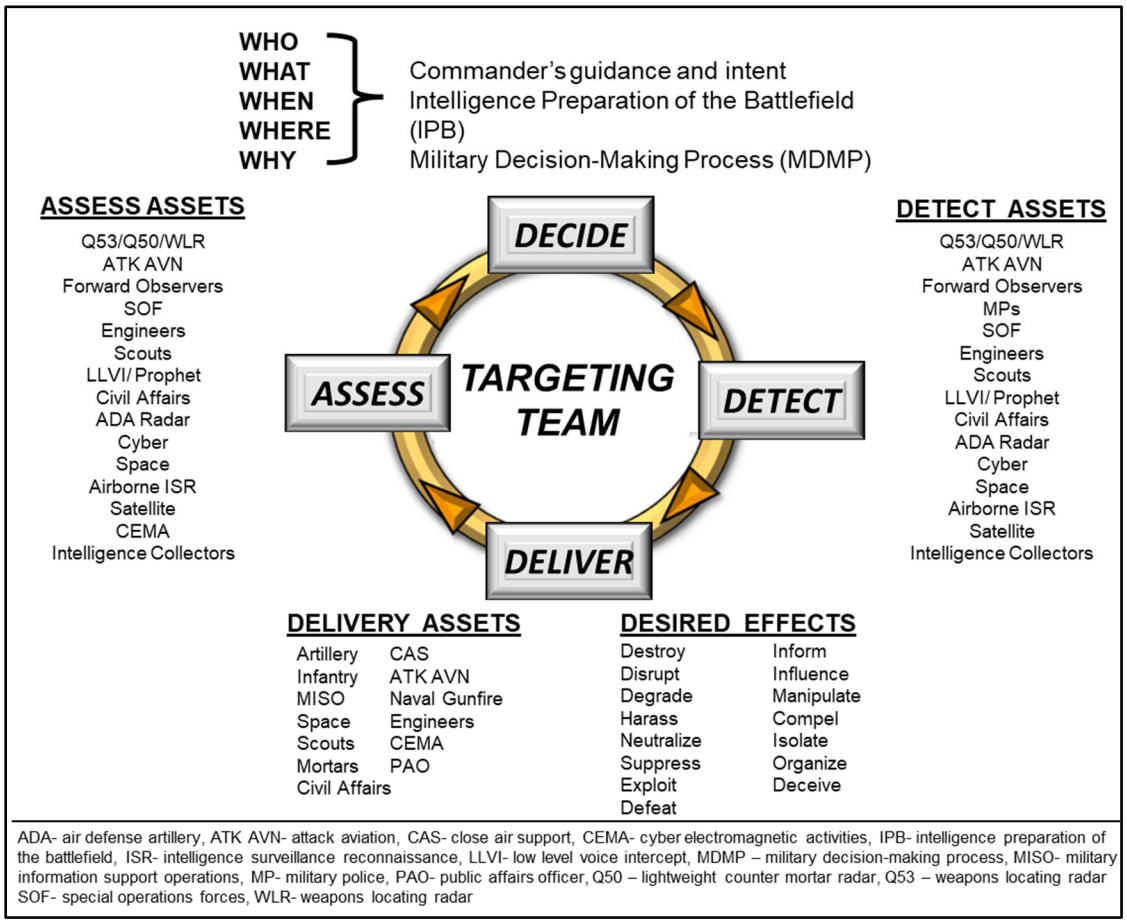


Figure 2-3. Decide, detect, deliver, and assess methodology and assets

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Chapter 3
Brigade Targeting

Targeting at the tactical level is largely defined by the capability and capacity of personnel and equipment. The sheer numbers of personnel at the brigade are far less than that of a corps or Theater Army. The staff and targeting team must assess capability and requirements to determine the feasibility and level of detail when applying the D3A methodology. The brigade is realistically the first echelon where a formal process will be conducted. The application of the methodology will be very similar at echelon; however, processes and procedures may be abbreviated. Targeting decisions at a higher HQ affect targeting decisions at subordinate HQ. The brigade staff may use the targeting products of the division or produce their own, depending on time and personnel available, to coordinate and integrate targeting actions. The brigade will focus on synchronizing assets to meet the commander's objectives within their assigned AO and submit requests for support or target nominations to division for effects they are unable to create with task organized capability or organic assets and enablers. Targeting at these echelons is typically more focused on specific threat systems, equipment, or individuals than on larger threat capabilities or functions such as integrated air defense systems, integrated fires commands, or logistics.

SECTION I - OPERATIONAL FRAMEWORK

3-1. The understanding of the operational framework allows commanders and staff the ability to geospatially, as well as temporally understand their assigned area of responsibility. Furthermore, it provides them the understanding to define the rear, close, and deep fight of the organization. Additionally, it provides an appreciation for the depth and breadth of their assigned AO across the multi-domain battlefield to include the electromagnetic spectrum, and information dimension. It ensures the correct orientation of forces while constantly assessing the adversary’s ability to contest friendly forces across all domains. True understanding of the operational framework better allows the commander to make informed targeting decisions that quickly creates windows of opportunity and convergence of effects.

3-2. Although BNs rarely, independently conduct organizational targeting, they play a valuable role in the tactical success of the brigade. The brigade applies the organizational targeting process to synchronize effects and to strike the enemy rapidly at decisive points to set favorable force ratios and enable conditions for continuous consolidation of gains. To accomplish this, the brigade leverages the operational framework to focus fires and effects ahead of friendly forces probable line of contact.

3-3. The operational framework extends from the brigade to theater army level in a single avenue in depth. Once identified, the brigade delineates a rear, close, and deep area to describe the physical arrangement of friendly forces in time, space, and purpose. This provides focus to the brigade targeting team and requires the commander and staff to examine the capabilities and operational reach of its forces and assigned enablers. Once applied, the brigade develops, as well as applies measures that favor the employment, timeliness, and synchronization of effects. Organizations apply the capabilities and limitations of its assigned sensors and weapon systems to inform placement. This is useful when articulating requirements to higher HQ or requests for assistance.

3-4. Figure 3-1 contains the brigade operational framework, which highlights the targeting effort at the brigade level and shades other echelon's AOs denoting they are outside of the brigade’s responsibility. Despite being outside the brigade’s responsibility, it is within their area of interest and brigade targeting teams should be conscious of activities in the areas that may impact their AO.

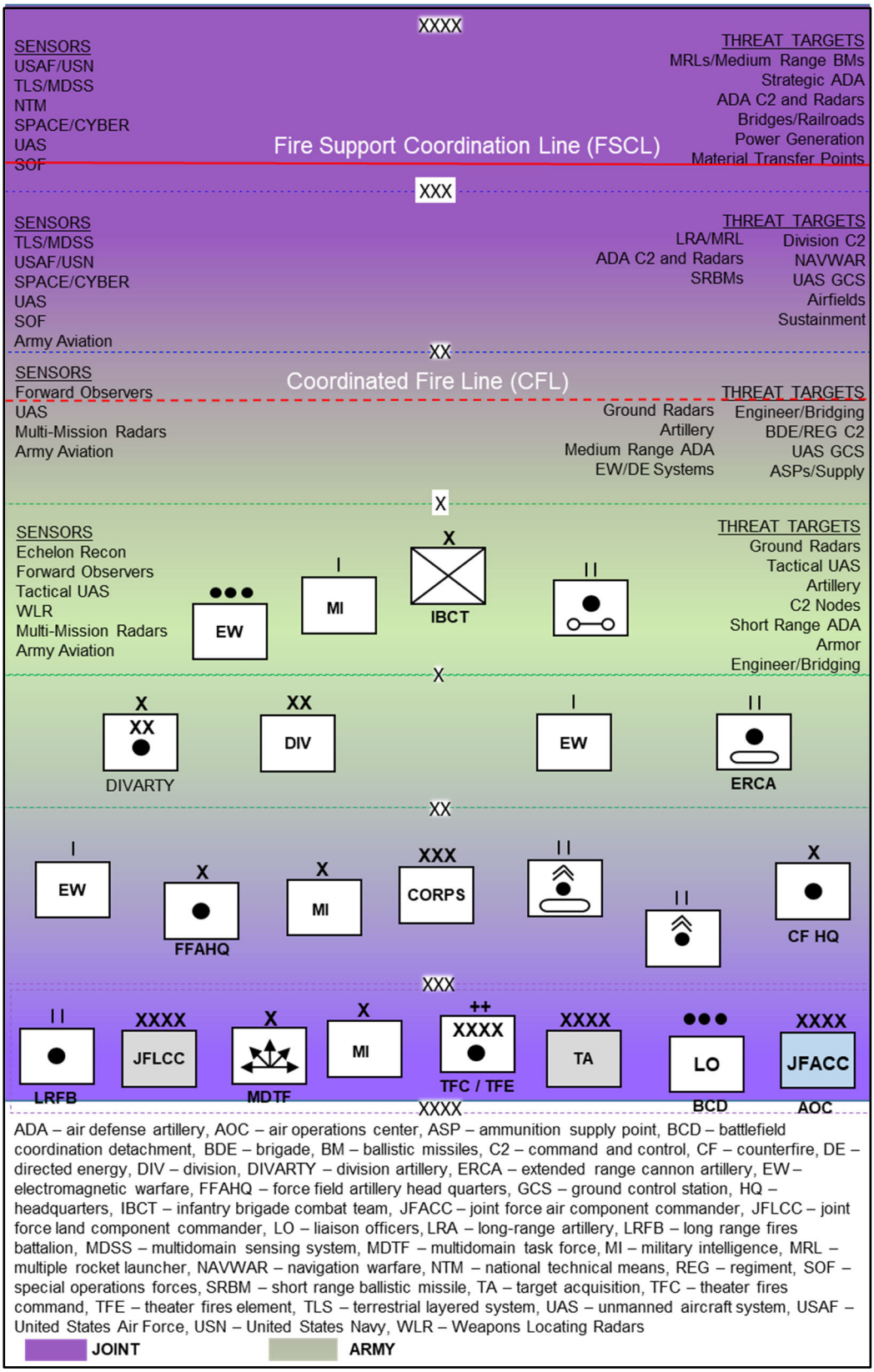

Figure 3-1. Brigade operational framework

SECTION II - FUNCTIONS

3-5. As described in section I, brigades may build off the division's targeting products to ensure integration with higher HQ plan and to save time. This does not preclude the brigade staff from inherent targeting functions to meet its own commander's intent. These functions and products are explained in detail in the corresponding appendices.

- Develop the HPTL.
- Develop the AGM.
- Establish TSS.
- Develop and synchronize the information collection plan with targeting efforts.
- Develop TSM
- Nominate targets to higher HQ.
- Synchronize desired effects with scheme of maneuver.
- Integrate and synchronize all elements of the targeting team (targeting battle rhythm).
- Receive and evaluate BDA.

SECTION III - PLANNING

TARGETING AND MILITARY DECISION-MAKING PROCESS

3-6. The D3A methodology is an integral part of the MDMP. Targeting is inherently a planning function. Targeting begins with receipt of mission and continues through OPORD execution and assessment activities. The fast-paced, ever-changing nature of the battlefield at the brigade level presents challenges to the targeting process that the targeting team must consider:

- Brigade operational timing and tempo (when and where targets will be acquired).
- The brigade has limited organic assets with which to detect and must leverage the all-weather, ground reconnaissance of the assigned cavalry squadron to detect and deliver against targets in the brigade deep fight.
- Targets are generally highly mobile.
- Planning time is limited, and planners are often also executers.
- Planning is primarily focused on future operations out to 24-48 hours.

3-7. Integrating and synchronizing planning, execution and assessment is pivotal to the success of targeting. The targeting team must participate in all steps of MDMP. Understanding the objectives, intentions, capabilities, and limitations of all actors within the OE enables the maximum use of all available means to create desired effects and accomplish the mission.

3-8. As the MDMP is conducted, targeting becomes more focused based on the commander's guidance and intent. Table 3-1 illustrates the relationship between the D3A methodology and the MDMP along with products generated during targeting.

Table 3-1. Targeting/military decision-making process crosswalk

MDMP Steps	*Inputs*	*Outputs*	*Notes*
1. Receipt of Mission	Gather the Tools: Set up Analog Map Gather targeting products and resources Establish mission command information system		
2. Mission Analysis	Enemy order of battle HVTL Enemy COA/ Objectives/decision points Air Operations Products: Special instructions, Joint Air Operations Plan, Air Operations Directive	Assets Available Request for forces Begin FST/HPTL (Task/Purpose) formulation Formulate Targeting Guidance and Targeting Objectives Initial information Collection Plan	1.
3. COA Development	Assets Available Initial HPTL Initial FSTs (Task/Purpose) Initial Targeting Guidance	Refined Targeting Guidance Weapon- Target Pairing Desired Effects on HPTs Weaponeering Solution Initial HPTL-TSS-AGM-TSM Initial Air Support Requests for shaping Friendly COAs	2. 3. 4.
4. COA Analysis	Initial TSM-HPTL-TSS-AGM Corps/Division/BDE Target Type Delineation	Refined TSM-HPTL-TSS-AGM Corps/Division/BDE Target Type Delineation	4.
5. COA Comparison	Targeting Products	Refine Targeting Products Begin Target Working Group	
6. COA Approval	Targeting Products Continue Target Working Groups	Refine Targeting Products Complete Target Coordination Boards	
7. Orders Production	Approved TSM-HPTL-TSS-AGM	Appendix 3 to Annex D (Targeting Products)	

Notes:

1. The FSTs are enemy focused and include the entity and a change metric from a baseline. The purpose is friendly focused and will reflect the supported maneuver tasks.

2. FSCOORD guidance may include desired firing elements (PLT/BTRY/BN) depending on the target sets. This will shape the weaponeering solutions, such as positioning guidance.

3. Weaponeering analysts, in conjunction with the Fire Direction Officer/Fire Control Officer, typically develop weaponeering solutions for surface-to-surface targets.

4. To facilitate war gaming and rehearsal, use scheduled/on-call targets planned during COA Development.

AGM – attack guidance matrix, BDE – brigade, BN-battalion, BTRY-battery, COA – courses of action, FSCOORD- fire support coordinator, FST – fire support task, HPTL – high-payoff target list, HVTL – high-value target list, PLT-platoon, TSM – targeting synchronization matrix, TSS – target selection standards

3-9. Upon completion of orders production, rehearsals are critical for success on the battlefield. Planning time must be allocated for technical and tactical rehearsals. Rehearsals clarify the fire plan for observers, sensor operators, attack system managers, and the maneuver units they support. Rehearsals ultimately facilitate the synchronization of FS with maneuver.

SECTION IV - BATTLE RHYTHM SYNCHRONIZATION

3-10. The battle rhythm is the key to synchronizing the warfighting functions in support of the scheme of maneuver. Battle rhythm events aid the staff in coordinating the critical targeting functions required to achieve the commander's guidance. *Synchronization* is the arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive time and place (JP 2-0).

3-11. Battle rhythm provides structure and sequencing of actions and events within the HQ regulated by the flow and sharing of information supporting all decision cycles. It is a cycle of command and staff activities intended to synchronize current and future operations. Battle rhythm consists of a series of meetings, briefings, working groups, boards, and other activities logically arranged to support cross-functional team

events, higher HQ, and the commander's decision-making cycle. The essential functions for a battle rhythm include, but are not limited to, the following:

- Provide a routine for staff interaction and coordination within the HQ.
- Provide a routine for the commander and staff interaction.
- Synchronize staff organizations' activities.
- Facilitate the staff's shared understanding, planning, and commander's decision making the staff's shared understanding, planning, and commander's decision making.

BATTLE RHYTHM EVENTS

3-12. Targeting working group and targeting coordination board are the key sessions that must be effectively integrated into the brigade battle rhythm and nested within the higher HQ targeting cycle to ensure that targeting focuses, rather than disrupts operations. There needs to be an adequate balance and sufficient time allocated between the targeting working group and the targeting coordination board. This includes time to conduct the meetings, as well as implement guidance, develop or adjust products, and conduct staff coordination. Thus, sufficient time is also required for supporting working groups (IO, intelligence, CEMA) to produce their inputs to the targeting working group. Task organization changes, modifications to the information collection plan, target nominations that exceed organic capabilities, air support requests, unit airspace plan, HPTL changes, and information related tasks all must be made with full awareness of time available to prepare and execute. This is a continuous process for the working group throughout operations.

3-13. The timing of targeting working group sessions is critical. While the time-focus for brigade level sessions of the targeting working group is normally 24 to 48 hours out, the brigade employment of assets and certain targeting decisions, such as target nominations and air support requests, must be planned in advance and in conjunction with the division, corps, theater Army, and the joint air tasking cycle. However, commanders must choose a targeting cycle based on the pace of operations. These cycles may be 6-12 hours apart if required. The brigade fire support officer (FSO) also schedules internal FSE targeting huddles so FS, information operations, and EW activities related to target nominations arrive within the BCT and higher echelon target nomination windows.

3-14. The number and frequency of targeting working group meetings varies based on the battle rhythm, operating tempo, or the commander's guidance. A preliminary working group facilitated by the FSE ensures the effects of fires meet the brigade commander's guidance and intent. The brigade FSO, FSE planners, and targeting team assess ongoing targeting efforts, and ensure air support requests with target nominations are processed through higher HQ to meet division, corps, theater Army, and JTF targeting timelines. The targeting coordination board is generally more formal and is focused on updating the commander, gaining new guidance, and obtaining approval of the collection plan and associated targeting actions. Targeting working group and coordination board sessions should be the minimum length required to present targeting information, situation updates, provide recommendations, and obtain decisions.

TARGETING WORKING GROUP

3-15. The targeting working group is a selection of predetermined staff representatives involved with targeting who meet to provide analysis, coordination, warfighting function updates, and running estimates to synchronize the targeting efforts and generate options presented to the commander at the targeting coordination board. The targeting working group has a set structure and agenda but is not a briefing. It is a discussion, organized by topic, with all participants involved in that discussion and all providing input.

3-16. Assembling the targeting working group brings various members of the brigade staff together to synchronize the targeting process and obtain approval for any changes to the targeting products. The targeting working group focuses and synchronizes the brigade's combat power and resources toward targeting and engaging HPTs. The targeting working group usually includes:

- Brigade FSO (Chairs or is the officer in charge of the working group).
- Brigade operations officer.
- Brigade intelligence officer.
- Targeting officers.

- Air defense, airspace management, and brigade aviation element representative.
- Combat aviation brigade FSO/targeting officer.
- Brigade judge advocate.
- Field artillery BN operations and intelligence representatives.
- FSE representatives or liaison officers from the maneuver BNs, the reconnaissance squadron, and the task organized engineer unit (if available).
- ALO or tactical air control party representative.
- EW Officer or EW representative.
- CEMA representative.
- Civil affair officer.

3-17. Additional staff personnel may provide relevant information and recommendations to the commander, operations officer, or FSO as necessary.

TARGETING COORDINATION BOARD

3-18. A *board* is a grouping of predetermined staff representatives with delegated decision authority for a particular purpose or function (FM 6-0). The targeting coordination board is a temporary grouping of selected staff representatives with delegated decision authority to provide targeting decision recommendations for command approval. When the process or activity being synchronized requires command approval, a board is the appropriate forum. The targeting coordination board usually includes:

- Brigade Commander (chairs the board)
- Brigade executive officer (often delegated to chair the board).
- Brigade operations officer.
- Brigade intelligence officer.
- FSCOORD.
- Brigade FSO.
- Targeting officers. (leads/facilitates the board).
- Air defense, airspace management, and brigade aviation element representative.
- Combat Aviation Brigade FSO/Targeting Officer
- Counterfire Officer
- Brigade Judge Advocate
- Field artillery BN operations and intelligence representatives.
- FSE representatives or liaison officers from the maneuver BNs, the reconnaissance squadron, and the task organized engineer unit (if available).
- ALO or tactical air control party representative.
- EW Officer or EW representative.
- CEMA representative.
- Civil affair officer.

3-19. Additional staff personnel may be present and provide relevant information and recommendations to the commander, S3, FSCOORD, or FSO as necessary. See appendix E for example targeting working group and targeting coordination board formats.

BRIGADE FIRE SUPPORT ELEMENT

3-20. The FSE is the centerpiece of the brigade and BN targeting architecture and must be focused on both lethal and nonlethal effects. Primary targeting functions of the FSE includes the following:

- Working with the information officer, civil affairs officer, public affairs officer, and brigade judge advocate to integrate appropriate aspects of information related capabilities into brigade targeting.
- Providing information to the operations officer for coordinating the tasking of sensors during development of the information collection plan with the brigade intelligence officer, the military intelligence company commander (as needed), and the reconnaissance squadron to acquire targets.

- Managing brigade targeting and facilitating the coordination board.
- Coordinating clearance for attacks against targets (clearance of fires).
- Coordinating assessment.

3-21. The lethal and nonlethal effects elements prepare recommendations for the brigade targeting working group sessions and implement the resulting decisions. Leveraging the reconnaissance and surveillance assets available to the main command post, the elements plan and synchronize the fires and nonlethal effects of brigade operations.

BATTALION FIRE SUPPORT ELEMENT

3-22. The FS organizations in the maneuver BNs and the reconnaissance squadron support their respective commanders but work closely with the brigade FSE. Lacking the capacity to conduct an independent targeting cycle, BNs must integrate and synchronize efforts with the brigade targeting team.

3-23. The maneuver BNs and the reconnaissance squadron are each supported by a FSE, and each may have an Air Force tactical air control party. The FS teams participate in targeting by nominating and refining targets. For more information of FS teams see ATP 3-09.30 and FM 3-09.

BRIGADE INTELLIGENCE SUPPORT

3-24. Intelligence support to the BCT is provided by the organic intelligence cell and military intelligence company. The intelligence cell, augmented with components from the military intelligence company, provides timely, relevant, accurate, and synchronized intelligence, surveillance, and reconnaissance support (to include target development, target detection, and combat assessment) to the BCT commander, staff, and subordinate units. Most intelligence personnel in a BCT are assigned to the military intelligence company but work under the direction of the brigade S-2 during operations. The BCT military intelligence company comprises a brigade intelligence support element, an information collection platoon, an Air Force staff weather officer, an EW platoon, and a tactical unmanned aircraft systems (TUAS) platoon. The military intelligence company commander provides command, control, and coordination of the TUAS platoon and the EW platoon, which integrates signals intelligence (SIGINT) and EW capabilities and target threat electronic capabilities to support the friendly scheme of maneuver.

3-25. The brigade intelligence support element conducts analysis, target development, and proposes HVTs. The element supports development of the brigade level collection plan in support of targeting efforts, integrates the intelligence architecture to support targeting priorities, and assists the BCT S-2 with intelligence, surveillance, and reconnaissance synchronization and collection management tasks.

3-26. The Information Collection Platoon conducts multiple discipline intelligence collection: SIGINT collection in support of EW and targeting, human intelligence (HUMINT) collection in support of detainee operations and technical control of HUMINT (Operations Management Team) and SIGINT/EW (Technical Control and Analysis Cell). The Technical Control and Analysis Cell creates target intelligence folders for SIGINT collection missions and recommends targets for action to the commander. The cell's SIGINT collection teams provide SIGINT collection, exploitation, and limited analysis to detect, track, and locate targets.

3-27. The EW platoon supports information collection efforts, survey of the electromagnetic spectrum, integration, and multisource analysis by providing warnings and indications, radio frequency direction finding and geolocation of threat emissions. The EW Platoon's electronic support tasks include electromagnetic reconnaissance, threat warning, and direction finding.

3-28. The TUAS platoon conducts maintenance and flight operations to ensure availability of the brigades deepest looking organic collection asset. Flight operations require coordination with both the brigade aviation element for friendly airspace considerations, and the brigade intelligence support element for enemy threats to their systems and development of a flight plan in support of their collection tasks. The TUAS platoon also provides initial tactical identification of enemy vehicles in support of targeting.

3-29. The staff weather officer is responsible for the weather forecast to include light weather data for the next three to four targeting cycles and its impacts to both friendly and enemy operations.

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Chapter 4
Division and Corps Targeting

The key to successful targeting at the corps and division is three-fold. First is understanding the support needed by the subordinate echelons and shaping efforts required to enable their operational success. Second is understanding division and corps schemes of maneuver, time, and assets available and third is understanding the planning horizons associated with requests for support and target nominations for external capabilities. Corps and divisions must operate in all domains. Targeting at these levels require the integration and synchronization of many more organizations, elements, and capabilities to create the desired effects within a joint environment. Organizations and elements such as the joint air-ground integration center (JAGIC), FAB, and E-MIBs are key components at these echelons. Organically, corps and divisions have separate, subordinate elements to provide unique capabilities to support the achievement of the commander's objectives but must establish relationships with necessary external joint interagency multinational (referred to as JIM) partners to be truly effective and successful.

Targeting at this echelon is complicated by expanding roles and a greater operational reach. This is also the first echelon where delineation of the D3A methodology and the Joint Targeting Cycle must occur. It is critical for division and corps targeting teams to definitively understand their task organization and the capabilities organic to their respective formations.

SECTION I – OPERATIONAL FRAMEWORK

4-1. The AO inherently expands at the corps and division levels. Understanding that corps control multiple divisions and divisions control multiple brigades is critical to understanding the size, scope, and scale of the corps and division AO. It is essential for corps and division targeting teams to understand the assigned boundaries from front to rear and left to right. Working in concert, the two organizations establish an operational framework that is advantageous to friendly forces and enables mission accomplishment. The established boundaries define the space in which each echelon is responsible for achieving the Commanders objectives and setting conditions for subordinate echelons to be successful.

4-2. Targeting at the corps and division is primarily conducted at the tactical level of war. It involves commanders and staffs using the D3A methodology in support of tactical operations within the roles of a senior Army forces (ARFOR) HQ or Army tactical formation. A corps and division commander might also command a joint force land component or a JTF. The joint force land component commander (JFLCC) or JTF commander will execute the joint targeting cycle.

4-3. Corps and division staffs must have a thorough understanding of the joint targeting cycle and the associated planning horizons and execution timelines. Corps and divisions, depending on roles will be tasked to integrate and perform the targeting functions of an operational HQ. Ensuring the corps and divisions staffs are adequately manned, trained and equipped to execute joint targeting cycle tasks and request joint assets when necessary is critical to mission success. Failure of the corps and division to synchronize capabilities and shape for their subordinate echelons will ultimately result in failing to create desired effects and achieving commander's objectives. Figure 4-1 on page 4-2 illustrates the operational framework demonstrating targeting responsibilities at the corps and division.

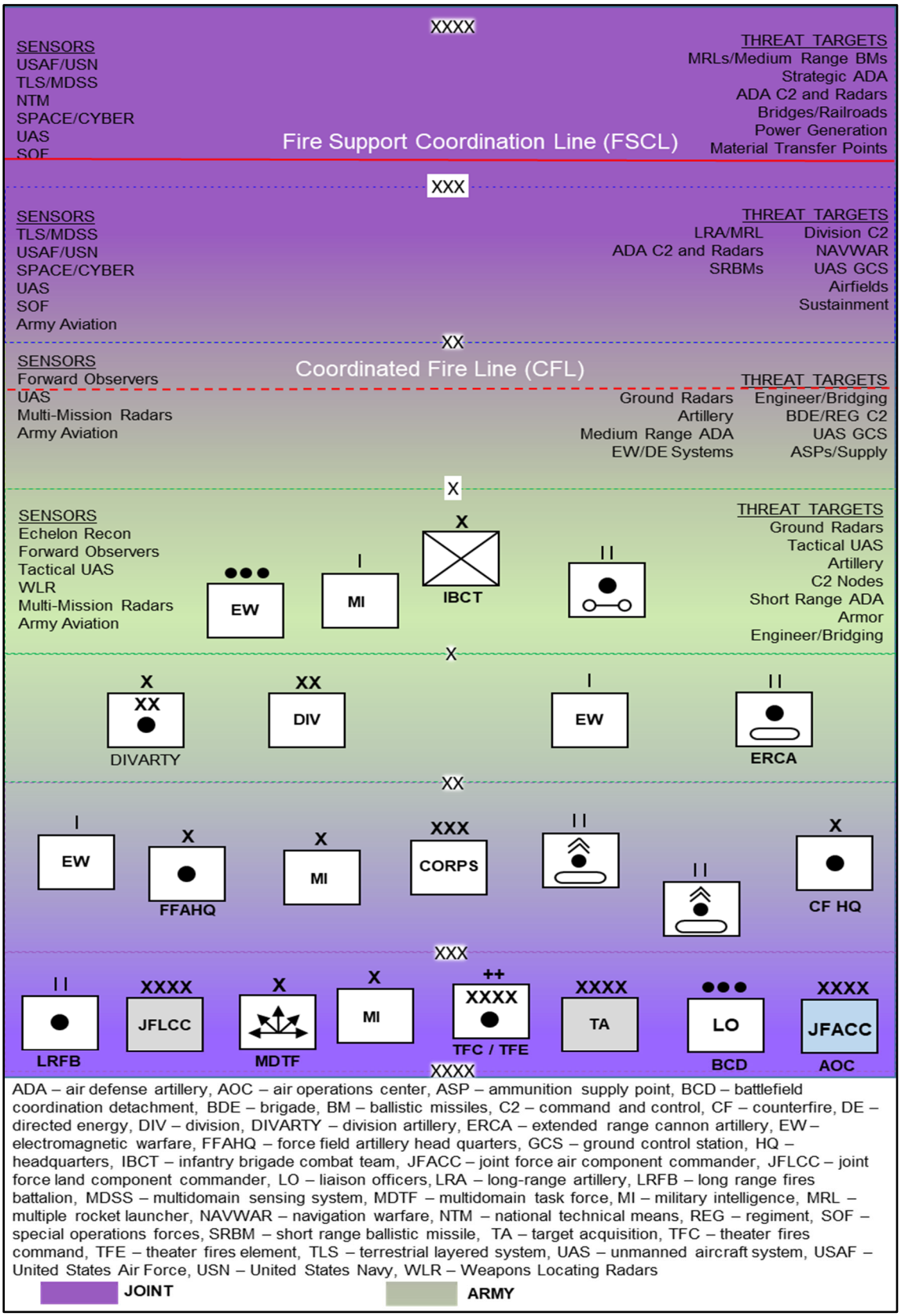

Figure 4-1. Corps and division operational framework

SECTION II – FUNCTIONS

4-4. Targeting functions at the corps and division expand when compared to the brigade and BN. The targeting team must consider the Joint requirements when functioning as a JTF or JFLCC to include systems, software, credentials, and authorities. Training and rehearsing the increased targeting functions will enable the corps or division to seamlessly transition between roles. The below lists highlights functions required by the corps and division:

- Develop the HPTL.
- Develop the AGM.
- Establish TSS.
- Develop and synchronize the information collection plan with targeting efforts.
- Develop TSM.
- Nominate targets to higher HQ.
- Attend higher HQs battle rhythm events.
- Synchronize desired effects with scheme of maneuver.
- Integrate and synchronize all elements of the targeting team (targeting battle rhythm).
- Synchronize joint interagency multinational assets and organizations.
- TST nomination, management, and execution.
- Conduct Joint target development (See current version CJCSI 3370.01D).
- Conduct target list management (JFLCC or JTF).
- Conduct operational and combat assessment.

SECTION III – PLANNING

4-5. Targeting remains a critical integrating function within the operations process and will be applied through all phases of planning, preparing, executing, and assessing the operation. It will exist as part of the MDMP but will also be applied to changes in plans during execution.

TARGETING AND THE MILITARY DECISION MAKING PROCESS

4-6. The expanded, multidomain nature of the OE at corps and division levels presents additional challenges in scale and scope to the targeting process that the targeting team must consider:

- Corps and division operational timing and tempo (when and where targets will be acquired).
- Planning horizons and execution timelines of joint capabilities.
- Capability to detect far more targets than they can engage with organic assets.
- Target taxonomy and target systems.
- Theater battle rhythm events and timelines.
- Anticipate needs and support requests from subordinates.
- Operational framework (rear, close, and deep area).

4-7. Corps information capabilities planning horizons and ability to gain placement and access often require more than a typical 24-to-96-hour period to properly plan and execute engagements.

4-8. Integrating and synchronizing is more than just MDMP. The targeting team must also consider joint planning methods, such as the joint planning process (JPP), joint targeting cycle, joint air tasking cycle, joint intelligence preparation of the operational environment, and unit airspace planning. Understanding the objectives, intentions, capabilities, and limitations of all actors within the OE enables the maximum use of all available means to create desired effects and accomplish the mission.

4-9. The targeting team must consider the role (JTF, LCC), ARFOR, Tactical HQ) in which they are operating to determine the appropriate planning process, products, and procedures required. Operating as an ARFOR or Tactical HQ, planning and targeting methods remain the same as described in Chapter 3 (reference Fig 3-2 on page 3-5 for targeting and MDMP integration crosswalk). However, in the case of a corps or

division serving in a role as a JTF or LCC, joint publications such as JP 3-0, JP 3-60, and JP 5-0 will dictate these processes, products, and procedures.

4-10. Upon completion of orders production, rehearsals are critical for success in the OE. Planning time must be allocated for technical and tactical rehearsals. Rehearsals clarify the concept of targeting for observers, sensor operators, attack system managers, collection managers and the maneuver units they support. Rehearsals assist in identifying gaps and unfeasible options.

SECTION IV – SYNCHRONIZATION

4-11. The battle rhythm events at division and corps (primary synchronization mechanism) become progressively complex due to the increase in organizations, agencies, and enablers contributing to the targeting effort. The additional roles performed at these echelons place a greater demand on synchronizing internal and external elements in support of operations. In addition to a greater number of contributors, coordinating the parallel and supporting bureaus, boards, centers, cells, and working groups (referred to as B2C2WGs) within the staff must be emphasized to ensure integration and maximize the joint targeting working group and joint targeting coordination board.

BATTLE RHYTHM EVENTS

4-12. Divisions and corps operating as a combined/JTF or combined/JFLCC are expected to conduct the joint targeting cycle and perform all associated joint targeting tasks in accordance with JP 3-60 and applicable CJCSIs. In the event a division or corps is tasked as the ARFOR or tactical HQ, the targeting team must be prepared to participate in the joint targeting process of the higher HQ to submit target nominations for joint capabilities. All effects that cannot be created by organic capability must be requested through predetermined channels. Higher HQ typically prescribe the methods for support requests and target nominations. In addition to participating in the higher HQ processes, divisions and corps will conduct joint targeting working groups (referred to as JTWGs) and joint targeting coordination boards (referred to as JTCBs) at their level for echelon specific synchronization and integration. Working group and board facilitators must be conscious of role, targeting tasks, and command and support relationships to include all necessary participants. Units must train and develop B2C2WGs to enable distributed execution if the tactical environment dictates smaller command posts.

JOINT/ TARGETING WORKING GROUP

4-13. The targeting working group participants could vary widely at the division and corps. When operating as the ARFOR or a tactical HQ, attendees will be very similar to those at the brigade targeting working group. In addition to organic staff sections, below is a list of members to consider when building the working group at this level:

- BCD/Air Operations Center.
- Air Operations Center.
- Higher HQ.
- Corps/division intelligence targeting officer.
- Corp/division and lower-echelon collection management, ACEs, and PED elements.
- Military intelligence company unit commander, staff, and technical control elements in the unit.
- Coalition mission partners and unified action partners as applicable.
- Components (JFLCC, joint force air component commander, joint force maritime component commander.
- Special operations joint task force (referred to as SOJTF).
- Any relevant intelligence community members (Defense Intelligence Agency, National Security Agency, Federal Bureau of Investigation, Department of State).
- United States Space Command (referred to as USSPACECOM) or designated representative.
- United States Cyber Command (referred to as USCYBERCOM) or designated representative.
- Combat Aviation Brigade.

- Subordinate unit liaison officers (division, BCT, FAB, MEB).

JOINT/ TARGETING COORDINATION BOARD

4-14. The joint targeting coordination board provides a forum for the commander to make decisions and provide guidance. This forum allows components, organizations, agencies, and staff sections to articulate strategies and priorities for future operations to ensure they are synchronized and integrated. The joint targeting coordination board normally facilitates and coordinates targeting activities with the schemes of maneuver to ensure that the commander's priorities are met. Specific targeting issues are resolved by direct coordination between elements below the level of the joint targeting coordination board. The joint targeting coordination board is the primary forum to enable the commander to make targeting decisions and provide guidance.

- Attendees of the board are often mission dependent. The number can fluctuate depending on echelon, physical location, and agenda.
- Additional staff personnel may be present and provide relevant information and recommendations to the commander, chief of staff, G-3, or FSCOORD as necessary.
- See appendix E for example targeting working group and targeting coordination board formats.

DIVISION AND CORPS FIRE SUPPORT ELEMENT

4-15. The primary action agency for targeting at the division and corps is the FSE. The FSE leads targeting activities which include coordinating, integrating, and synchronizing capabilities to create desired effects. The FSE serves as the staff conduit between planning and execution.

FIELD ARTILLERY BRIGADE

4-16. Serving as the force field artillery HQ and/or the counterfire HQ the FAB plays a critical role in the corps targeting process. The FAB assists and facilitates the targeting process for higher or supported command by planning, coordinating, integrating, synchronizing, and deconflicting the employment of suppression of enemy air defenses and deep shaping fires utilizing multiple launch rocket system or high mobility artillery rocket system BNs in support of multi domain operations (MDO). In most cases, the FAB commander serves as the corps FSCOORD.

4-17. The duties and responsibilities between the corps staff and the FAB personnel must be clearly defined. Collective effort between the corps and FAB staff is required for successful targeting efforts. There is typically a level of augmentation that occurs within the corps FSE by the FAB staff to meet all manning requirements in support of targeting efforts. FABs lack the capacity to conduct an independent targeting cycle and should integrate and synchronize efforts with the corps targeting team.

DIVISION ARTILLERY

4-18. Serving as the force field artillery HQ and/or counterfire HQ the DIVARTY plays a critical role in the division targeting process. The DIVARTY commander serves as the division FSCOORD. Collective effort between the division and DIVARTY staff is required for successful targeting efforts.

4-19. There is typically a level of augmentation that occurs within the division FSE by the DIVARTY staff to meet all manning requirements in support of targeting efforts. DIVARTYs lack the capacity to conduct an independent targeting cycle and should integrate and synchronize efforts with the division targeting team.

JOINT AIR–GROUND INTEGRATION CENTER

4-20. The JAGIC provides commanders a technique to coordinate, integrate, and control operations in division-assigned airspace and efficiently collaborate requirements with external airspace elements outside of the division area. The JAGIC plays a critical role in the execution of current targeting cycles. Close coordination between the JAGIC and FSE is imperative to ensure effective transitions occur from planning to operations. See ATP 3-91.1 for more information on JAGIC operations.

INTELLIGENCE SUPPORT AT CORPS AND DIVISION

4-21. Corps and division intelligence capabilities provide rapid detection, identification, and dissemination of threat HPTs, all of which are essential to the timely targeting required to disintegrate threat anti-access and area denial systems. Each corps has an E-MIB to enhance the Army's corps and division intelligence collection capabilities and ability to detect, locate, identify, and track targets across multiple domains. The E-MIB's intelligence and electronic warfare (IEW) BN (corps) and IEW BN (division) in coordination with the G-2 section provide support to the targeting effort.

4-22. The IEW BN (corps) conducts multi-discipline intelligence analysis and PED in support of the corps G-2; intelligence analysis and targeting support, PED, and collection in support of corps multidomain effects; and provides general support counterintelligence and HUMINT to the corps. It provides sensing and target development capability to support the corps' operations and comprises the BN headquarters and headquarters detachment, Analysis and PED detachment, multidomain military intelligence detachment, Counterintelligence (CI) & HUMINT company, and EW (corps) company.

- The CI/HUMINT company conducts CI operations (force protection) and HUMINT and interrogation in support of corps and division operations.
- The analysis and PED detachment conducts multi-discipline intelligence analysis, targeting support, and BDA; processing, exploitation, and dissemination; and open-source intelligence (referred to as OSINT) in support of corps operations.
- The multidomain military intelligence detachment conducts multi-discipline intelligence analysis and targeting support, and BDA; SIGINT collection support to EW and cyber operations; SIGINT technical control; expeditionary PED capability, enabled by organic classified communications, in support of operations.

4-23. The IEW BN (division) conducts multi-discipline intelligence analysis and PED in support of the division G2; intelligence analysis and targeting support, PED, and collection in support of division effects. The IEW BN (division) does not have a CI and HUMINT company; instead, it has an interrogation section with a limited interrogation capability to enable the division commander to exploit other targets of interest. The IEW BN (division) comprises the BN headquarters and headquarters detachment, an analysis and PED detachment, a multidomain military intelligence detachment, and an EW (division) company.

- The analysis and PED detachment conducts multi-discipline intelligence analysis, targeting support, and BDA; PED; and open-source intelligence in support of division operations.
- The multidomain military intelligence detachment conducts multi-discipline intelligence analysis and targeting support, and BDA; SIGINT collection support to electromagnetic warfare and cyber operations; SIGINT technical control; expeditionary PED capability, enabled by organic classified communications, and limited interrogation capability in support of division operations.

Chapter 5
Theater Targeting

Targeting in support of a theater is primarily conducted at the operational to strategic level of war. It involves commanders and staffs using the Joint Targeting Cycle in support of operations. A corps and division commander might also command a JFLCC or a JTF, requiring them to perform Joint tasks and integrate targeting efforts at a theater level.

SECTION I – OVERVIEW

5-1. Through targeting, the commander prioritizes resources, solves emerging problem sets, synchronizes the staff and subordinate unit operations, and manages the overall tempo of operations. Detailed planning and integration across all warfighting functions allows the application of joint FS and effects in the deep area, which facilitates surprise, concentration, and audacity. Effective integration, synchronization, and employment of joint FS and joint targeting is essential to creating conditions that provide the supported commander freedom of action. Since many joint capabilities are not organic to Army forces, commanders and staffs plan, coordinate, and integrate joint and unified action partner capabilities in a multidomain approach to operations.

5-2. The LCC may request joint fires from the JFC through the joint targeting cycle. In certain situations, the JFC may task the LCC to provide surface-to-surface fires in support of a JFC target. At the LCC level, outputs from the Joint targeting cycle are translated into actions conducted by tactical units. LCCs also contribute to the joint targeting cycle by nominating their own targets specific to their own environment and mission within the JFC's intent. Such targets could be outside their own AO.

5-3. LCCs contribute to the joint targeting cycle by assisting the JFC in formulating guidance, integrating land component fires with other joint fires to support JFC operations, conducting target development, synchronizing, and coordinating the use of collection assets, engaging targets, and providing feedback as part of the assessment process. These functions remain constant regardless of how the joint force is organized (functional or Service components).

5-4. Targeting in support of the theater presents the most complex challenges regarding integration and synchronization of organizations, elements, and capabilities to create the desired effects within a joint environment. Organizations and elements such as the BCD, theater fires command or theater fires element (referred to as TFC/TFE), multidomain task force (MDTF), and MIB-T are key components at these echelons.

5-5. At the theater level, targeting tasks demand greater outputs than lower echelons. At this echelon a target production cell (referred to as a TPC) may be established to consistently address theater targeting requirements. This cell places priority and dedicated effort to the discovery, development, nomination, and management of targets in support of combatant commands. This allows these organizations to maintain qualification, certification, and currency. Corps or divisions may develop a target production cell at their echelon as mission dictates. The makeup of a target production cell is tailorable to the demand but is comprised of a collection of fires, intelligence, and information capabilities. A target production cell is separate and distinct from a target material production (referred to as TMP) workcenter that is required to produce target materials. See CJCSI 3505.01E for more information on target material production workcenters.

SECTION II - OPERATIONAL FRAMEWORK

5-6. The operational framework at theater level encompasses the entirety of the AO. Understanding the command and support relationships of all subordinate units is critical to understanding the size, scope, and scale of the theater AO.

5-7. Theater operations must integrate and synchronize all available capabilities as well as holistically understand the depth and breadth of threat capabilities. Figure 5-1 on page 5-3 illustrates the AO to demonstrate targeting responsibilities at the theater.

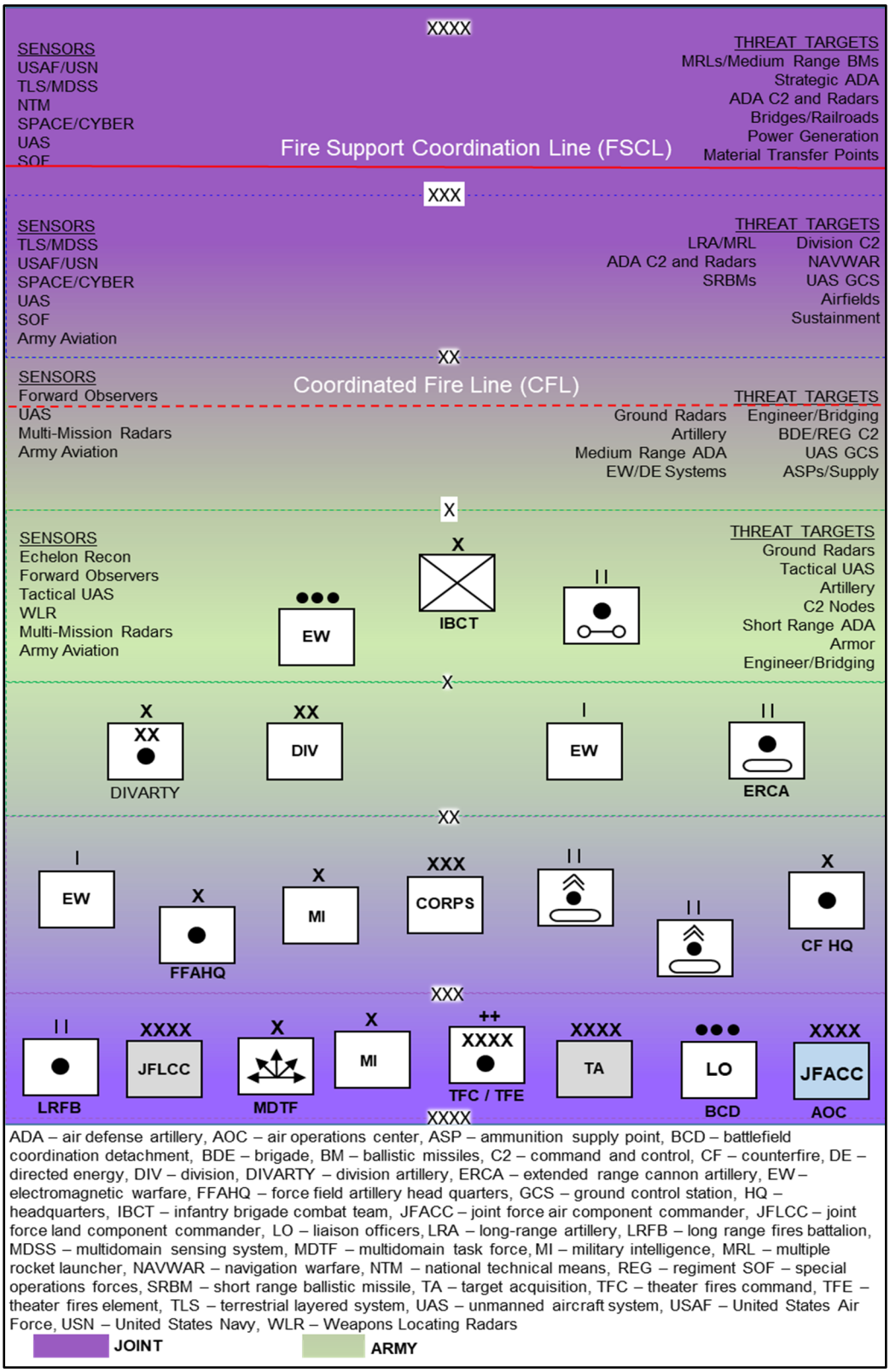

Figure 5-1. Delineation of area of operation

SECTION III - FUNCTIONS

5-8. Targeting functions at the theater expand when compared to lower echelons. The targeting team must consider joint requirements as well as planning horizons and associated timelines for all other theater level planning cycles. Theater targeting teams must be adequately manned, trained, and equipped to perform all joint targeting tasks. The below lists highlights functions required at the theater:

- Develop measures and indicators.
- Develop and synchronize the information collection plan with targeting efforts.
- Nominate targets to higher HQ.
- Attend higher HQs battle rhythm events.
- Synchronize desired effects with scheme of maneuver.
- Integrate and synchronize all elements of the targeting team (joint targeting working group/joint targeting coordination board/and other bureaus, boards, centers, cells, and working groups).
- Synchronize joint interagency multinational assets and organizations.
- TST nomination, management, and execution.
- Conduct joint target development (See current version of CJCSI 3370.01D).
- Conduct target list management.
- Conduct operational and combat assessment.

SECTION IV - PLANNING

5-9. The targeting process occurs in the context of joint operation planning, both before and during execution. This contributes to creating the commander JTF's desired effects and achieving objectives. During execution, commanders and planners continue to consider the tenets of multidomain operations (agility convergence, endurance, and depth) and adjust both current operations and future plans to capitalize on tactical and operational successes as the joint operation unfolds.

5-10. Planning for joint operations is continuous across the range of military operations using the closely related, integrated, collaborative, and adaptive JPP. The JPP shares the same basic approach and problem-solving elements as the MDMP, such as mission analysis and COA development. The JPP promotes coherent planning across all levels of war and command echelons, whether the requirement is for a limited, single-phase operation such as noncombatant evacuation or for a multiphase campaign involving high-intensity combat operations.

5-11. JPP is a less formal but proven analytical process, described in detail in JP 5-0, which provides a methodical approach to planning at any organizational level and at any point before and during joint operations. The focus of JPP is on the interaction between an organization's commander, staff, the commanders, and staffs of the next higher and lower commands and supporting commanders and their staffs. Although the ultimate product is an OPLAN or OPORD for a specific mission, the process is continuous throughout an operation. Even during execution, it produces plans and orders for future operations as well as fragmentary orders (referred to as FRAGORDs) that drive immediate adjustments to the current operation.

5-12. Joint targeting is integral to joint operation planning and assessment. Some targeting activities occur concurrently with the steps of JPP during planning. It begins with the planning initiation and mission analysis steps of JPP and continues through publication of the OPLAN, OPORD, or FRAGORD. Detailed joint intelligence preparation of the operational environment, country assessments, and TSA set the stage for detailed targeting within the joint targeting cycle. Many products used to support joint operations are developed, maintained, and continuously updated as foundational information for targeting by combatant commands and combat support agencies.

5-13. Integrating and synchronizing planning, execution, and assessment is pivotal to the success of targeting. Understanding the objectives, intentions, capabilities, and limitations of all actors within the OE enables the use of joint, interagency, and multinational means to accomplish tasks and create effects. Planning enables the targeting team to focus on creating the desired target effects that accomplish targeting-related tasks and objectives in support of the JFC's overall objectives and endstate, rather than simply servicing a list

of targets or basing targeting decisions on the availability of particular weapons, platforms, or system. Theater organizations may federate targeting tasks and elements of planning to subordinate or supporting organizations.

SECTION V - SYNCHRONIZATION

5-14. The battle rhythm events at the theater army (primary synchronization mechanism) become progressively complex due to the increase in organizations, agencies, and enablers contributing to the targeting effort. The additional roles performed at these echelons place a greater demand on synchronizing internal and external elements in support of operations. In addition to a greater number of contributors, coordinating the parallel and supporting bureaus, boards, cells, centers and working groups (referred to as B2C2WGs) within the staff must be emphasized to ensure integration and maximize the joint targeting working group and joint targeting coordination board.

BATTLE RHYTHM EVENTS

5-15. The joint force battle rhythm and the JFC's decision cycle are two factors that affect planning at this echelon. The targeting team must be keenly aware of supporting component processes (such as the air tasking cycle and cyber tasking cycle) to ensure the joint force battle rhythm and decision cycles are nested within the joint targeting cycle.

JOINT TARGETING WORKING GROUP

5-16. The targeting working group membership should include SMEs in all capabilities. The integration of capabilities to create lethal and nonlethal effects should be a function of all phases of joint operations. The joint targeting working group should be flexible enough to consider all capabilities for appropriate targeting. Members may include but are not limited to the following:

- BCD.
- Air operations center.
- Higher HQ.
- Components (JFLCC, joint force air component commander, joint force maritime component commander).
- Theater fires command or element.
- Target production centers.
- Multinational and unified action partners (as applicable).
- Special Operations Joint Task Force.
- Any relevant Intelligence Community members Defense Intelligence Agency, National Security Agency, Federal Bureau of Investigation, Department of State).
- United States Space Command (referred to as USSPACECOM) or designated representative.
- United States Cyber Command (referred to as USCYBERCOM) or designated representative.
- Theater Combat Aviation Brigade.
- MIB-T.
- Army Air and Missile Defense Command (referred to as AAMDC).
- MDTF.

JOINT TARGETING COORDINATION BOARD

5-17. The joint targeting coordination board provides a forum in which components, organizations, agencies, and staff sections can articulate strategies and priorities for future operations to ensure they are synchronized and integrated. The joint targeting coordination board normally facilitates and coordinates targeting activities with the schemes of maneuver to ensure that the commander's priorities are met. Specific targeting issues are resolved by direct coordination between elements below the level of the joint targeting coordination board. The joint targeting coordination board is the primary forum to enable the commander to make targeting decisions, validate targets, and provide guidance. Attendees of the board are often mission dependent. The

number can fluctuate depending on echelon, physical location, and agenda. Members may include but are not limited to the following:

- BCD.
- Air operations center.
- Higher HQ.
- Components (JFLCC, joint force air component commander, joint force maritime component commander).
- Special Operations JTF.
- Any relevant Intelligence Community members (Defense Intelligence Agency, National Security Agency, Federal Bureau of Investigation, Department of State).
- United States Space Command (referred to as USSPACECOM) or designated representative.
- United States Cyber Command (referred to as USCYBERCOM) or designated representative.
- Theater Combat Aviation Brigade.
- MIB-T.
- Army Air and Missile Defense Command (referred to as AAMDC).
- Coalition mission partners.
- Additional staff personnel may be present and provide relevant information and recommendations to the commander, chief of staff, G-3, or FSCOORD as necessary.

5-18. See appendix E for example joint targeting working group and joint targeting coordination board formats.

FIRES CELL OR JOINT FIRES ELEMENT

5-19. The primary action agency for targeting at the theater is the fires cell. The fires cell leads targeting activities in conjunction with the intelligence targeting officer which include target development, capabilities analysis, coordinating, integrating, and synchronizing lethal and nonlethal capabilities. The fires cell serves as the staff conduit between planning and execution.

THEATER FIRES COMMAND OR THEATER FIRES ELEMENT

5-20. An Army theater fires command, or a theater fires element provides C2 of assigned strategic fires capabilities, serves as the senior HQ assigned to an Army Service component command/theater Army to integrate theater fires assets, and executes critical FS functions across the competition continuum. The organizational difference is minimal. The two different organizational structures represent requirements in different regions and may continue to evolve.

5-21. The theater fires command and theater fires element are designed to develop, nominate, and converge effects on joint targets across the theater. This support to joint targeting will enable continuous efforts to set the theater for the joint force land component command, field army, and corps operations during competition below armed conflict and crisis. The theater fires command ensures the Army's contribution to the joint targeting process is effectively planned and executed during shape and prevent and can seamlessly transition to large-scale ground combat operations in accordance with the ground force commander's priorities.

MULTIDOMAIN TASK FORCE

5-22. The MDTF is forward postured to synchronize and employ multidomain capabilities (lethal and nonlethal) to achieve the supported commander's strategic objectives by conducting operational preparation of the environment (referred to as OPE) and joint intelligence preparation of the operational environment during competition and by conducting integrated strikes across domains to shape, penetrate, and dis-integrate enemy anti-access and area denial defenses in order to enable joint force freedom of action during conflict.

5-23. The MDTF leverages theater fires command/theater fires element, combatant command, and other intelligence community members for guidance, authorities, and target development (to include TSA, entity target development, and target list management) based off organizational role, and provides liaison officers to supported commands to synchronize employment and targeting.

BATTLEFIELD COORDINATION DETACHMENT

5-24. A BCD is a specialized, regionally focused Army element that serves as the senior liaison between the ARFOR commander and the air component commander. A BCD is co-located with the joint air operations center, combined air operations center, or the Air Force air operations center.

5-25. The BCD is the Army's interface for systems connectivity to the joint air operations center and for personnel integration with their joint air operations center counterparts. Its tasks include facilitating the exchange of current intelligence and operational data, processing air support requests, monitoring and interpreting the land battle situation, coordinating airlift, and integrating airspace requirements. A BCD must possess adequate knowledge of LCC target nominations to advocate for integration into theater targeting efforts and battle rhythm events. These events may be hosted by designated component command.

ARMY AIR AND MISSILE DEFENSE COMMAND

5-26. The Army air and missile defense command is a HQ element responsible for the command of all subordinate Army air and missile defense units as well as the army air and missile defense coordinator for the land component. When required by the geographic combatant command, the Army air and missile defense command will be attached to the theater army, if not already assigned. Air and missile defense units in an area of responsibility are assigned or attached to the Army Air and Missile Defense Command (referred to as AAMDC) typically do not run their own targeting cycle or process. They are a critical member of theater targeting efforts and battle rhythm events.

INTELLIGENCE SUPPORT AT THEATER ARMY

5-27. Theater army intelligence capabilities provide support to the target development of threat systems. A MIB-T, as the theater Army's permanently assigned ground intelligence organization, can deploy scalable and tailorable intelligence capabilities to meet combatant command, Army Service component command, and JTF intelligence requirements. The operations BN within a MIB-T serves as the theater Army G-2's ACE and performs highly complex queries using advanced analytical tools to determine precisely when, where, and how targets of interest operate. The operations BN's S-2/S-3 section prioritizes intelligence assets to meet intelligence support targeting requirements. The following intelligence elements within the MIB-T operations BN support the targeting effort:

- Analytical company- focuses primarily on conducting ongoing combatant command daily operational requirement-related analytical activities. The company's SIGINT, geospatial intelligence, and CI/HUMINT sections support units in nominating targets to be destroyed, deceived, degraded, or neutralized as well as targets to disrupt, deny, degrade, or destroy information in computers, computer networks, or the computers and networks themselves.
- All-source company- focuses primarily on managing the 24/7 watch operations necessary to prioritize the efforts of the analytical company. The company's open-source intelligence section produces target development and BDA products. The watch section supports units in nominating targets to be destroyed, deceived, degraded, or neutralized as well as targets to disrupt, deny, degrade, or destroy information in computers, computer networks, or the computers and networks themselves.

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Appendix A

Targeting Checklist

Targeting is a very complex and challenging process. There are many considerations and variables that impact the ability of the targeting team to plan and execute with efficiency. The below checklist, like many of the appendices, is intended to be printable and used throughout planning and execution to minimize mistakes and missed opportunities.

SECTION I – DECIDE

A-1. _____The commander's planning guidance and intent contain enough detail to enable the targeting working group to determine:

- HVTs to nominate as HPTs.
- Desired effects on each HPT.
- When to attack each HPT.
- How to attack each HPT.
- Any restrictions or constraints.
- Which HPT requires BDA.

A-2. _____What targeting assets (organic, attached, and supporting) are available to detect and attack HPTs?

A-3. _____What detect, deliver, and assess support is needed from higher HQ?

A-4. _____When must requests to higher HQ be submitted to obtain the support required?

A-5. _____Have target tracking responsibilities been established?

A-6. _____Are systems in place to pass the detected targets to assets that are capable of tracking them?

A-7. _____What detect, deliver, and assess support is required from subordinate units, and when is it required?

A-8. _____What detect, deliver, and assess support requests have been received from subordinate units, and what has been done with them?

A-9. _____Has the TSM been synchronized with the decision support template and the maneuver and FS plans?

A-10. _____Are all commands using a common datum for locations? If not, are procedures in place to correct differences in datum?

A-11. _____Are all commands on a common time zone standard?

SECTION II – DETECT

A-12. _____Does the collection plan focus on PIRs and finding the necessary HPTs?

A-13. _____What accuracy, timeliness, and validity standards TSS are in effect for detection and delivery systems?

A-14. _____Are all target acquisition assets fully employed?

A-15. _____Have alternate target acquisition systems been identified for HPTs?

A-16. _____Have responsibilities been assigned to the appropriate unit agency for detection of each HPT?

A-17. _____Are HPTs being tracked?

A-18. _____Have verification procedures using alternate systems been established where necessary?

A-19. _____Are target acquisition and BDA requirements distributed properly among systems that can accomplish both?

SECTION III – DELIVER

A-20. _____Have responsibilities been assigned to the appropriate unit or agency for engagement of each HPT?

A-21. _____Has an alternate engagement asset been identified for each HPT? (The primary system may not be available at the time the HPT is verified.)

A-22. _____Have applicable FS coordination measures, airspace coordinating measures and clearance procedures, and the AGM been established to facilitate target engagement?

A-23. _____Have on-order FS coordination measures, airspace coordinating measures and AGM been established to facilitate future and transition operations?

A-24. _____Have potential fratricide situations been identified, and have procedures been established to positively control each situation?

A-25. _____Have responsibilities been assigned to the appropriate unit or agency for tracking specified HPT and providing BDA on specified HPTs?

A-26. _____What are the procedures to update the HPTL and synchronize the AGM and decision support template if it becomes necessary to change the scheme of maneuver and FS as the situation changes?

SECTION IV – ASSESS

A-27. _____Are the collection assets, linked to specific HPTs, still available?

A-28. _____Has the collection manager been notified of the engagement of a target requiring assessment?

A-29. _____Have the assessment asset managers been updated as to the actual target location?

A-30. _____Has all coordination been accomplished for the assessment mission, particularly airborne assets?

A-31. _____What is the status of BDA collection?

A-32. _____Has the information from the mission been delivered to the appropriate agency for evaluation?

A-33. _____Has the targeting working group reviewed the BDA to determine if requests for restrike are required?

A-34. _____Has the target intelligence gathered from the assessment been incorporated into the overall threat situational development?

Appendix B

Intelligence Support to Targeting

Intelligence support to targeting is a specialized and synchronized effort as it overlaps with operations functions and all components of the intelligence warfighting function. Specifically, intelligence support to targeting touches several all-source intelligence analysis tasks, all aspects of collection management, and every intelligence discipline and complementary intelligence capability. This support occurs across the echelons as an intelligence push from the theater army, which has regional expertise and extensive capabilities, down to each successive echelon. Therefore, understanding intelligence support to targeting must begin with understanding intelligence.

INTELLIGENCE SUPPORT TO TARGETING OVERVIEW

B-1. Commanders and staffs need timely, accurate, relevant, and predictive intelligence to support the targeting effort, which includes the selection, prioritization, execution, and assessment of targets. Therefore, the intelligence support to targeting effort must be resourced, carefully planned, and supported by a large portion of the intelligence architecture. The intelligence architecture is the compilation and interrelationship of all relevant intelligence and communications capabilities, data centers, organizations, supporting capabilities, concepts of operations, and personnel necessary to ensure the successful execution of the intelligence process. (See ADP 2-0.)

B-2. Intelligence support to targeting is specialized as it occurs across a significant portion of the intelligence warfighting function. While all intelligence disciplines and complementary intelligence capabilities support targeting, the effort is ultimately focused by the close collaboration between the all-source intelligence analysis element (whether dedicated to targeting or ad hoc), the collection management element, and various targeting and fires elements, including the target development working group if applicable.

B-3. Intelligence support to targeting is one of the four primary intelligence tasks and provides the commander information and intelligence support needed to both lethal and nonlethal targeting. It includes support to the planning (target development), identification (target detection), and assessing the effect of those operations (combat assessment). The intelligence warfighting function provides support during all functions of D3A.

DECIDE

B-4. During MDMP, targeting becomes more focused based on the commander's guidance and intent. Once objectives are determined by the commander, the intelligence staff must continuously review them with respect to the threat and the changing situation to ensure they remain relevant to the commander's intent. Intelligence provides the commander with an understanding of the threat in terms of probable intent, objectives, strengths, weaknesses, probable COA, most dangerous COA, values, and critical vulnerabilities. Additionally, intelligence analysts recommend objectives based on enemy capabilities, vulnerabilities, centers of gravity, and likely COAs. The decide function of the targeting methodology provides the overall focus and sets priorities for information collection and attack planning. It is the most important targeting function and requires close interaction between the intelligence, plans, operations, and FSE/fires cells, and the servicing judge advocate. This step draws heavily on the staff's knowledge of the threat, a detailed IPB (which occurs simultaneously), and a continuous assessment of the situation. Targeting priorities are addressed for each phase or critical event of an operation.

B-5. During the targeting meeting, the collection management team advises the targeting working group on the ability of available collection systems to acquire and identify HPTs, track HPTs, and support BDA on HPTs. The team assists the group, as needed, in developing an architecture that disseminates target-related intelligence to attack systems in near-real-time. The targeting working group further refines event templates and associated event matrices, developed during IPB, into targeting matrices, which provide the level of detail the collection management team requires to focus information collection to support targeting. The team uses targeting matrices, IPB products, and the TSS to break down HPTs into collection functions, SIRs, NAIs and TAIs, and specific collection tasks. (See ATP 2-01, ATP 2-01.3, and ATP 2-33.4 for detailed information)

DETECT

B-6. The current operations integration cell is the primary cell responsible for directing the execution of the information collection effort to detect HPTs identified in the decide function. The intelligence cell (with the current operations integration cell) must focus their intelligence analysis efforts to support both situation development and the targeting effort. Therefore, close coordination between the intelligence cell and the FSE is critical. Key staff members in this effort include the G-3/S-3, G-2/S-2, information operations officer, FAIO (when staffed), targeting officer, and FSCOORD/FSO.

B-7. The collection manager directs the information collection synchronization effort with focus on PIRs and target intelligence requirements. The collection manager ensures the information collection plan supports the finalized targeting plan. The collection management team, in coordination with the targeting team (or intelligence targeting officer), develops collection strategies to satisfy PIRs and targeting intelligence requirements. The collection management team may have to differentiate collection tasks to support the acquire and identify collection function or the track collection function when a collection asset cannot perform both collection functions. This is a major challenge during large-scale ground combat operations at which time the concept of persistent surveillance is often not possible. National technical means may have to serve as an intermittent form of surveillance in conjunction with Army collection assets to acquire, identify, and track HPTs. Some collection assets provide actual targetable information while information from other collection assets requires PED to produce valid targets. The target priorities developed in the decide function are used to expedite the processing of targets. The collection management team:

- Plans for synchronized collection, focusing on the proper HPT at each phase in the COA.
- Plans collection to satisfy that set of SIRs if BDA is required to support the COA.
- Plans and arranges, when possible, direct dissemination of targeting intelligence from the collector to the targeting cell or the appropriate fires element.

B-8. During operations, the collection management team monitors the execution of the collection management plan; uses the information collection matrix to ensure collection assets are focused on the proper HPTs (and their associated NAIs and TAIs); tips off the appropriate fires element as targets of opportunity present themselves, and cross-cues collection assets to support the targeting effort. When detecting a planned HPT, the information is quickly disseminated to the FAIO to determine if the target is an HPT, the target's priority, and if the target complies with TSS. To ensure the target-related intelligence is disseminated quickly, the FAIO should be co-located in the intelligence cell with communications to the FSE/fires cell. If the target is an HPT, the FAIO coordinates with the intelligence cell and disseminates the target-related intelligence directly to the FSE/fires cell. If the commander approves actioning the target, it is transferred to a firing unit. In those cases where the situation dictates the development of a new HPT or when the staff assesses a significant change to an existing HPT, subsequent target development must occur. When subsequent target development is necessary, the targeting information is forwarded for intelligence analysis and the target development process must occur quickly. Upon identifying a target specified for attack, analysts pass the target to the FSE/fires cell. The FSE/fires cell executes the attack against the target. (See ATP 2-01, ATP 2-01.3, and ATP 2-33.4 for detailed information)

DELIVER

B-9. During the deliver function, the intelligence staff examines potential target systems and their components to make a recommendation for generating the commander's intended effect on the target, though the final decision is made by the FSO in collaboration with the operations officer. The intelligence input is

based primarily on the AGM - determining the most effective friendly means available to produce the commander's desired effect on the target. During the deliver function, the collection management team cues collectors to continue tracking targets during their engagement. Preplanned or cued BDA collection and reporting assists in determining if the engagement produced the desired effects; if not, continued tracking supports immediate reengagement. (See ATP 2-01, ATP 2-01.3, and ATP 2-33.4 for detailed information)

ASSESS

B-10. Intelligence supports the assessment function by determining if targeting actions have met the desired effects and if reattack is necessary to perform essential fires tasks and achieve the commander's intent for fires. Intelligence support to combat assessment relates to specific targets by completing physical damage assessments and functional damage assessments. During the assess function, the collection management team continuously assesses the information collection effort and compares ongoing actions to the collection management plan and the original intent. As operations progress and the situation deviates from the plan, it is important to ensure information collection is supporting all requirements. If the staff's assessment reveals that some requirements are not answered, the collection management team must reevaluate the collection management plan. Then the team and staff must provide input on adjustments to the collection effort, retaskings, or the development of new tasks. The collection management team and current operations track the situation relative to those requirements to determine the completion of collection tasks; the effectiveness of targeting and resulting effects on the target; continued synchronization with other operations or emerging collection opportunities; and most critically, the requirements for target reengagement, if required.

B-11. The assess function of the targeting methodology is nested in the overall continuous assessment of operations within the operations and intelligence processes. Assessments are directly tied to the commander's decisions throughout the planning, preparation, and execution of operations. Planning for assessment identifies key aspects of the operation that the commander directs be closely monitored, and where the commander wants to make the decisions. Intelligence plays a major role in assessments as a part of the targeting methodology. The assess function of the targeting methodology is performed through combat assessment. *Combat assessment* is the determination of the effectiveness of force employment during military operations (JP 3-60). Combat assessment comprises three elements:

- BDA.
- Munitions effectiveness assessment.
- Reengagement recommendation.

B-12. BDA is the estimate of damage composed of physical and functional damage assessment, as well as target system assessment, resulting from the application of lethal or nonlethal military force (JP 3-0). The staff determines how combat assessment relates to specific targets by completing BDA. Producing BDA is primarily an intelligence cell responsibility but requires coordination across the staff, similarly to IPB and most steps of intelligence support to targeting. BDA requirements should be captured as PIRs or as similar high-priority information collection requirements. Together, BDA and munitions effectiveness assessment provide the commander and staff with an assessment of the effects achieved against targets and whether the targeting guidance was met. Based on this information, the staff can recommend reengagement when necessary.

B-13. Characteristics that best describe the intelligence support to targeting effort include deliberate planning, collaboration across national to tactical intelligence echelons, and precise intelligence to target threat capabilities at the right time and place and to open windows of opportunity to achieve positions of relative advantage. This effort is challenging because the threat, especially peer threats, makes precisely analyzing threat target systems, predicting threat COAs, accounting for terrain and weather effects, providing intelligence specific to a location and time, and accurately assessing the employment of capabilities extremely difficult. Intelligence support to targeting includes tracking highly mobile targets and simultaneously engaging targets, including targets in complex terrain (such as subterranean and urban areas, and jungle and mountainous terrain) across multiple domains, the electromagnetic spectrum, and the information environment. Intelligence support to targeting primarily consists of:

- IPB.
- Collection management.

- Intelligence support to target development.
- Intelligence support to target detection.
- Intelligence support to combat assessment.

INTELLIGENCE PREPARATION OF THE BATTLEFIELD

B-14. Conducting IPB allows commanders and staffs to take a holistic approach to analyzing the OE. The IPB process comprises four steps: define the OE, describe environmental effects on operations, evaluate the threat, and determine threat COAs. It is a collaborative staff effort led by the G-2/S-2 and the intelligence staff. IPB products developed during MDMP, specifically during mission analysis, and continuously updated facilitate situational understanding and assist commanders and staffs in identifying relevant aspects within the AO that can affect mission accomplishment.

B-15. IPB is critical to targeting threat capabilities at the right time and place to open windows of opportunity across domains. Close interaction between the commander, G-2/S-2, G-3/S-3, and the rest of the staff is essential, as the entire staff supports unit planning and preparation through the integrating processes. During step 2 of MDMP (Mission analysis), the intelligence staff when conducting IPB, works closely with targeting team members to provide and integrate a holistic IPB. This integration enables the planning process to reduce uncertainty in the conduct of IPB across the physical, virtual, cognitive and temporal framework of the OE. The holistic approach:

- Describes the totality of relevant aspects of the OE that may impact friendly, threat, and neutral forces.
- Accounts for all relevant domains that may impact friendly and enable threat operations.
- Allows commanders to leverage positions of relative advantage at a time and place most advantageous for mission success with the most accurate information available.

B-16. IPB results in intelligence products that are used during MDMP in developing friendly COA and decision points (referred to as DPs) for the commander. Targeting personnel contribute to and leverage IPB to understand the effects of the operational variables of political, military, economic, social, information, and infrastructure (referred to as PMESII-PT) and civil considerations, the AO, mission variables of mission, enemy, terrain and weather, troops and support available-time available, civil considerations, and information considerations (referred to as (METT-TC[I]), on friendly and enemy operations, and to identify and develop high-value targets (HVTs), assist with developing HPTs, as well as provide nominations and recommendations to the NSL, RTL, and TST nominations. Figure B-1 on page B-5 contains a list of outputs (intelligence products) used during MDMP. Several of these products are crucial to planning information collection and targeting. They include:

- Threat situation templates with associated COA statements and high-value target list.
- Event templates and associated event matrices.
- Modified combined obstacle overlay (referred to as the MCOO), terrain effects matrices, and terrain assessments.
- Weather effects, light and illumination tables, and weather assessments.
- Civil considerations overlays and assessments.
- Initial collection plan with all available assets.
- Initial PIR recommendations.

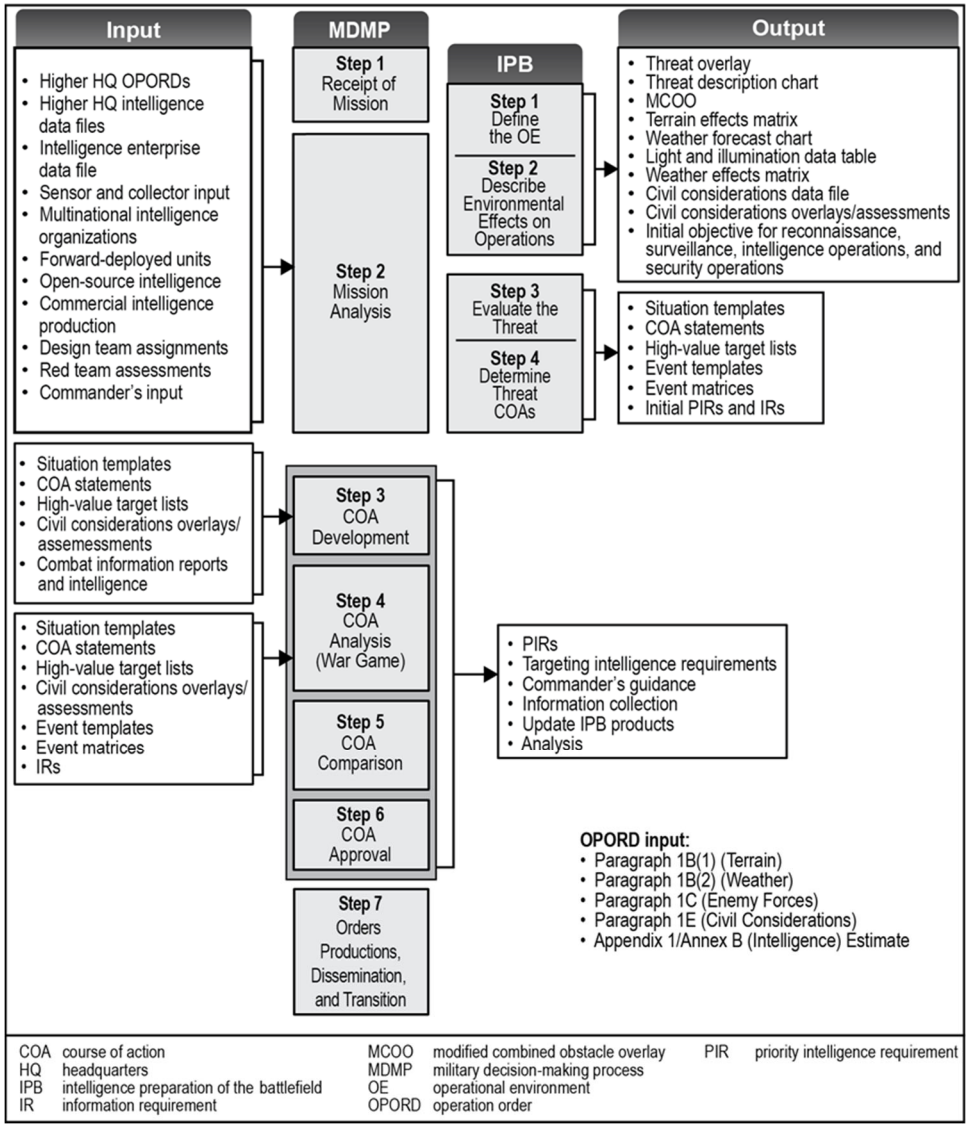

Figure B-1. Intelligence preparation of the battlefield outputs during the military decision-making process

B-17. During step one of IPB the targeting team leverage the limits of the AO to identify significant characteristics that could affect operations. These characteristics may include-

- Critical structures or facilities that support transportation, communications, and information systems that can be sensitive or need to have restricted actions placed on them.
- Cultural or social factors that are sensitive.
- Facilities, structures, or industries that can be considered sensitive, or if affected can produce an occupational and environmental health threats.
- Foreign embassies, international government organizations, and non-government organizations.

B-18. During step two of IPB, the targeting team seeks to understand the impact of the environmental effects on operations and the operational and mission variables. These might include, but not limited to the following:

- The impact and continuing assessment of the modified combined obstacle overlay (MCOO).
- The effects of weather and terrain.
- Civil capabilities and vulnerabilities that can be leveraged to affect operations.

B-19. During steps three and four of IPB, the intelligence staff uses all relevant intelligence products, threat templates, models, characteristics, and matrices to evaluate the threat. This is done to understand how they can affect friendly operations and to determine possible courses of actions that can enable friendly forces' mission accomplishment. Each warfighting function and staff section contribution to steps three and four of IPB is crucial in understanding the various functions and the critical capabilities the enemy requires and depends on to accomplish missions.

B-20. During the IPB process, the targeting team should have a clear understanding of civil capabilities that can affect friendly and enemy operations. The team identifies threat forces critical capabilities, requirements, dependencies, and vulnerabilities. This will lead to the identification of HVTs and potential HPTs for COA development and war gaming.

COLLECTION MANAGEMENT

B-21. Successfully collecting timely, relevant, and useful information requires the staff to plan for and use well-developed procedures and flexible planning to facilitate situational understanding, track emerging targets, adapt to changing operational requirements, and meet the requirement for combat assessment. The collection management team participates in various meetings, such as intelligence synchronization meetings, operational update briefs, and targeting working groups. Routine exposure to these meetings assists collection management teams in understanding important aspects of and considerations for operations and fires.

B-22. Both collection management and intelligence analysis are driven by PIRs, targeting intelligence requirements, and other intelligence requirements to develop information collection recommendations. These recommendations assist in the tasking or requesting of collection assets to collect information, which results in timely, accurate, relevant, and predictive intelligence that answers the commander's requirements.

B-23. The collection management team, commander, requesters, and the rest of the staff collaborate to define what requirements to collect against and when to collect. The collection management team must:

- Be heavily involved in all aspects of the targeting process.
- Rely on the knowledge generated from mission analysis and the IPB process to ensure the collection management plan is structured to meet target intelligence requirements.
- Use knowledgebase about the enemy and other relevant aspects of the OE to develop requirements that are strongly connected to decision points and targeting intelligence requirements that will affect operations.

B-24. The collection management team, operations staff, and collection assets (or assets' C2 element) collaborate to specify what assets should collect against target intelligence requirements and define when, where, and how to employ those assets and PED capabilities.

B-25. The collection management plan is an output of the completion of MDMP. This plan guides the information collection efforts and drives analysis in support of targeting and providing combat assessments. The collection management plan includes the following:

- Evaluating collection assets, including their availability, capability, sustainability, and vulnerability.
- Collection Strategy.
- Collection management tools (information collection matrix, information collection synchronization matrix, information collection overlay).
- Annex L (Information Collection).

INTELLIGENCE SUPPORT TO TARGET DEVELOPMENT

B-26. Intelligence support to target development involves a flexible but detailed process, displayed in figure B-2. The tasks of the intelligence support to target development process are:

- Analyze target systems.
- Conduct TVA.
- Develop initial and continually update target intelligence folders.
- Identify specific HVTs.
- Refine/adjust HVTs, when necessary.
- Support the selection of HPTs and other products.
- Support subsequent target development.

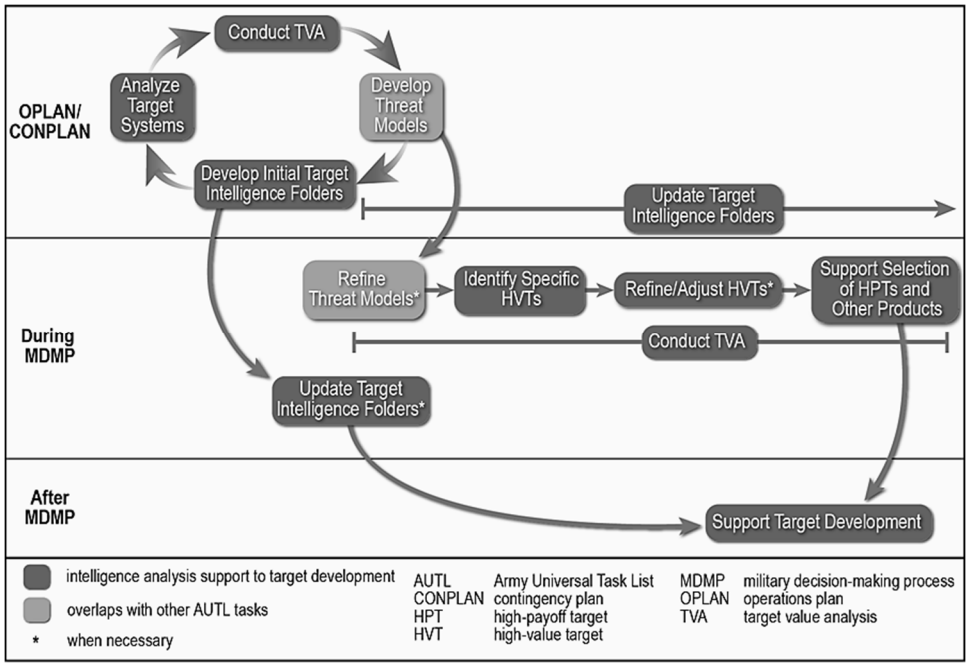

Figure B-2. Intelligence support to the target development process

ANALYZE TARGET SYSTEMS

B-27. Friendly forces cannot target threat forces and capabilities without understanding threat target systems, from the most general level to very detailed target elements (a macro to micro approach). This effort results in intelligence that is pushed from the joint force and theater army down to the BN level. Analyzing target systems overlaps with developing threat models during generate intelligence knowledge and should be conducted as early as possible before actual operations-preferably well before MDMP. Analyzing target systems is a priority primarily for theater organizations during the shape and prevent Army strategic roles. However, the task may be conducted at any time if the staff does not have general HVTs, or if it lacks an understanding of the components of a threat function and how that threat performs that function. Often, there are major differences in how and when this task will be conducted to support stability operations versus offensive and defensive operations. It is more likely analysis of target systems will be conducted at the lower tactical levels, as well as during MDMP, when necessary, to support stability operations.

B-28. When possible, the targeting working group participates in the Army analysis of threat systems effort led by the intelligence targeting element. Analysis of target systems focuses on breaking down target systems into successive elements at a greater level of detail to eventually identify HVTs and HVT elements. The resulting products and the development of threat models support subsequent and more detailed target development. The first step is evaluating which target systems are relevant to future or current operations.

Typically, a target system comprises a broad set of interrelated and functionally associated components that generally produce a common output or have a shared mission (such as the air defense structure within a specific threat unit). From the target system, analysts carefully determine all associated target system components, general HVTs, and HVT elements. With each level, there is a growing number of entities.

B-29. Analysis of threat systems is related to/supported by functional analysis using critical factors analysis (CFA), an advanced structured analytic technique detailed in ATP 2-33.4. CFA is an overarching analytic framework that assists analysts in identifying threat critical capabilities, threat critical requirements, and threat critical vulnerabilities, which they may integrate into other structured analytical techniques. Functional analysis supports analysis of threat systems in effectively identifying windows of opportunity and threat vulnerabilities. At EAC, the CFA assists in identifying threat centers of gravity.

B-30. As the number of entities grows with each level, all relationships of those entities are mapped. These relationships can occur from a physical, logical, or complex social system or from another perspective. While a target system component or HVT may be significant because of its characteristics, the component's or target's real importance is in its relationship to other components or targets within a target system. Components and HVTs are both intra-dependent to perform specific functions and interdependent to support threat capabilities (for example, the capabilities of a certain theater army-level integrated air defense target system may depend on logistics, C2, radar coverage, automation, and many other components). Analysts must link all the components down to HVTs and HVT elements, when necessary, to properly template all elements of the target system.

B-31. Considerations for conducting analysis of target systems include but are not limited to:

- Open-source research.
- Existing intelligence, databases, and files from generating intelligence knowledge.
- Existing threat center of gravity and other forms of functional analysis.
- Conducting TVA (for example using the CARVER technique) iteratively as part of analysis of the target system.
- Signatures emitted from HVTs and the ability to collect on those HVTs.
- Understanding the five broad methods (systems warfare, isolation, preclusion, information warfare, and sanctuary) employed by peer threats. (See both ADP 3-0 and FM 3-0 for more information on peer threats.)
- Theater army-level guidance on the conduct of analysis of target systems.

CONDUCT TARGET VALUE ANALYSIS

B-32. The intelligence targeting element conducts TVA with the targeting working group, FSE/fires cell, (based on unit SOPs). From the coordination and work performed during the IPB effort, the targeting working group, especially the intelligence staff and targeting officer, perform TVA that yields HVT lists (which may include HVI lists) for a specific threat COA. TVA is a methodology which assists in prioritizing HVTs and identifies potential HVT sets with a given tactical situation. It is a process led by the FSE/fires cell as part of targeting that quantifies the relative value of HVTs with each other in relation to a threat operation. This analysis is based in part on the conclusions reached by the intelligence staff upon evaluating threat characteristics. TVA continues the detailed analysis of relevant threat factors, including doctrine, tactics, equipment, capabilities, and expected actions for a specific threat COA. However, TVA is a valuable tool that can be applied multiple times during intelligence support to target development, as well as:

- During step 3 of IPB (evaluate the threat) to identify general HVTs.
- During step 4 of IPB (determine threat COAs) to identify specific HVTs.
- Following step 4 of IPB and step 3 of MDMP (COA development) to select HPTs.
- At any point to support subsequent target development.

Note. To be effective, this analysis depends on the most current intelligence related to the threat. Initially, based on the threat template, TVA should be refined based on the threat COAs, and refined continually based on changes to the threat overlay during operations. Whenever conducted, the intelligence staff supports TVA with the most up-to-date threat-related intelligence. See JP 3-60, ATP 2-01.3, and ATP 2-33.4 for more details on TVA.

DEVELOP INITIAL AND CONTINUALLY UPDATE TARGET INTELLIGENCE FOLDERS

B-33. EAC organizations are critical to building target folders (also referred to as joint target folders or electronic target folders) during the competition phase and then disseminating those target folders to land forces commanders. Target folders, hardcopy or electronic, contain target intelligence and related materials prepared for planning and executing action against a specific target (JP 3-60). Target folders are built during the competition phase and disseminated to land forces commanders to support MDMP in preparation for large-scale combat operations and targeting. Currently, MIB-Ts and aerial exploitation battalions hold/will hold the Army's organic deep collection assets that are essential to collecting information relevant to targeting. MIB-Ts have the data storage and data transport necessary to connect ground units at echelons corps and below to joint target folders and other theater-level targeting materials. As such, EAC intelligence organizations support targeting through competition to conflict.

B-34. Like joint target folders, Army echelon corps and below intelligence targeting elements develop and refine target intelligence folder. Target intelligence packets support he target folder. Army intelligence targeting elements develop and refine targeting intelligence packets based on their requirements. When not covered by joint target folders, Theater Army G-2 requirements, standards, and unit SOPs drive Army target intelligence packets. As required, target development elements develop target intelligence folders using specific intelligence products and analysis from the corps or division ACE. Target intelligence folders are both offensive and defensive in nature and are subsequently updated throughout operations to further detail information and intelligence over time. Initially, a target intelligence folder includes the same level of detail as the associated threat model. The target intelligence folder contains two subfolders:

- Target intelligence packages (also referred to as intelligence target packet/package). The folder contains individual intelligence target packages used by the targeting working group to plan targeting operations.
- Work folders. The folders contain raw data, working aids, and analyst notes used by individual analysts to form conclusions that the target development element presents to the G-2 ACE chief, G-2, and commander.

B-35. Following the D3A targeting methodology, the target development element develops HVTs, assists in developing HPTs for the AGM, conducts combat assessment, and creates target intelligence packages for target nominations. The target development element collaborates closely with the fusion element, the FAIO, and the information operations staff to ensure its analysis addresses the physical and functional aspects of each target.

B-36. A target intelligence packet contains pertinent target system, complex, or component information collected during target development. Information in the target intelligence packet is used to build target studies once HPTs are approved or validated. Generally, target intelligence packets deal with fixed or semifixed targets. This information may be in the form of databases, selected imagery, or graphics. The FSE/fires cell and intelligence cell develop and maintain target intelligence packets. Once the commander has approved a target, intelligence cell analysts develop target and objective studies to support mission planning. Target intelligence packets are focused, detailed intelligence products that assist in applying fires against a specific target set or area. These studies are graphically oriented and may use many of the graphics derived during the IPB process. Target intelligence packets identify HVTs in relation to operations by providing detailed targeting information. Target intelligence packets are IPB and wargaming products as well as a compilation of products that support the targeting methodology for a specific target. The purpose is to have all necessary products (including relevant IPB, operations, and legal products and information) in a single product.

B-37. These packets are developed and maintained at the Army HVT level (but referenced to the larger threat target system and component) and include a unique target intelligence number that is maintained throughout operations.

B-38. After target intelligence packets are first developed, they are subsequently updated throughout operations to further detail information and intelligence over time. Initially, a target intelligence packet includes the same level of detail as the associated threat model, except for unit and geographic specificity. Over time, the target intelligence packet includes analysis and supporting intelligence and information down to a detailed assessment of target element vulnerabilities and a historical record of HVT collection and analysis.

IDENTIFY SPECIFIC HIGH-VALUE TARGETS

B-39. HVTs are developed during step 3 (Evaluate the threat) and initially refined during step 4 (Determine threat COA) of the IPB process, an integrated process of step 2 (Mission analysis) of MDMP. Outputs from step 3 include the threat template, HVT list, and threat capability statement. Step 4 requires an understanding of the threat characteristics, as well as the effects of terrain, weather, and civil considerations on operations. The most important element in determining threat COAs is understanding threat operational art and tactics. The process for determining the COAs these threat forces may employ consists of the following:

- Identify likely objectives and the desired end state.
- Determine threat battlefield functions.
- Determine threat capabilities available to perform each battlefield function.
- Identify the full set of COAs available to the threat.
- Evaluate and prioritize each threat COA.
- Develop each COA in the amount of detail time allows.
- Identify HVTs for each COA.
- Identify initial collection requirements for each COA.

B-40. Below are several techniques used by the intelligence staff in identifying and evaluating HVTs:

- Identify HVTs from threat models, situation templates with time phase lines, existing intelligence studies, database evaluations, patrol debriefs, and size, activity, location, unit, time, and equipment (also called SALUTE) reports.
- A review of threat tactics, techniques, and procedures.
- Previous threat operations.
- Understanding the threat's objective, tasks, purpose, and intent.
- Identify assets that are key to executing the primary operation, branches, or sequels of threat COAs.
- Determine how the threat might react to the loss of each identified HVT. Consider the threat's ability to substitute other assets and adopt branches or sequels.
- Consider AO and area of interest effects and potentially broader effects.
- Consider how the threat may use multiple capabilities to create the effects of one or more HVTs.
- Consider how the threat may use assets by phases of an operation, which may lead to classifying certain threat assets, functions, or systems as HVTs across all domains, the information environment, and the electromagnetic spectrum.
- Consider the multidomain nature of complex OEs and how threat forces may use assets to disrupt friendly operations at multiple echelons and locations.

- After identifying HVTs, place them in order of their relative worth to the threat's operation and record them as part of the threat model. The value of an HVT varies throughout an operation. Identify and annotate changes in value by phase of the operation. The following are additional considerations:
  - Use all available intelligence sources (for example, patrol debriefs, reporting) to update and refine the threat models.
  - Categorize the updates to reach a conclusion concerning the threat's operations, capabilities, and vulnerabilities.

B-41. CFA is an overarching analytic framework that assists the intelligence staff in identifying threat critical capabilities, threat critical requirements, and threat critical vulnerabilities. This assists friendly forces in effectively identifying windows of opportunity and threat vulnerabilities. CFA is most effective when conducted by a team of experienced analysts. At EAC, the CFA assists in identifying threat centers of gravity that friendly forces can use for operational planning. Identified threat critical vulnerabilities are key when identifying and developing HVTs, which are later prioritized by the FSE/fires cells through TVA.

Note. Potential pitfalls - units may not have enough experienced personnel to apply CFA effectively, as multiple analysts are optimal. Additionally, there may not be enough time to conduct a thorough functional analysis.

B-42. HVTs drive target development. Identification of HVTs overlaps with IPB. Developed prior to IPB, TSA templates and matrices or predeveloped threat models assist IPB significantly, especially in time-constrained environments. During step 3 of IPB, analysts develop general HVTs not associated with specific threat COAs and the terrain and weather. Then, analysts consider specific threat COAs and the terrain and weather to develop HVTs for each threat COA. Analysts must be proficient with the IPB steps and cannot develop specific HVTs outside of the IPB process. See ATP 2-01.3 for detailed information about the steps of the IPB process.

REFINE/ADJUST HIGH-VALUE TARGETS

B-43. During step 3 of MDMP, the targeting working group, led by the intelligence targeting element, refines the high-value target list one last time based on the most current intelligence and analysis. The entire staff conducts further analysis, including another iteration of TVA. Conducting TVA assists the staff in prioritizing HVTs and identifies potential HVT sets for each threat COA. They are placed in order of their relative worth to the threat's operation and recorded as part of the threat model. The value of HVTs varies over the course of an operation. The entire staff analyzes and identifies those HVTs that must be attacked to ensure friendly mission success. Additionally, the staff analyzes all implications of attacking those HVTs and possible threat counteractions. Results of this analysis is the refined high-value target list. Those critical HVTs that the staff confirms as acquired and attacked are nominated as potential HPTs for each COA.

SUPPORT THE SELECTION OF HIGH-PAYOFF TARGETS AND OTHER PRODUCTS

B-44. HPTs are initially developed during step 3 (COA development) of MDMP. Each friendly COA requires engaging specific HPTs to reach a specific effect at a specific time and location to ensure COA success. HPTs are critical to both the adversary's needs and the friendly concept of operations. They support achieving the commander's intent and executing the concept of operations. They are determined based on the commander's targeting guidance. Upon receipt of the HPT nominations, the staff groups the HPTs into a prioritized HPTL, associating the HPTs to a specific point in the battle. HPTs are incorporated into the scheme of fires and used to develop TSS and AGMs for each friendly COA. The HPTL, TSS and AGM are later refined during step 4 (COA analysis) and finalized during step 6 (COA approval) of MDMP.

B-45. The HVTs and HPTs are developed during steps 2 and 3 of MDMP, and further refined during the step 4, COA analysis. During COA analysis, the entire staff, led by the chief of fires/FSCOORD, refines or adjusts the key targeting products (HPTL, TSS, and AGM). The intelligence targeting element ensures the staff has the necessary intelligence products to validate or adjust the targeting products during COA analysis. Then,

the chief of fires/FSCOORD presents the HPTL, TSS, and AGM for the recommended friendly COA to the commander for approval.

B-46. Wargaming is conducted during step 4 (COA analysis) of MDMP. During wargaming, the staff compares each friendly COA with the enemy's most probable COA. The staff recommends which HVTs are to become HPTs for each friendly COA. When listed in priority, the HPTs for the approved COA compose the HPTL. Other related decisions include:

- When to engage each HPT.
- Which system to use against each HPT.
- The best places to attack an HPT.
- The desired effects of each attack, expressed in terms of the targeting objectives.
- Which HPTs require BDA.
- Which HPTs require special instructions or require coordination.

B-47. Target selection depends on the ability to acquire the target. The collection manager must be closely involved in ensuring information collection on HPTs is carefully synchronized into the information collection plan. This task includes:

- Breaking HPTs into subsets, when necessary.
- Developing adequate collection tasks.
- Considering the use of cueing, collection redundancy, and sensor mix during the development of the information collection synchronization matrix.

B-48. Based on wargaming, the targeting team refines specified targeting products for each friendly COA. These products include:

- HPTL.
- TSS.
- AGM.

B-49. Wargaming also assists the intelligence staff in refining and updating intelligence products in support of targeting. These include:

- Updated IPB products (threat model, threat COAs, event template, event matrix).
- Updated collection management products (refined intelligence requirements, information collection plan, information collection matrix, information collection support matrix, information collection overlay).

SUPPORT SUBSEQUENT TARGET DEVELOPMENT

B-50. After MDMP, more detailed target development occurs. Some aspects of subsequent target development-such as target validation and dynamic target development-overlap with intelligence support to target detection. The intelligence target element is not the lead element for developing most of the subsequent target development products. However, the intelligence target element produces supporting target intelligence, updates target intelligence folders, and supports the FSE in performing different tasks, including:

- Conducting deconfliction.
- Making aim point recommendations.
- Producing targeting materials.
- Linking targets back to targeting objectives and MOE.
- Vetting targets, when necessary.
- Validating targets.
- Developing dynamic targets, when necessary.
- Clearing fires.

B-51. Target vetting, when necessary, is conducted to establish a reasonable level of confidence in a target's designated functional characterization. The intelligence targeting element accomplishes the initial portion of vetting by reviewing the target intelligence to determine the level of accuracy on that target. At a minimum,

after the intelligence review, target vetting includes the following: it does not include an assessment of compliance with the laws of war or ROE:

- An assessment of the target's identification and significance.
- Collateral damage estimation.
- Geospatial or location issues.
- Threat or friendly impacts of servicing the target.
- Impact of not servicing the target.
- Environmental and other effects.
- Intelligence gain or loss concerns.

INTELLIGENCE SUPPORT TO TARGET DETECTION

B-52. The targeting working group establishes target detection and tracking priorities based on targeting priorities. Target tracking is inherent in target detection. The FSE/fires cell provides the intelligence cell with the degree of accuracy required and dwell time for a target to be eligible for engagement. Then the collection manager can match those requirements to the TLE of the information collection asset. Execution of the information collection plan begins as early as possible during planning and continues all the way through the assess function and even helps transition unit operations into the next mission. The execution of the information collection plan to answer the targeting information requirements is central to detection. Targets are detected by using the appropriate information collection assets.

B-53. The current operations integration cell is the primary cell responsible for directing the execution of the information collection effort to detect HPTs. The unit intelligence cell (with the current operations integration cell) must focus their intelligence analysis efforts to support both situation development and the targeting effort. Therefore, close coordination between the unit intelligence cell and the FSE is critical. Key staff members in this effort include the G-2/S-2, information operations officer, FAIO, targeting officer, and FSO.

B-54. The G-2/S-2 makes maximum use of all available information collection assets to detect targets and focus the intelligence acquisition efforts on designated HPTs and PIRs. Situation development information, through detection and tracking, accumulates as information collection assets satisfy PIRs and information requirements. The collection manager-

- Considers information collection assets' capabilities and availability within the echelon, and those assets available to subordinate, higher, and adjacent units.
- Considers joint or combined force assets.
- Arranges direct dissemination of targeting information, from the information collection asset to the targeting cell or targeting intelligence, to the FSE/fires cell if possible.

B-55. When detecting a planned HPT, the information is quickly disseminated to the FAIO to determine if the target is an HPT, the target's priority, and if the target complies with TSS. To ensure the target information is disseminated quickly, the FAIO should be located in the intelligence cell with communications to the FSE/fires cell. If the target is an HPT, the FAIO coordinates with the G-2/S-2 analytic element and disseminates the target directly to the FSE/fires. If the commander approves the target, it is transferred to a firing unit.

B-56. In those cases, where the situation dictates the development of a new HPT or a significant change to an existing HPT, subsequent target development must occur. When subsequent target development is necessary, the targeting information is forwarded for intelligence analysis and the target development process must occur quickly. Upon identifying a target specified for attack, analysts pass the target to the FSE/fires cell. The FSE/fires cell tasks the appropriate capability to execute the attack against the target.

INTELLIGENCE SUPPORT TO COMBAT ASSESSMENT

B-57. Intelligence also plays a major role in assessment as a part of the targeting methodology. The assess function of the targeting methodology is performed through combat assessment. *Combat assessment* is the determination of the effectiveness of force employment during military operations (JP 3-60). Units conduct combat assessment by determining the effectiveness of force employment during military operations (BDA

and munitions effectiveness assessment). *Battle damage assessment* is the estimate of damage composed of physical and functional damage assessment, as well as target system assessment, resulting from the application of fires. (JP 3-0). The staff determines how combat assessment relates to specific targets by completing BDA. Producing BDA is primarily an intelligence cell responsibility but requires coordination across the staff, similarly to IPB and most steps of intelligence support to targeting. BDA requirements should be captured as PIRs or as similar high-priority information collection requirements. From this determination, they make recommendations for maneuver operations (reengagement recommendation). Identifying, defining, and maintaining accurate threat characteristics are also essential in conducting combat assessment. For example, understanding a threat's composition assists the intelligence staff in determining the threat's combat effectiveness. The intelligence staff incorporates the entire staff's input into IPB products for staff planning, decision making, targeting, and combat assessment.

B-58. BDA provides commanders with an assessment of the target's combat effectiveness, overall status, capabilities (whether full or partial), and likely reactions or any change to their intent. This assists the staff in determining if the engagement is meeting the targeting guidance and is critical to any recommendation to reengage the target. BDA also provides important analysis used to conduct quick target development and decide on the allocation or redirection of assets or weapon systems for any reengagement.

B-59. Together, BDA and munitions effectiveness assessment inform the commander of effects against targets and target sets. The threat's ability to make and sustain war is estimated continually. During the munitions effectiveness assessment of the targets, restrike recommendations are proposed or executed. BDA pertains to the results of attacks on commander-designated targets. Although BDA is conducted primarily by the intelligence staff, it requires coordination with the entire staff. BDA requirements are translated into PIRs. BDA-

- Is conducted at the tactical level by commanders to obtain a series of timely and accurate snapshots of how they are affecting the threat. BDA provides commanders an estimate of the threat's combat effectiveness, capabilities, and intentions (threat characteristics). From this information, commanders determine when or whether their targeting effort accomplishes their objectives.
- Assists in determining if restrike is necessary. Commanders use BDA to allocate or redirect attack systems to make use of available combat power.

B-60. The Army's integrated systems demonstrate the seamless availability of national, theater, and tactical access-protected information, allowing Department of Defense users and mission partners to confidently share the information as needed. Intelligence personnel use these integrated systems to receive and distribute intelligence and information to support decision making, situation development, target development, and information collection at every echelon.

Appendix C

Desired Effects and Target Categories

Throughout the manual, creating the desired effects has been highlighted as an essential part of meeting the commander's intent. Commanders' guidance should include the task that they want to conduct, and the outcome intended by the specific action. Weaponeering is the process of determining the specific means required to create a desired effect on a given target. The targeting team may develop these effects through planning or the use of the Joint Munitions Effectiveness Manual Weaponeering Software (referred to as JWS) for specific lethal engagements. Both lethal and nonlethal capabilities are considered.

SECTION I – DESIRED EFFECTS

C-1. Desired effects should be created with the outcome in mind (see table C-1). The outcome must be perceivable providing the targeting team the ability to measure created effects. A desired effect represents a condition for achieving an associated objective, while an undesired effect could inhibit progress toward the same objective.

C-2. Effects of fires can only be properly assessed by an observer, sensor, or analyst. It is important that the assessment of desired effects is tasked for collection to a capable asset. Each asset must understand the desired effects to include when and for how long they are required.

Table C-1. Desired effects

TASK	***Effect/Outcome***
Attrit	To wear down or weaken (an opponent or enemy).
Compel	1) To force, drive or constrain. 2) To make necessary.
Convince	1) To overcome by argument. 2) To bring to belief, consent, or a course of action (COA).
Damage	To reduce the soundness, effectiveness, or perfection of.
Deceive	To cause to believe what is not true.
Defeat	To render a force incapable of achieving its objectives.
Degrade	1) Damage done to the function is permanent, but only portions of the function were affected; that is, the function still operates, but not fully. 2) A function's operation is permanently impaired, but the damage does not extend to all facets of the function's operation.
Deny	1) To hinder the enemy the use of space, personnel, or facilities. It may include destruction, removal, contamination, or erection of obstructions. 2) Damage done to the function is only temporary, but all aspects of the function were affected. 3) A function's operation is impaired over the short term, but the damage extends to all facets of the function's operation.
Delay	1) To slow down the arrival of a unit on the "battlefield." 2) An operation in which a force under pressure trades space for time by slowing down the enemy's momentum and inflicting maximum damage on the enemy without, in principle, becoming decisively engaged.

Table C-1. Desired Effects (continued)

TASK	*Effect/Outcome*
Destroy	1) To damage the condition of the target so that it cannot function as intended nor be restored to a usable condition. 2) Damage done to the function is permanent, and all aspects of the function have been affected. 3) A function's operation is permanently impaired, and the damage extends to all facets of the function's operation.
Diminish	1) To make less or cause to appear less. 2) To reduce the effectiveness of an activity. This is similar to degrade without the kinetic overtones.
Disrupt	1) To break apart, disturb, or interrupt a function. 2) Damage done to the function is temporary, and only portions of the function were affected. 3) A function's operation is impaired over the short term and the damage does not extend to all facets of the function's operation.
Divert	To restrict the enemy's capabilities to pursue a particular COA.
Enhance	To increase or make greater the capabilities of a force or a people.
Exploit	To gather information that will enable opposition ability to conduct operations to induce other Effects.
Expose	1) To make known or cause to be visible to public view. 2) To make visible, to reveal something undesirable or injurious.
Harass	To disturb the rest of enemy troops, curtail their movement and lower morale by threat of loss.
Influence	1) To affect or change how someone or something develops. 2) To cause a change in the character, thought, or action of a particular entity.
Inform	To impart information or knowledge.
Manipulate	1) To influence or control someone to your advantage, often without that person knowing it. 2) Control or change information, information systems, and/or networks in gray or red cyberspace to create physical denial effects, using deception, decoying, conditioning, spoofing, falsification, and other similar techniques.
Negate/Neutralize	1) To render an enemy weapon system and maneuver units ineffective or unusable for a specific period of time. 2) To render ineffective, invalid or unable to perform a particular task or function. 3) To counteract the activity or effect of.
Prevent	1) To deprive of hope or power of acting or succeeding. 2) To keep from happening, to avert.
Protect/Safeguard	1) To cover or shield from exposure, damage, or destruction. 2) To keep from harm, attack, injury or exploitation. 3) To maintain the status or integrity of.
Suppress(ion)	1) Involves temporary or transient degradation of an actual or suspected enemy weapons system for the purpose of degrading its performance below the level needed to fulfill its mission objectives at a specific time for a specified duration. 2) Temporary or transient degradation by an opposing force of the performance of a weapons system below the level needed to fulfill its mission objectives.

SECTION II – TARGET CATEGORIES

C-3. The target categories represent target groupings based on their battlefield functions, not on the associated equipment. The categories (also known as target sets) cover all the major battlefield functions of the Threat. The categories are as follows:

- C2 targets are command, control, and communications centers that affect maneuver or combined arms.
- FS category covers the entire Threat FS system to include counter-battery radars.

- MANEUVER targets are combat arms tactical subunits in various postures.
- AIR DEFENSE ARTILLERY refers to air defense system targets, including missile unit HQ and processing centers, radar sites, and short-range air defense platoons.
- ENGINEER denotes engineer targets, including crossing sites, snorkeling sites, and movement support elements.
- RECONNAISSANCE AND SURVEILLANCE assets include ground surveillance radars, reconnaissance patrols, and airborne sensor systems.
- CEMA category is radio-electronic combat, known as offensive EW. Because of the nature of the peer, near peer system, some dedicated collection target acquisition assets are listed in this category instead of under Reconnaissance and surveillance.
- INFORMATION refers to the personnel and the development and production capabilities (both mobile and fixed) a threat employs to influence targeted individuals and groups or gain decision dominance. (May include functions such as print facilities or access points for internet-based activities).
- CBRN targets include all aspects of enemy CBRN programs.
- SUSTAINMENT
  - CLASS III petroleum, oil, and lubricants (referred to as POL) support and includes transport and pipeline units and POL points.
  - The CLASS V AMMO category covers the ammunition support targets.
  - CLASS IX MAINT covers maintenance and repair capabilities.
- LIFT refers to general transport units in the Threat.
- LINE OF COMMUNICATION (referred to as LOC) represents means for which people traverse terrain for deployment, maneuver, redeployment or sustainment and transmit or share information.

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Appendix D

Example Targeting Product Formats

The commander, the targeting team, supporting, and supported units should implement the targeting products developed during the targeting process to facilitate the planning and execution of operations. The products allow the team to control and synchronize targeting in an effective and efficient way.

TARGETING TOOLS AND FORMATS

D-1. There are no prescribed formats for the targeting tools. Each unit will develop tools that work best for them. Factors to consider in developing formats are as follows:

- Type, level, or role of the command.
- Operational environment.
- Assets available.
- Missions.
- SOPs.

D-2. Regardless of the formats used, the targeting methodology applicable for the unit's role must be followed. Targeting products can be presented in many forms. It is important forms be sharable in oral presentations, hard copy publications, or electronic format.

D-3. The purpose of this appendix is to provide a menu of formats and a focus on the targeting information and knowledge the commander and staff requires. The formats may be copied or modified by the targeting team to support the requirements of the command. These examples are intended to provide a baseline understanding of the required information in each product. In the example products a mix of acceptable forms of inputs are used to further demonstrate the flexibility a unit has when developing its own targeting product standards.

HIGH-PAYOFF TARGET LIST

D-4. The HPTL identifies HPTs by phases in the battle and order of priority. Other considerations include the following:

- The sequence or order of appearance.
- The ability to detect, identify, classify, locate, and track the target. (This decision must include sensor availability and processing timeline considerations.)
- The degree of accuracy available from the acquisition system(s).
- The ability to engage the target.
- The ability to create the desired effects based on attack guidance.

D-5. Targets are prioritized according to the considerations above within specific time windows. The targeting working group recommends priorities for the targets according to its judgment and the advice of the FSE targeting officer and the FAIO. The target category of the HPT is shown, either by name or by number, on the list. The number of target priorities should not be excessive. Too many priorities will dilute the intelligence collection acquisition and engagement efforts. The approved list is given to the operations, intelligence, and FSE. It is used as a planning tool to determine attack guidance and to refine the collection plan. This list may also indicate the commander's operational need for BDA of the specific target and the time window for collecting and reporting it. Table D-1 shows an example of a HPTL.

Table D-1. High-payoff target list (example)

High-Payoff Target List		
Phase or Critical Event		
Priority	***Category***	***Targets***
1	ADA	SA-15, SA-17, Tracking Radar, Engagement Radar
2	Fire Support	HVY MRL, Cannon ARTY, CTR BTY Radar
3	R&S	UAS GCS, Scouts
4	Lift	ATK helo, FARP, Utility helo, Airfields
5	Sustainment	Bulk fuel, logistics, ammunition, maintenance
ADA – air defense artillery, ARTY– artillery, ATK – attack, BTY – battery, CTR – counter, FARP – forward arming and refuel point, GCS – ground control station, helo – helicopter, HVY – heavy, MRL-multiple rocket launcher, R&S – reconnaissance and surveillance, SA – surface-to-air, UAS – unmanned aircraft systems		

TARGET SELECTION STANDARDS

D-6. TSS are usually comprised of the essential elements listed in the TSS matrix. Table D-2 provides an example format of a TSS matrix. Units may develop their own target selection format:

- HPT. This refers to the designated HPT that the collection manager is tasked to acquire.
- TIMELINESS. Valid targets are reported to weapon systems within the designated timeliness criteria.
- ACCURACY. Valid targets must be reported to the weapon system meeting the required TLE criteria. The criteria are the least restrictive TLE considering the capabilities of available weapons system. A compiled list of sensor TLE can be found within the Joint Munitions Effectiveness Manual Weaponeering Software (referred to as JWS).
- SIZE. Echelons should understand the size of the element to be engaged. This assists in the efficient use of capabilities to maximize resource employment. Echelons should establish discrimination criteria based on capability or objectives. The targeting team must determine engagement standards during the development of the TSS.

Table D-2. Target selection standards matrix (example)

Target Selection Standards			
High-Payoff Target	***Timeliness***	***Accuracy***	***Size***
Tor	15 minutes	200 meters	Battery
HVY MRL	30 minutes	100 meters	Battalion
Ammunition Holding Point	6 hours	200 meters	
UAS ground control station	1 hour	100 meters	Individual
Counter-battery radar	30 minutes	200 meters	Section
Print Facilities	2 hours	50 meters	Individual
Forward arming and refueling point	1 hour	200 meters	
Access Point (Internet Activities)	10 minutes	50 meters	Individual
HVY – heavy, MRL– multiple rocket launcher, Tor – surface-to-air missile system, UAS – unmanned aircraft systems			

ATTACK GUIDANCE MATRIX

D-7. The AGM example in table D-3 on page D-4 provides guidance on what HPT should be attacked and when and how they should be attacked. Units may develop their own AGM format. The AGM includes the following elements:

- High-payoff target. The high-payoff target column is a prioritized list of HPTs by phase of the operation. This column lists the HPTs identified during war gaming or the targeting working group. These targets have priority for engagement.

- WHEN. The WHEN column indicates the time the target should be engaged. Timing the engagement of targets is critical to maximizing the effects. During war gaming or the targeting working group, the optimum time is identified and reflected in the WHEN column:
  - Planned (P): These targets should be engaged according to the planned timeline (scheme of maneuver, critical event, gap crossing, suppression of enemy air defenses). If the planned time is beyond a reasonable time, the target should be tracked or re-confirmed before engagement per the planned engagement schedule.
  - As Acquired (A): These targets should be engaged as they are detected. If multiple targets are found at the same time, the targets should be prioritized in accordance with the HPTL.
  - Immediate (I): These targets must be attacked immediately and take precedence over all other targets (except TST). They are conducted even if attack systems must be diverted from attacks already underway. This designation should be limited to the most critical targets such as those CBRN capable systems, HQ (division, integrated fires commands, integrated air defense systems, long-range missiles, and rockets). The operations officer, FSCOORD, and FSO must establish procedures within the main command post (CP) that allow for immediate engagement of targets.
- HOW. The HOW column links the engagement means to the HPT. It is best to identify a primary and alternate engagement means of HPTs. Each engagement system may require different TSS criteria to produce the same effect.
- EFFECT. The EFFECTS column refers to the target engagement criteria. The targeting working group should specify engagement criteria according to the commander's general guidance. Target engagement criteria should be given in quantifiable terms (number of systems to be destroyed, length of time to suppress/disrupt). (See the legend below the example.)
- The desired effects on the target or target system are stated in this column.
- REMARKS. This column should note which targets should not be engaged in certain tactical situations (for example, targets not to be engaged if the enemy is withdrawing). Some examples of how this column should be used are:
  - Collateral damage estimation limitations
  - Accuracy or time constraints.
  - Required coordination.
  - Limitations on the amount or type of ammunition.
  - Specific combat assessment requirements.

D-8. As the operation progresses, the AGM may change. The AGM is a tool that must be updated based on the changing enemy situation. The AGM should be discussed and updated during routine staff planning meetings. Consider a separate AGM for each phase of the concept of operations. The AGM should be synchronized with the decision support template and ensure the selection of HPTs is supported by targeting intelligence requirements and the information collection plan.

- FORMAT. The formats for the HPTL, TSS, and AGM presented in the preceding paragraphs are examples only. Data from these documents should be integrated into mission command systems to facilitate digital execution, coordination, and assessments. Targeting personnel must understand all the considerations that are involved in building these targeting tools. However, experienced staffs may prefer to develop their own formats tailored for their situation. See appendix D for examples of the formats.

Table D-3. Attack guidance matrix (example)

Attack Guidance Matrix				
HPT	***When***	***How***	***Effect***	***Remarks***
BM-30	A	Field Artillery	Neutralize	Coordinate and ensure CFFZ and CFZ are emplaced and active
Tor	A	UAS	Destroy	Maneuver engages target and calls in UAS strikes as necessary.
UAS Ground Control Station	P (1330Z)	Electromagnetic Attack	Neutralize	Jam Communications at H-1
WLR	I	SCAR	Destroy	Monitor for signals transmission to trigger engagement
Print Facilities	A	AI/Cyber	Neutralize	Coordination required to synchronize lethal engagement with cyber effects.
A – as acquired, ACM – airspace coordinating measures, AI – air interdiction, BM – boyevaya mashina, CFFZ – call for fire zone, CFZ – critical friendly zone, H – hour, HPT – high-payoff target, I – immediate, P-planned, SCAR – strike coordination and reconnaissance, Tor – surface-to-air missile system, UAS – unmanned aircraft system, WLR – weapons locating radar				

INFORMATION COLLECTION SYNCHRONIZATION MATRIX

D-9. The collection management team develops the ICSM in conjunction with the information collection matrix and information collection overlay in order to synchronize information collection activities with enemy activities and friendly force operations, as well as to show actual tasked and requested assets. The ICSM example shown in figure D-1 on page D-5 synchronizes and communicates information collection activities horizontally and vertically across echelons and units.

D-10. In conjunction with the other targeting products (HPTL, TSS, AGM), the ICSM allows the targeting team to effectively build an accurate and detailed TSM. The collective products enable the targeting team to visualize collection efforts and make engagement recommendations synchronized across warfighting functions and in time and space.

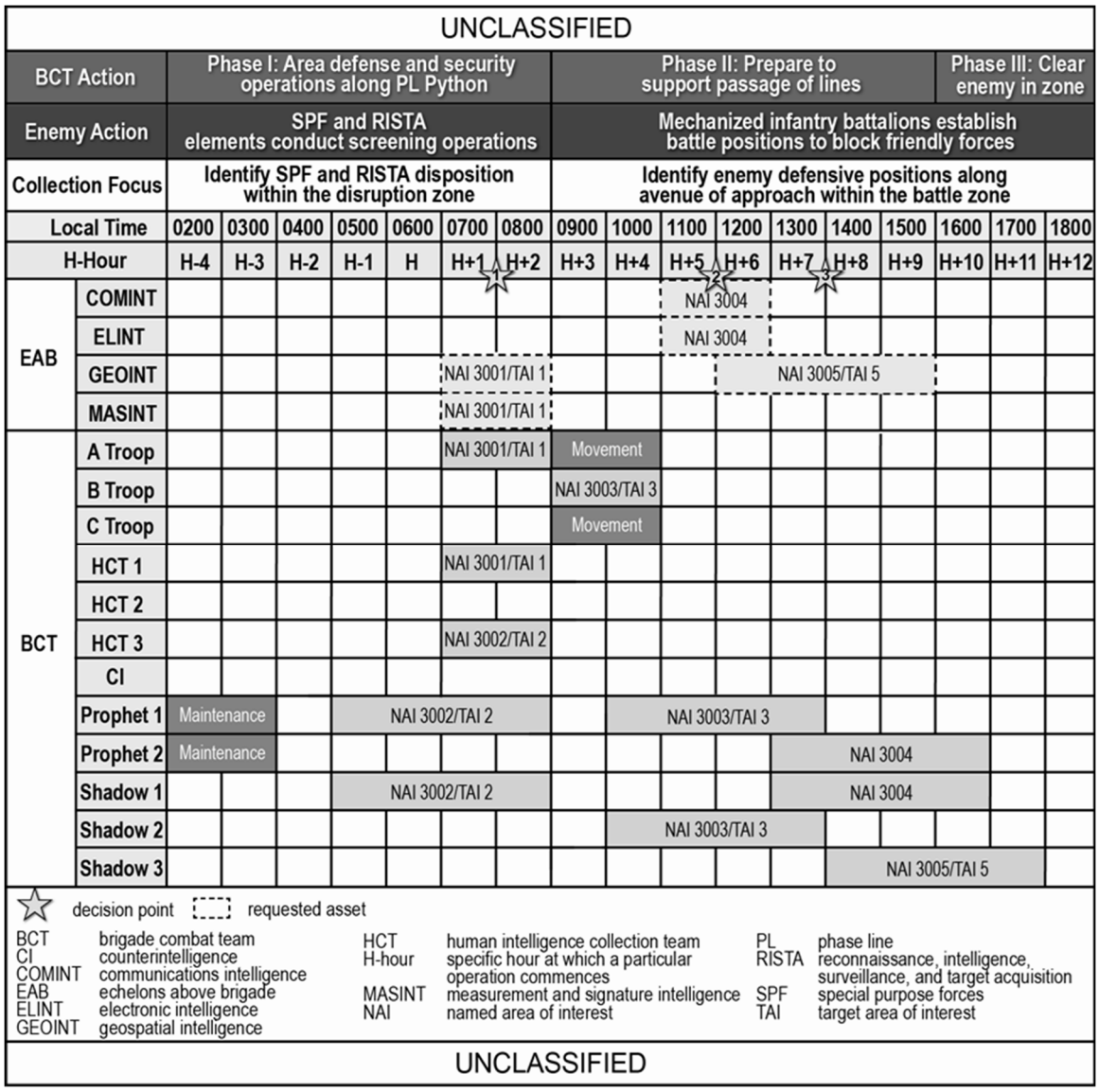

Figure D-1. Information collection synchronization matrix (example)

TARGETING SYNCHRONIZATION MATRIX

D-11. Table D-4 provides an example of the TSM. The TSM is a successful way to synchronize targets by identifying responsibilities to detect, deliver, and assess attacks on specific HPTs. The HPTs are listed in priority by category under the Decide column. Units and agencies 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 and that assets or agencies are not overtaxed. This matrix could also be prepared for a specific event or for each phase of the battle. Units may develop their own TSM format.

Table D-4. Targeting synchronization matrix (example)

DECIDE			DETECT		DELIVER		ASSESS	
P	Category	HPTs	Agency	Asset	Agency	Asset	Agency	Asset
1	Fire Support	BM-30 BM-27 1V18 1V19 Counter-battery Radar	FAB CAB G-2 FAB E-MIB G-2	Q-53 FMV JSTARS Q-53 NOS Rivet Joint	1-FAB 2-Avn DIVARTY FAB FAB FAB CAB	1-MLRS 2- AH-64E Artillery MLRS MLRS MLRS AH-64E	E-MIB FAB G-2 E-MIB E-MIB G-2 CAB	FMV Q-53 JSTARS Rivet Joint FMV Rivet Joint AH-64E FMV
2	ADA	Tor Buk Tracking Radar	G-2 CAB E-MIB	Rivet Joint FMV Rivet Joint	AI FAB AI	F35, F16 MLRS F22, F16	AOC CAB G-2	MSNREP FMV NOS
3	R&S	UAS ground control station Scouts	CEMA AMD G-2 BCT	NOS Sentinel FMV	FAB BCT FAB	MLRS Artillery Organic Artillery	AOC G-2 BCT	MSNREP EAD ELINT Prophet

ADA - air defense artillery, AI -- air interdiction, AMD – air and missile defense, AOC – air operations center, Avn – aviation, BCT - brigade combat team, BM – boyevaya mashina, Buk – enemy air defense missile system, CAB – combat aviation brigade, CEMA – cyberspace electromagnetic activity, DIVARTY – division artillery, EAD - echelons above division, ELINT – electronic intelligence, E-MIB – expeditionary military intelligence brigade, FAB - field artillery brigade, FMV – full motion video, G-2- Intelligence staff officer, HPTs - high-payoff targets, JSTARS – joint surveillance target attack radar system, MLRS - multiple launch rocket system, MSNREP – mission report, NOS – National overhead systems, P - priority, R&S -- reconnaissance and surveillance Tor – surface-to-air missile system, UAS – unmanned aircraft system

D-12. The following steps are a recommended way of completing the TSM while conducting the targeting working group.

- Step One. Select, or update the HPTL. These targets are derived from the S-2's list of HVTs.
- Step Two. 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 TSM. See table D-4. Be specific, state what unit or asset must detect or confirm or deny the location of each specific target. Clear and concise tasking must be given to acquisition assets and resources. Mobile HPT targets 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 enemy targets will be. Consider assigning a NAI to the target and enter the number on the TSM.
- Step Three. Determine which attack asset or resource will be used to attack each target once detected or confirmed by using the list of delivery assets and resources available. Enter this information into the "deliver" portion of the TSM. The lethal and nonlethal effects and applicable aspects of EW and information related capabilities are considered depending on the commander's targeting guidance and desired effects. Consider redundant means to attack each target. 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 created by attacking the target. For example, the effects of Army indirect fires, joint fires, and EW, including nonlethal effects can be to deceive, degrade, delay, deny, destroy, disrupt, divert, exploit, interdict, neutralize, or suppress the target.
- Step Four. Determine and prioritize which assets will assess how well the attack was executed and whether desired effects were created on the targets. Enter this information into the "assess" portion of the TSM.

D-13. Both nonlethal and lethal capabilities approved in the targeting coordination board should be included in the same TSM.

TARGET REPORT

D-14. When targeting information is passed from one agency to another, all essential information must be included to allow for proper analysis and attack. Figure D-2 is an example of a target report that captures information that will aid the targeting work group in establishing the most practicable attack response.

Line Number

1. Report Agency: Unit/Call sign
2. Sensor Type: FO, UAS, Scout, SIGINT, HUMINT, GEOINT
3. Report DTG: 1900Z01APR22
4. Acquisition DTG[1]: 1830Z01APR22
5. Target Description: 9A54, G6, C2 Node
6. Posture[2]: In the open
7. Activity[3]: Stationary digging in position
8. Size[4]: Battery
9. Target Location[5]: 12345 67890
10. Target Location Error[6]: 10 Meters
11. Dwell Time[7]

Notes:

[1] DTG – Date time group is Zulu time or Greenwich Mean Time
[2] Dug in, in the open, in built up area etc…
[3] Moving (Direction), stationary
[4] Unit Size, Diameter
[5] Grid Coordinates
[6] +/- Meters
[7] Target Decay or expected time of target in current status

FO-forward observer GEOINT-geospatial intelligence HUMINT-human intelligence
SIGNIT-signal intelligence UAS-unmanned aircraft system

Figure D-2. Essential target information (example)

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Appendix E

Example Battle Rhythm Products

There are two battle rhythm events that directly facilitate the deliberate targeting process at the brigade through theater level, a targeting working group and a targeting coordination board. The assessments working group is a third battle rhythm event at echelons above brigade that supports the deliberate targeting process. All events require participation from staff sections, warfighting functions, subordinate commands, and other agencies as required. Each unit must develop an SOP that is based on the unique mission, organization, equipment, personnel, and philosophy of the commander. The responsibilities for the targeting working group and targeting coordination board are broken out by individual personnel and groups listed below. Example targeting working group, targeting coordination board, and assessments working group agendas follow below.

TARGETING BATTLE RHYTHM INDIVIDUALS

E-1. The following is a list of targeting individuals and their responsibilities. The list is an example but is by no means all-inclusive as commander's guidance and mission may require additions or deletions. Targeting individuals include the:

COMMANDING GENERAL/COMMANDER

- Provide guidance, objectives, priority of effort, and intent for targeting.
- Provide guidance and approve joint force command TST nominations and engagement criteria.
- Provide guidance and approve sensitive target for engagement and or removal (the STAR process).

CHIEF OF STAFF/EXECUTIVE OFFICER

- Chair the targeting coordination board (When delegated).
- Promulgate the commander's future targeting guidance.

FIRES SUPPORT COORDINATOR

- Supported by the FSO and targeting officer lead the targeting working group.
- Facilitate the targeting coordination board.
- Manage all aspects of the targeting process.
- Present the commander's targeting guidance and intent.

G-2 INTELLIGENCE

- Manage all aspects of target development.
- Assist in the development of TSTs, sensitive targets, restricted targets, and no-strike entities.
- Identify targeting requirements in support of PIRs and decision points.
- Ensure targeting requirements are fully integrated into the collection plan.
- Develop the high-value target list for each phase of the operation and ATO cycle.

G-3 OPERATIONS

- Chair the targeting coordination board (When delegated).

- Oversees the targeting effort for each targeting cycle is synchronized with the appropriate scheme of maneuver.

FUTURE OPERATIONS

- Provide the concept of operation and commander's intent by phase.
- Identify key tasks and objectives of subordinate commands by phase.
- Provide focus area for future targeting.

G-33 CURRENT OPERATIONS

- Responsible for the execution of the dynamic targeting process.
- Coordinate the execution of actions and activities in support of deliberate targeting.

G-4 LOGISTICS

- Identify logistic issues unique to fires (status of precision-guided munitions).
- Ensure infrastructure needed for future logistical operations are nominated for protection.

G-39 INFORMATION

- Integrate information (at echelon) into the targeting process.
- Identify host nation information capabilities.

CYBERSPACE ELECTROMAGNETIC ACTIVITIES

- Participate in target development, validation, and vetting, of all EW attack and offensive cyber capabilities supporting target nominations.
- In coordination with the targeting cell, prioritize all EW and offensive cyber capabilities supporting targets nominations (including subordinates' nomination).

CHEMICAL BIOLOGICAL RADIOLOGICAL AND NUCLEAR OFFICER

- Coordinate with the G2 and staff weather officer concerning CBRN targets and forecasted weather.
- Perform CBRN modeling to estimate the effects to include collateral damage from striking CBRN targets.
- Assess the effects of CBRN targeting on the friendly and enemy schemes of maneuver.
- Recommend CBRN targets for the RTL, JTL or NSL as appropriate when CBRN modeling effects exceed higher HQ or the commander's targeting guidance.

G-9 CIVIL AFFAIRS OPERATIONS

- Identify civilian entities for inclusion into the NSL.
- Nominate host nation/local civil networks, cultural sites, internally displaced person, or dislocated civilian camps for inclusion on the RTL.
- Provide information on nongovernmental organizations, intergovernmental organizations, and or local humanitarian operations with the area of responsibility.

STAFF JUDGE ADVOCATE

- Participate in target development, validation, and vetting to ensure compliance with ROE, Law of armed conflict, and other legal agreements.
- Highlight any potential harmful environmental impacts or consequences that should be considered in the targeting process.

TARGETING WORKING GROUP

E-2. The targeting working group agenda is divided to account for multiple targeting cycles. The Commanders designated representative (G-3, Chief of Staff, FSCOORD, Targeting Officer) directs the process and keeps the members focused on the unit mission, commander's intent, targeting guidance, and targeting priorities. The intent is to develop options for the Commander. As indicated by the name, work is meant to be done during the working group. Contingency operations may be developed, lethal and nonlethal capabilities are discussed and solutions for the best means of creating the desired effects should be worked through. New information, changes to previous understanding, and updates to approved plans should be discussed. The targeting working group is not intended to be a rehearsal for the targeting coordination board. Meeting times should be established to allow timely coordination of the parallel targeting effort of senior and subordinate HQ.

ORGANIZATION

E-3. Figure E-1 provides recommendations, routine functions, and delineates responsibilities for operations in the BN/brigade targeting working group.

<table>
<tr><th colspan="2">GENERAL INFORMATION</th><th colspan="2">PARTICIPANTS</th></tr>
<tr><td colspan="2">Purpose: Determine targets for planning and refinement based on priority within the operational environment. Match the appropriate asset required to achieve the desired effect on each target. Synchronize target nominations (lethal / non-lethal) across the staff and at echelon.

Frequency: As needed

Duration: Echelon HQ

Information / Refinement cut-off time: Refer to Battle Rhythm and SOP</td><td colspan="2">Proponent: Targeting Officer / Fire Support Officer

Chair: FSCOORD

Key Attendees: FSO, ALO, FAIO, S2, ITO, BISE Chief, Information Collection Manager, SWO, S3, EWO, CEMA, BAE, Space Officer, SOF LNO, SJA, Operations research and systems analyst, ENG, S4, Support Operations Officer, S6 LNOs

Recommended Attendees: Executive Officer, BDE Engineer Representative, S6, Protection Representative, PAO</td></tr>
<tr><th colspan="4">INPUTS / OUTPUTS</th></tr>
<tr><td colspan="2">Inputs:
• CDR/s Targeting Guidance / Resource Priorities
• Running Estimates
• Last Targeting cycle BDA and Assessments
• Enemy Event Template
• Enemy Situation
• Friendly Situation / Maneuver Plan
• HPTL, NAIs, Target Nominations</td><td colspan="2">Outputs:
• Refined / updated HPTL
• Refined / updated NAIs
• Proposed Information Collection Plan
• Recommended Target Nominations
• Recommended Resource Allocation</td></tr>
<tr><th colspan="4">AGENDA</th></tr>
<tr><td colspan="2">• Roll Call
• Current PIRs
• Weather: 5-day forecast
• ATO Crosswalk

ASSESS
• Review Operational Timeline
• Battle Damage Assessments
• Tasks to Effect / Review
• Decisions to be made

EXECUTION
• ENY SITEMP updates
• HPTL cross walk review / refinement
• Intelligence Collection Matrix review / refinement
• Target Sync Matrix review / refinement</td><td colspan="2">REVIEW / VALIDATE
• Review Targeting Guidance
• ENY SITEMP updates
• HPTL cross walk review / refinement
• Intelligence Collection Matrix review and refinement
• Target Sync Matrix review / refinement

APPROVAL
• ENY SITEMP assessment
• Proposed HPTL cross walk
• Proposed Intelligence Collection Matrix
• Proposed Target nominations
• Proposed Target Sync Matrix

GUIDANCE
• Proposed Targeting objectives
• Proposed HPTL
• Proposed Collection priorities
• Proposed initial targeting effects requests</td></tr>
<tr><td colspan="4">ALO – air liaison officer, ATO – air tasking order, BDA – battle damage assessment, BDE – brigade, BISE – brigade intelligence staff element, CDR – commander, CEMA – cyber electromagnetic activities, ENG – engineer, ENY – enemy, EWO – electromagnetic warfare officer, FAIO – field artillery intelligence officer, FSCOOR – fire support coordinator, FSO – fire support officer, G6 – assistant chief of staff, signal, HPTL – high payoff target list, HQ – headquarters, ITO – intelligence targeting officer, LNO – liaison officer, NAI – named area of interest, PAO – public affairs officer, PIR – priority intelligence requirement, S2 – battalion or brigade intelligence staff officer, S3 – battalion or brigade operations staff officer, S4 – battalion or brigade logistics staff officer, S6 – battalion or brigade signal staff officer, SITEMP – situation employment, SJA – staff judge advocate, SOF – special operations force, SOP – standard operating procedures, SWO – staff weather officer, Sync – synchronization</td></tr>
</table>

Figure E-1. Battalion/Brigade targeting working group (example)

TARGETING WORKING GROUP EXECUTION

E-4. The targeting working group is an action officer level venue, led by a delegated authority of the commander (typically the Director of the Fires function, FSCOORD that meets as required in accordance with the commander's guidance and battle rhythm. Targeting working group responsibilities:

- Disseminate the commander's targeting guidance and priorities.
- Consolidate, deconflict, and prioritize target nominations from subordinate and supporting commands, warfighting functions, staff sections, and other agencies.

- Synchronize the lethal and nonlethal capabilities and effects to ensure target engagement remains nested with higher HQ objectives and is supportive to subordinated commands.
- Synchronize detection and collection requirements with the collection manager.
- Identify delivery capabilities.
- Maintaining and updating the HPTL, candidate target list (referred to as CTL), NSL, RTL/JTL, and other relevant target-related lists.

E-5. Figure E-2 provides general information, participants, the overall agenda, and the inputs and outputs related to the division/corps targeting working group.

GENERAL INFORMATION	**PARTICIPANTS**
Purpose: Receive approval for the prioritization of resources for recommended targets. Gain approval for the next targeting cycle and receive guidance for the following target cycle. **Frequency:** As needed **Duration:** As needed (≤ 60 minutes) **Location:** Echelon HQ **Information / Refinement cut-off time:** Refer to Battle Rhythm and SOP	**Proponent:** FSCOORD / Targeting Officer **Chair:** Commander **Key Attendees:** FSO, ALO, FAIO, S2, ITO, BISE Chief, Information Collection Manager, SWO, S3, EWO, CEMA, BAE, Space Officer, SOF LNO, SJA, Operations research and systems analyst, ENG, S4, Support Operations Officer, S6 LNOs **Recommended Attendees:** Executive Officer, BDE Engineer Representative, S6, Protection Representative, PAO
INPUTS / OUTPUTS	
Inputs: • Assessments • Updates to Review / Validate	**Outputs:** • Approved Targeting Priorities • Approved asset allocation and resources • Approved Targeting Products (HPTL, TSS, AGM, TSM, and TLWS) • Seek Targeting Guidance
AGENDA	
• Roll Call • Current PIRs • Weather: 5-day forecast • ATO Crosswalk **ASSESS** • Review Operational Timeline • Battle Damage Assessments • Tasks to Effect / Review • Decisions to be made **EXECUTION** • ENY SITEMP updates • HPTL cross walk review / refinement • Intelligence Collection Matrix review / refinement • Target Sync Matrix review / refinement	**REVIEW / VALIDATE** • Review Targeting Guidance • ENY SITEMP updates • HPTL cross walk review / refinement • Intelligence Collection Matrix review and refinement • Target Sync Matrix review / refinement **APPROVAL** • ENY SITEMP assessment • Proposed HPTL cross walk • Proposed Intelligence Collection Matrix • Proposed Target nominations • Proposed Target Sync Matrix **GUIDANCE** • Proposed Targeting objectives • Proposed HPTL • Proposed Collection priorities • Proposed initial targeting effects requests
AGM – attack guidance matrix, ALO – air liaison officer, ATO – air tasking order, BAE – brigade aviation element, BDE – brigade, BISE – brigade intelligence element, CEMA – cyber electromagnetic activities, ENG – engineer, ENY – enemy, EWO – electromagnetic warfare officer, FAIO – field artillery intelligence officer, FSCOORD – fire support coordinator, FSO – fire support officer, HPTL – high payoff target list, HQ – headquarters, ITO – intelligence targeting officer, LNO – liaison officer, PAO – public affairs officer, PIR – priority intelligence requirement, S2 – battalion or brigade intelligence staff officer, S3 – battalion or brigade operations staff officer, S4 – battalion or brigade logistics staff officer, S6 – battalion or brigade signal staff officer, SITEMP – situation employment, SJA – staff judge advocate, SOF- special operations force, SOP – standard operating procedures, SWO – staff weather officer, Sync – synchronization, TLWS – target list work sheet, TSM – target synchronization matrix, TSS – target selection standards	

Figure E-2. Division/Corps targeting working group (example)

TARGETING COORDINATION BOARD

E-6. The targeting coordination board is a director or primary staff level venue chaired by the commander or delegated authority. The targeting coordination board is executed in accordance with the organizational battle rhythm. Targeting coordination board responsibilities:

- Review operational-level targeting, assessment and progress towards the commander's objectives.
- Approve targeting priorities, effects, and targets for inclusion on the NSL, RTL/JTL, and HPTL.
- Review and ensure targeting efforts are synchronized with ground scheme of maneuver.
- Approve allocation and priority of resources (collection and delivery) in support of targeting.
- Provide the commander's targeting guidance, priority of effort, priorities for dynamic targeting.

ORGANIZATION

E-7. Figure E-3 provides recommendations, routine functions, and delineates responsibilities for operations in the BN/brigade targeting coordination board.

GENERAL INFORMATION	PARTICIPANTS
Purpose: Determine targets for planning and refinement based on priority within the operational environment. Match the appropriate asset required to achieve the desired effect on each target. Synchronize target nominations (lethal / non-lethal) across the staff at echelon. **Frequency:** As needed **Duration:** As needed (≤ 60 minutes) **Location:** DIV / CORPS MAIN **Information / Refinement cut-off time:** Refer to Battle Rhythm and SOP	**Proponent:** Targeting Officer / FSCOORD **Chair:** Chief of Staff **Key Attendees:** POLAD, FSCOORD, FSO, ALO, FAIO, G2, ITO, IC Manager, SWO, G3, G35, G3 Air, AMD, CAB LNO, G39, S3, EWO, CEMA, military information support operations officer, CA Officer, Space Officer, SOF LNO, SOF Integrator, G5, G6, SJA, operations research and systems analyst, Supporting / Supported LNOs, Subordinate echelon LNOs, DIVARTY / FAB LNO **Recommended Attendees:** G6, ENG, Protection Rep, PAO, Support Operations Officer

INPUTS / OUTPUTS	
Inputs: • CDR's Targeting Guidance / Resource Priorities • Running Estimates • Last targeting cycle BDA and Assessments • Enemy Event Template • Enemy Situation • Friendly Situation / Maneuver Plan • HPTL, NAIs, Target nominations	**Outputs:** • Refined/updated HPTL • Refined/updated NAIs • Proposed Information Collection Plan • Recommended Target Nominations • Recommended Resource Allocation

AGENDA	
• Roll Call • Current PIRs • Weather: 5-day forecast • ATO Crosswalk	**REVIEW / VALIDATE** • Review Targeting Guidance • ENY SITEMP updates • HPTL cross walk review / refinement • Intelligence Collection Matrix review and refinement • Target Sync Matrix review / refinement
ASSESS • Review Operational Timeline • Battle Damage Assessments • Tasks to Effect / Review • Decisions to be made	**APPROVAL** • ENY SITEMP assessment • Proposed HPTL cross walk • Proposed Intelligence Collection Matrix • Proposed Target nominations • Proposed Target Sync Matrix
EXECUTION • ENY SITEMP updates • HPTL cross walk review / refinement • Intelligence Collection Matrix review / refinement • Target Sync Matrix review / refinement	**GUIDANCE** • Proposed Targeting objectives • Proposed HPTL • Proposed Collection priorities • Proposed initial targeting effects requests

ALO – air liaison officer, AMD – air and missile defense, ATO – air tasking order, BDA – battle damage assessment, CA – civil affairs, CAB – combat aviation brigade, CDR – commander, CEMA – cyber electromagnetic activities, DIV – division, DIVARTY – division artillery, ENG – engineer, ENY – enemy, EWO – electromagnetic warfare officer, FAB – field artillery brigade, FAIO – field artillery intelligence officer, FSCOORD – fire support coordinator, FSO – fire support officer, G2 – assistant chief of staff, intelligence, G3 – assistant chief of staff, operations, G3 Air – aviation officer, G5 – assistant chief of staff, plans, G6 – assistant chief of staff, signal, G35 – future operations officer, G39 – information officer, HPTL – high payoff target list, IC – information collection, ITO – intelligence targeting officer, LNO – liaison officer, NAI – named area of interest, PAO – public affairs officer, PIR – priority intelligence requirements, POLAD – political advisor, Rep – representative, S3 – battalion or brigade operations staff officer, SITEMP – situation employment, SJA – staff judge advocate, SOF- special operations force, SOP – standard operating procedures, SWO – squadron weather officer, Sync – synchronization

Figure E-3. Battalion/Brigade targeting coordination board (example)

E-8. Figure E-4 provides the general information, participants, the agenda, and the inputs and outputs necessary to conduct a division/corps targeting coordination board.

GENERAL INFORMATION	PARTICIPANTS
Purpose: Receive approval for the prioritization of resources for recommended targets. Gain approval for the next targeting cycle and receive guidance for the following target cycle. **Frequency:** As needed **Duration:** As needed (≤ 60 minutes) **Location:** DIV / CORPS MAIN **Information / Refinement cut-off time:** Refer to Battle Rhythm and SOP	**Proponent:** Targeting Officer / FSCOORD **Chair:** CDR **Key Attendees:** COS, POLAD, FSCOORD, FSO, ALO, FAIO, G2, G2T, IC Manager, SWO, G3, G35, G3 Air, AMD, CAB LNO, G39, EWO, CEMA, military information support operations officer, CA, Space, SOF LNO, SOF Integrator, G5, G6, SJA, operations research and systems analyst, G4, Support Operations Officer, Supporting / Supported LNOs, Subordinate echelon LNOs, DIVARTY / FAB LNO **Recommended Attendees:** G6, ENG, Protection Rep, PAO, Support Operations Officer
INPUTS / OUTPUTS	
Inputs: • Assessments • Updates to Review / Validate	**Outputs:** • Approved Targeting Priorities • Approved asset allocation and resources • Approved Targeting Products (HPTL, TSS, AGM, TSM, and TLWS) • Seek Targeting Guidance
AGENDA	
• Roll Call • Current PIRs • Weather: 5-day forecast • ATO Crosswalk **ASSESS** • Review Operational Timeline • Battle Damage Assessments • Tasks to Effect / Review • Decisions to be made **EXECUTION** • ENY SITEMP updates • HPTL cross walk review / refinement • Intelligence Collection Matrix review / refinement • Target Sync Matrix review / refinement	**REVIEW / VALIDATE** • Review Targeting Guidance • ENY SITEMP updates • HPTL cross walk review / refinement • Intelligence Collection Matrix review and refinement • Target Sync Matrix review / refinement **APPROVAL** • ENY SITEMP assessment • Proposed HPTL cross walk • Proposed Intelligence Collection Matrix • Proposed Target nominations • Proposed Target Sync Matrix **GUIDANCE** • Proposed Targeting objectives • Proposed HPTL • Proposed Collection priorities • Proposed initial targeting effects requests
AGM – attack guidance matrix, ALO – air liaison officer, AMD – air and missile defense, ATO – air tasking order, CA – civil affairs, CAB – combat aviation brigade, CDR – commander, CEMA – cyber electromagnetic activities, COS – chief of staff, DIV – division, DIVARTY – division artillery, ENG – engineer, ENY – enemy, EWO – electromagnetic warfare officer, FAB – field artillery brigade, FAIO – field artillery intelligence officer, FSCOORD – fire support coordinator, FSO – fire support officer, G2 – assistant chief of staff, intelligence, G2T – intelligence targeting, G3 – assistant chief of staff, operations, G3 Air – aviation officer, G4 – assistant chief of staff, logistics, G5 – assistant chief of staff, plans, G6 – assistant chief of staff, signal, G35 – future operations officer, G39 – information officer, HPTL – high payoff target list, IC – information collection, LNO – liaison officer, PAO – public affairs officer, PIR – priority intelligence requirements, POLAD – political advisor, Rep – representative, SITEMP – situation employment, SJA – staff judge advocate, SOF- special operations force, SOP – standard operating procedures, SWO – squadron weather officer, Sync – synchronization, TLWS – target list work sheet, TSM – target synchronization matrix, TSS – target selection standards	

Figure E-4. Division/Corps targeting coordination board (example)

OVERVIEW

E-9. The targeting coordination board is a director level venue chaired by the commander or delegated authority and meets as required in accordance with the corps battle rhythm. Targeting coordination board responsibilities:

- Review operational-level targeting, assessment, and progress towards the commander's objectives.

- Approve targeting priorities, effects, and targets for inclusion on the NSL, RTL/JTL, and HPTL.
- Review and ensure targeting efforts are synchronized with ground scheme of maneuver.
- Approve allocation and priority of resources (collection and delivery) in support of targeting.
- Provide the commander's targeting guidance, priority of effort, priorities for dynamic targeting.

E-10. Figure E-5 through figure E-30 on pages E-11 through E-34 provide a visual example of a possible targeting coordination board.

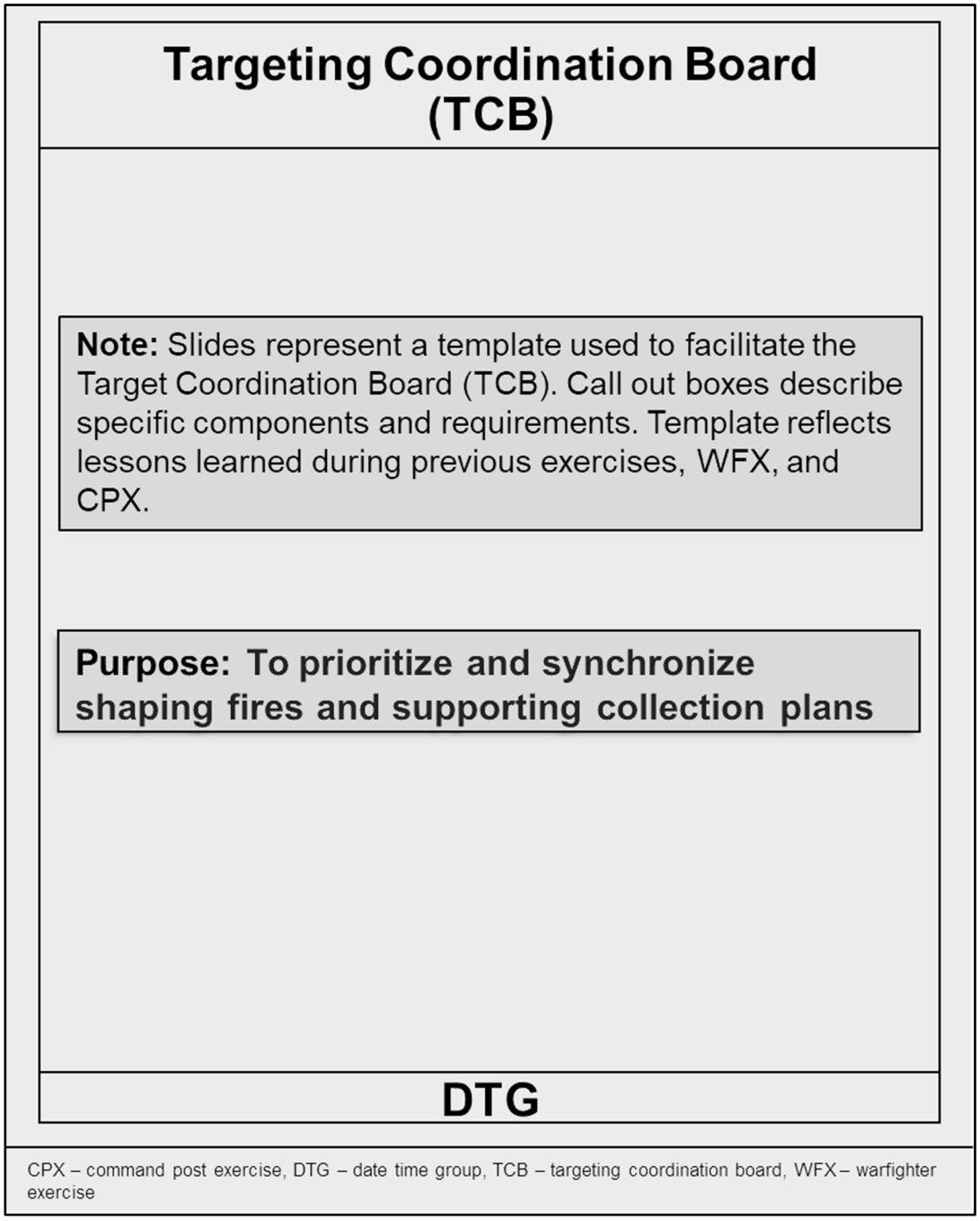

Figure E-5. Targeting coordination board slide 1

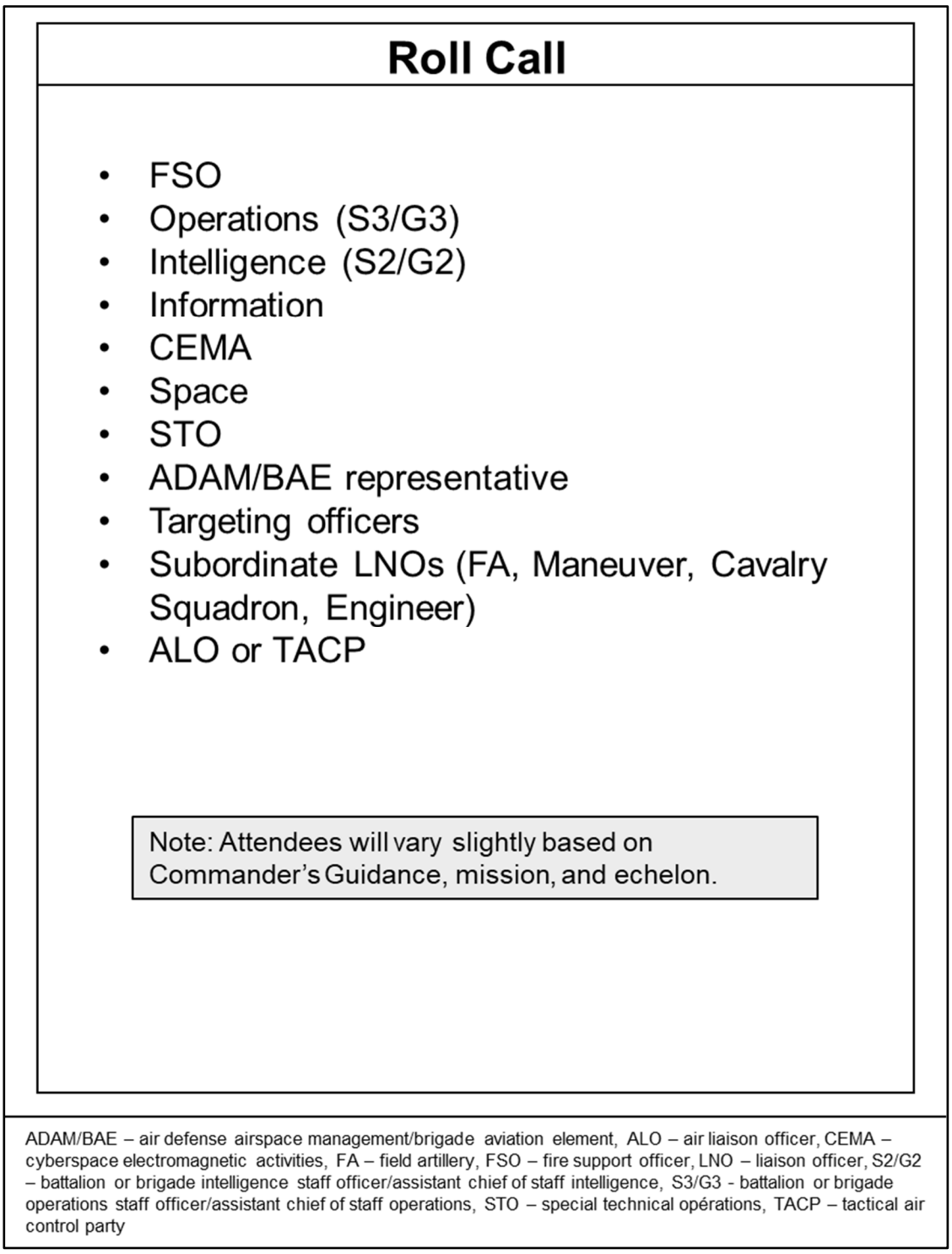

Figure E-6. Targeting coordination board slide 2 (Roll Call)

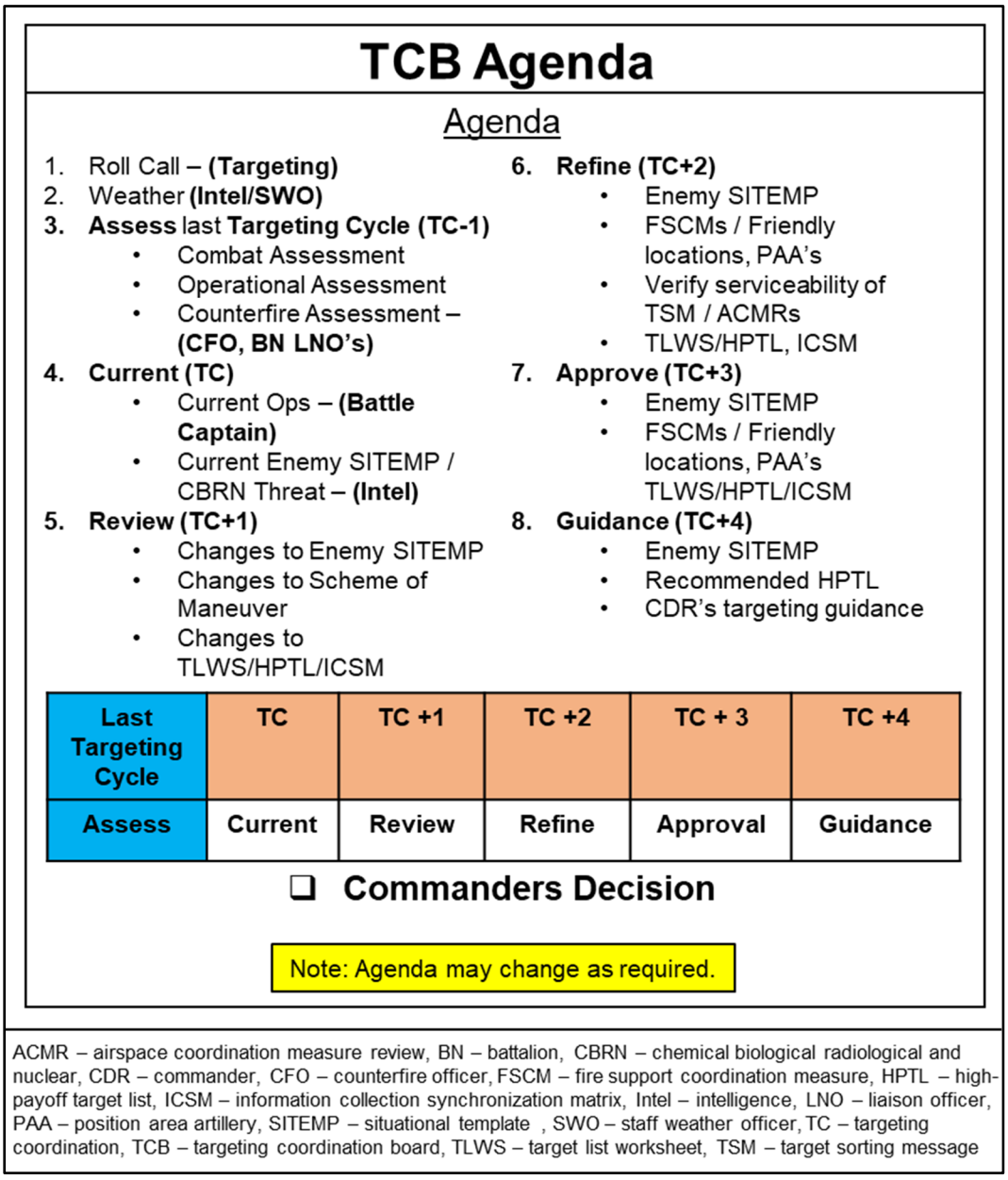

Figure E-7. Targeting coordination board slide 3 (Agenda)

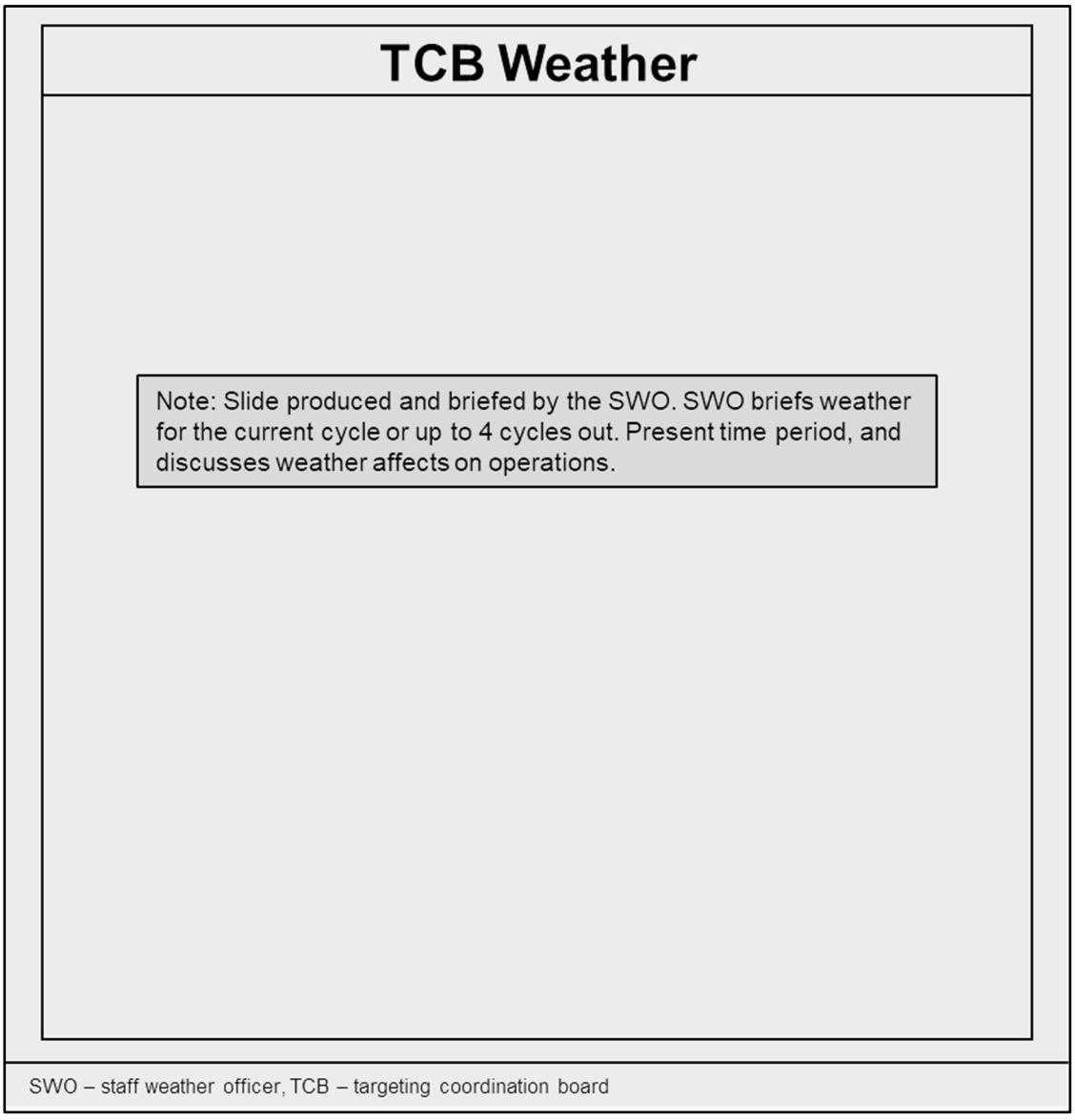

Figure E-8. Targeting coordination board slide 4 (Weather)

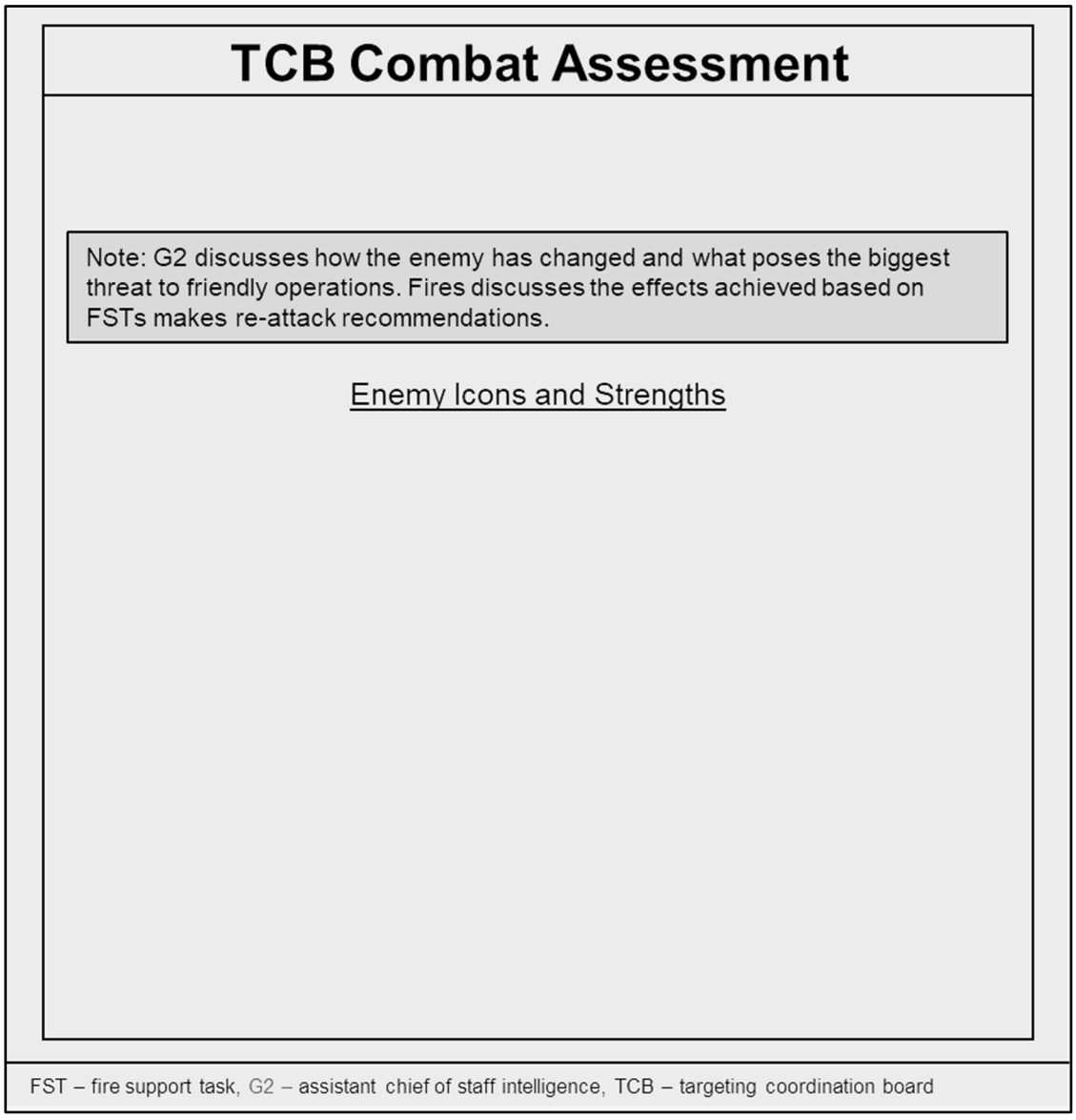

Figure E-9. Targeting coordination board slide 5 (Combat Assessment)

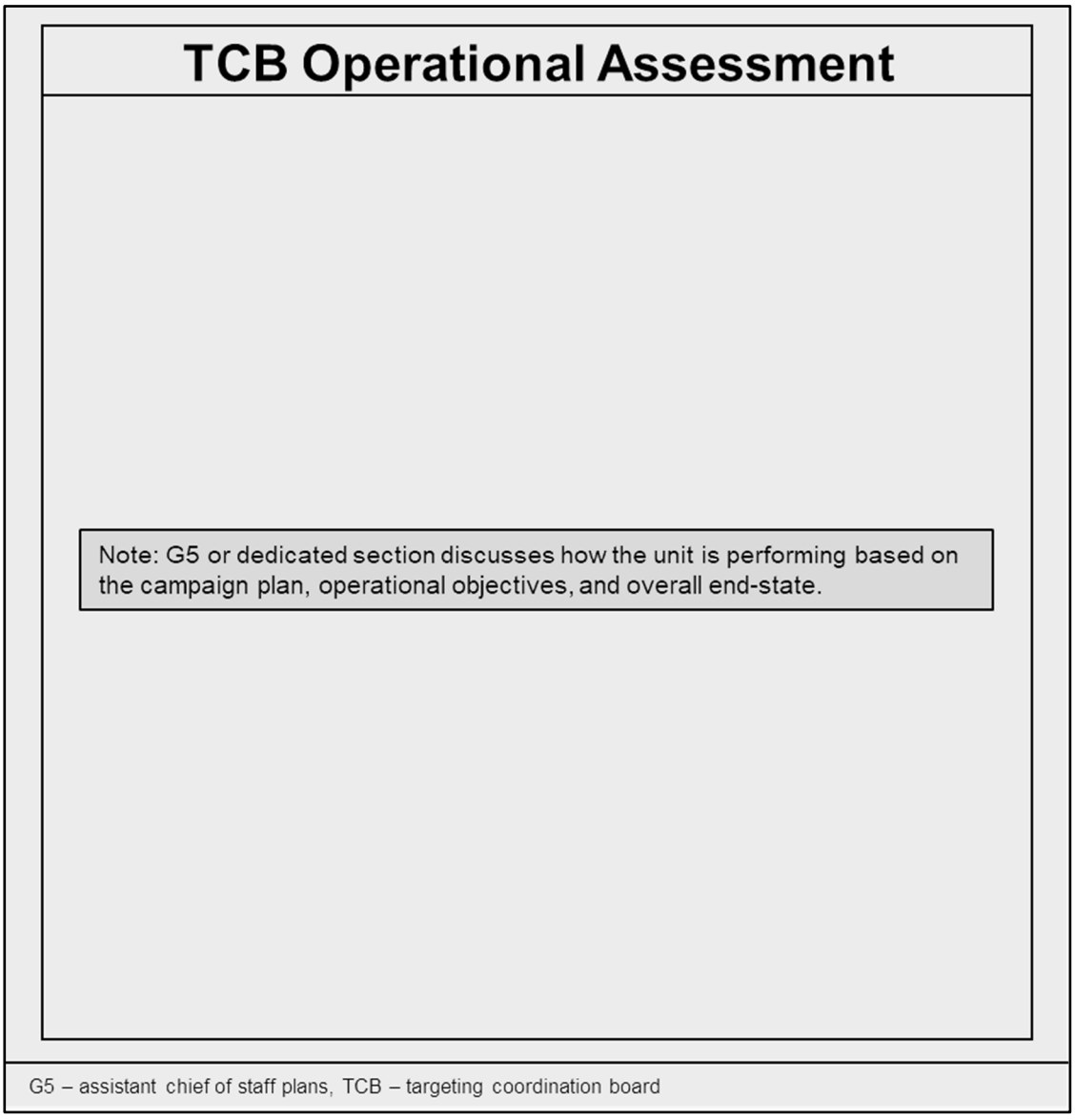

Figure E-10. Targeting coordination board slide 6 (Operational Assessment)

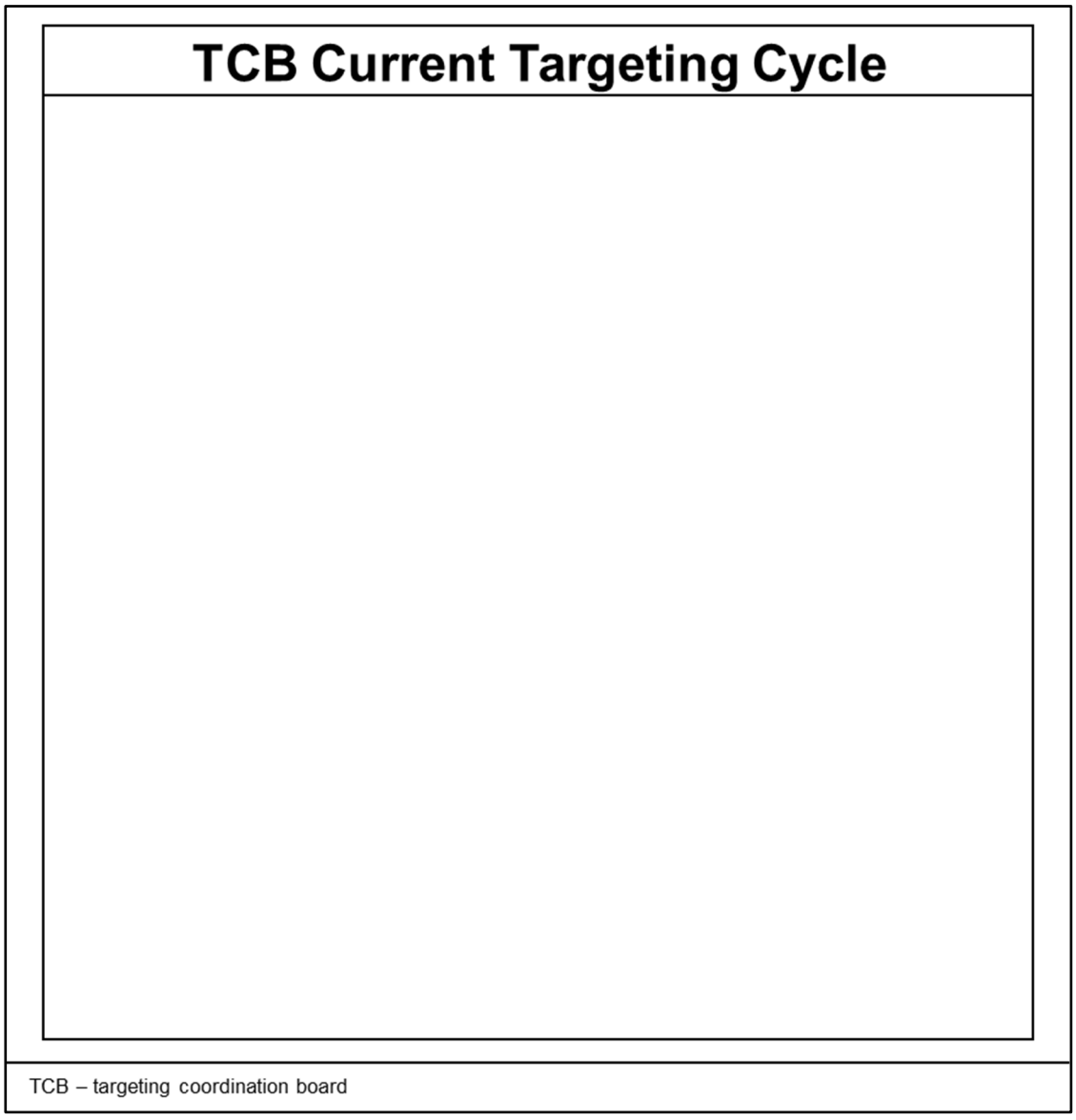

Figure E-11. Targeting coordination board slide 7 (Current Targeting Cycle)

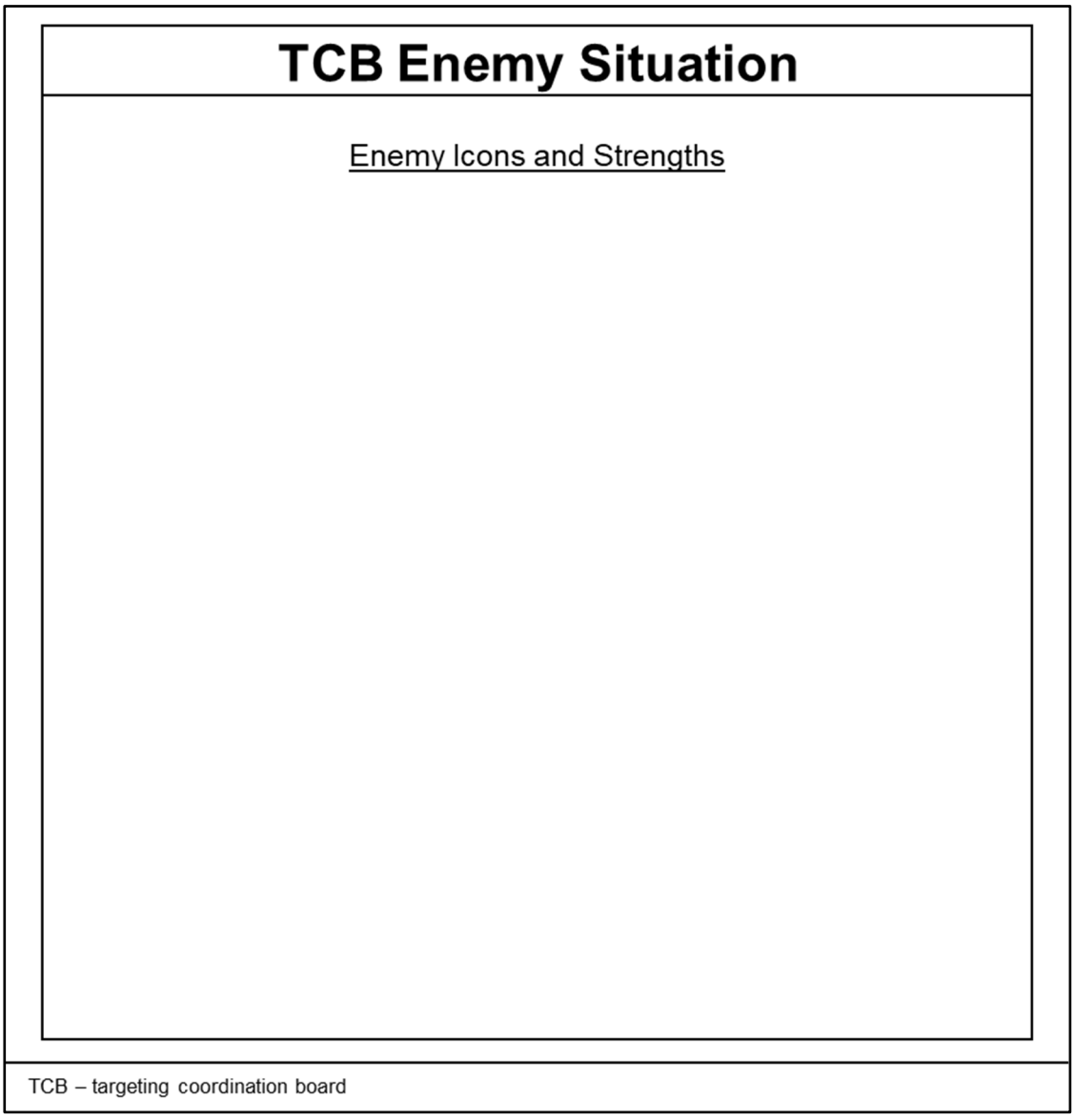

Figure E-12. Targeting coordination board slide 8 (Enemy Situation)

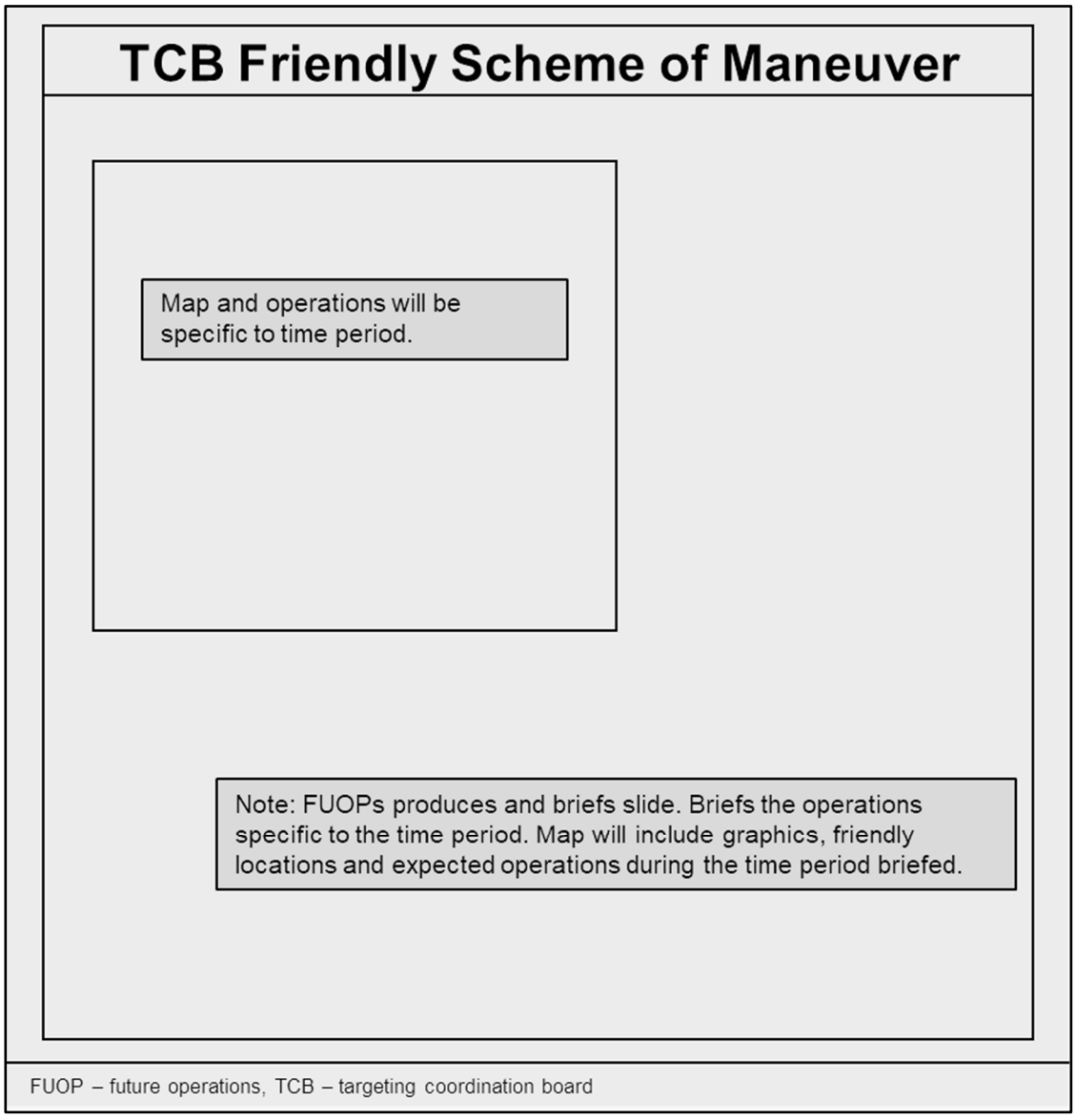

Figure E-13. Targeting coordination board slide 9 (Friendly Scheme of Maneuver)

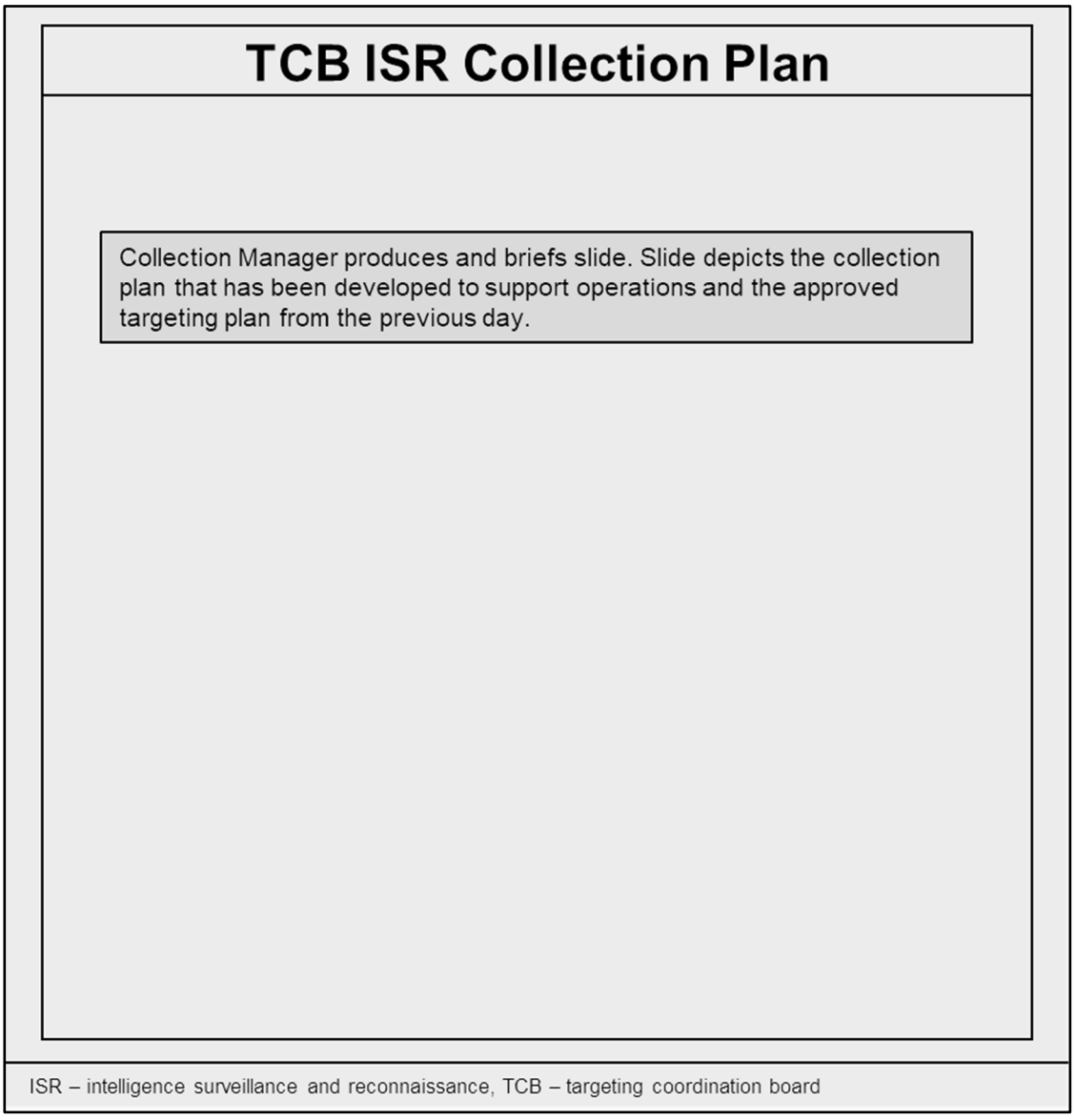

Figure E-14. Targeting coordination board slide 10 (Information Collection Plan)

Figure E-15. Targeting coordination board slide 11 (Review TC + 1)

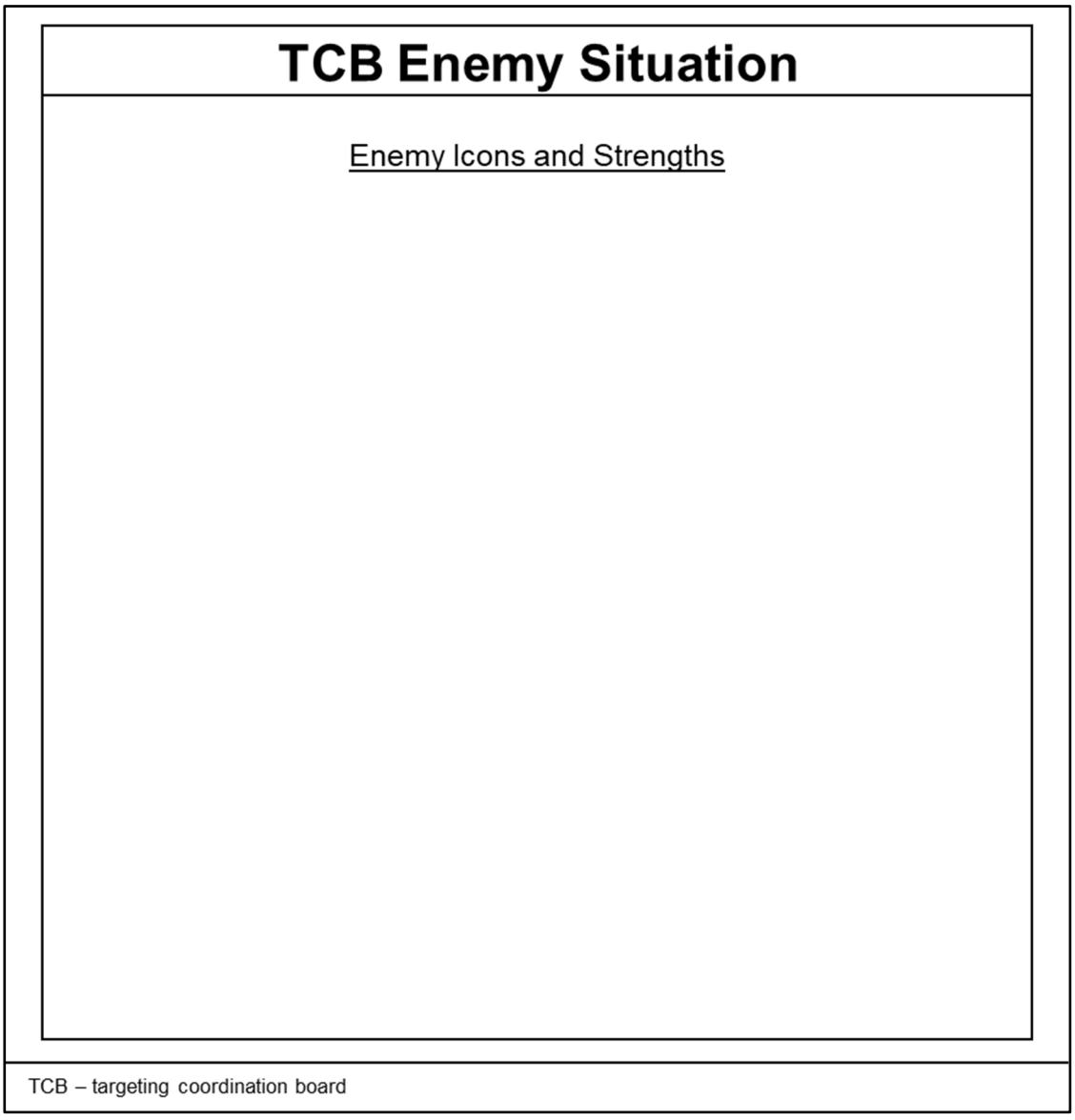

Figure E-16. Targeting coordination board slide 12 (Enemy Situation)

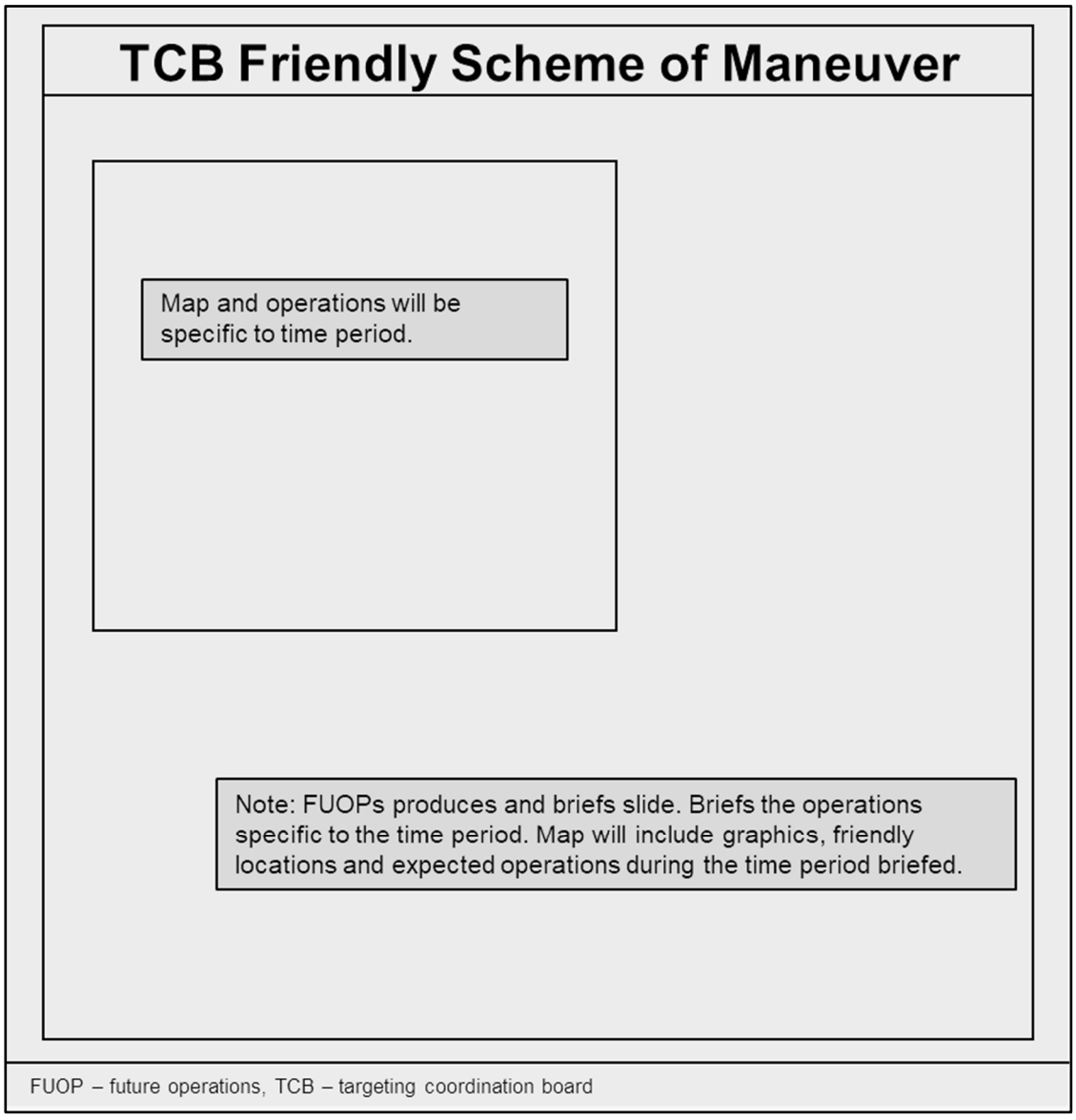

Figure E-17. Targeting coordination board slide 13 (Friendly Scheme of Maneuver)

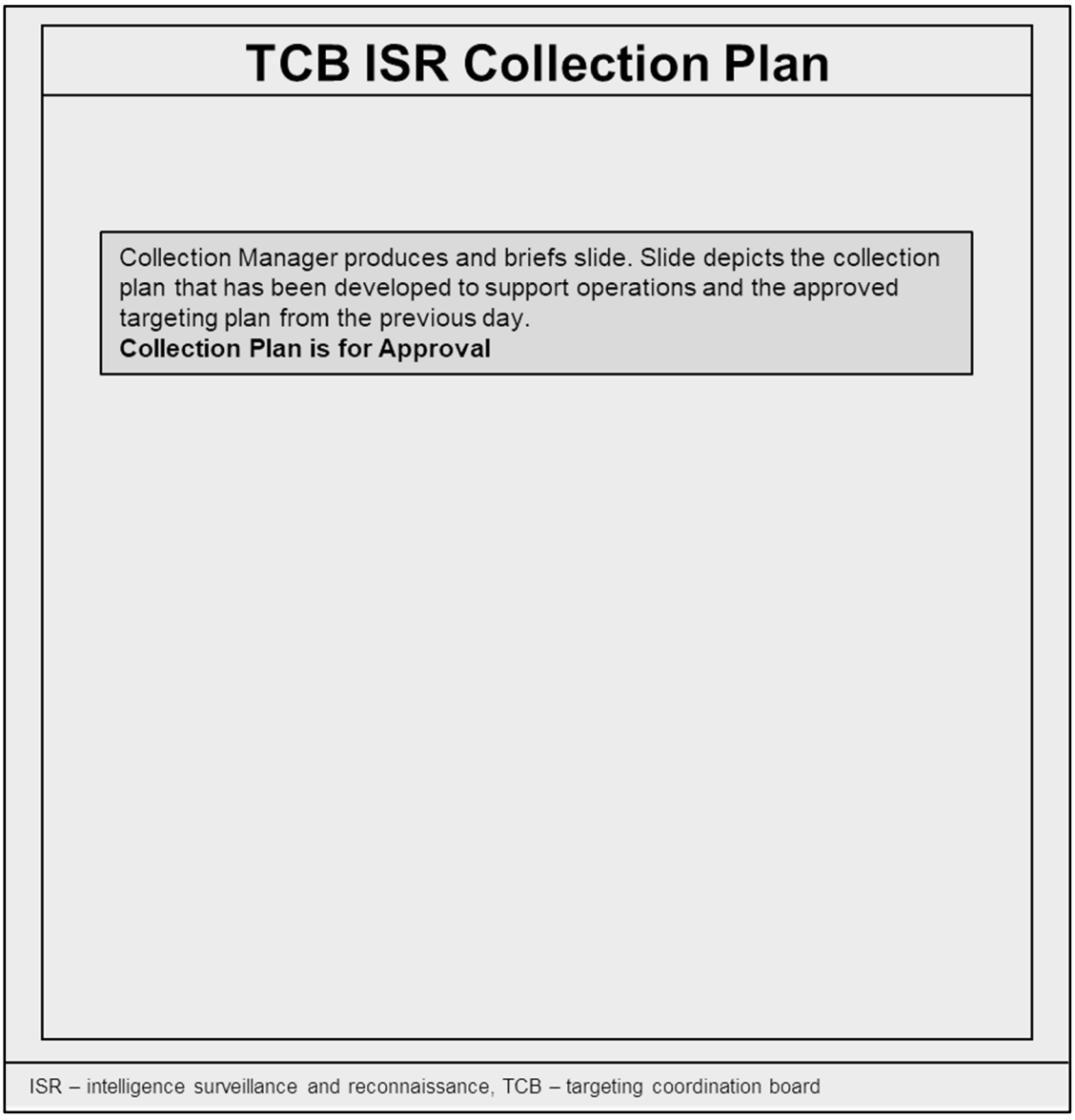

Figure E-18. Targeting coordination board slide 14 (Information Collection Plan)

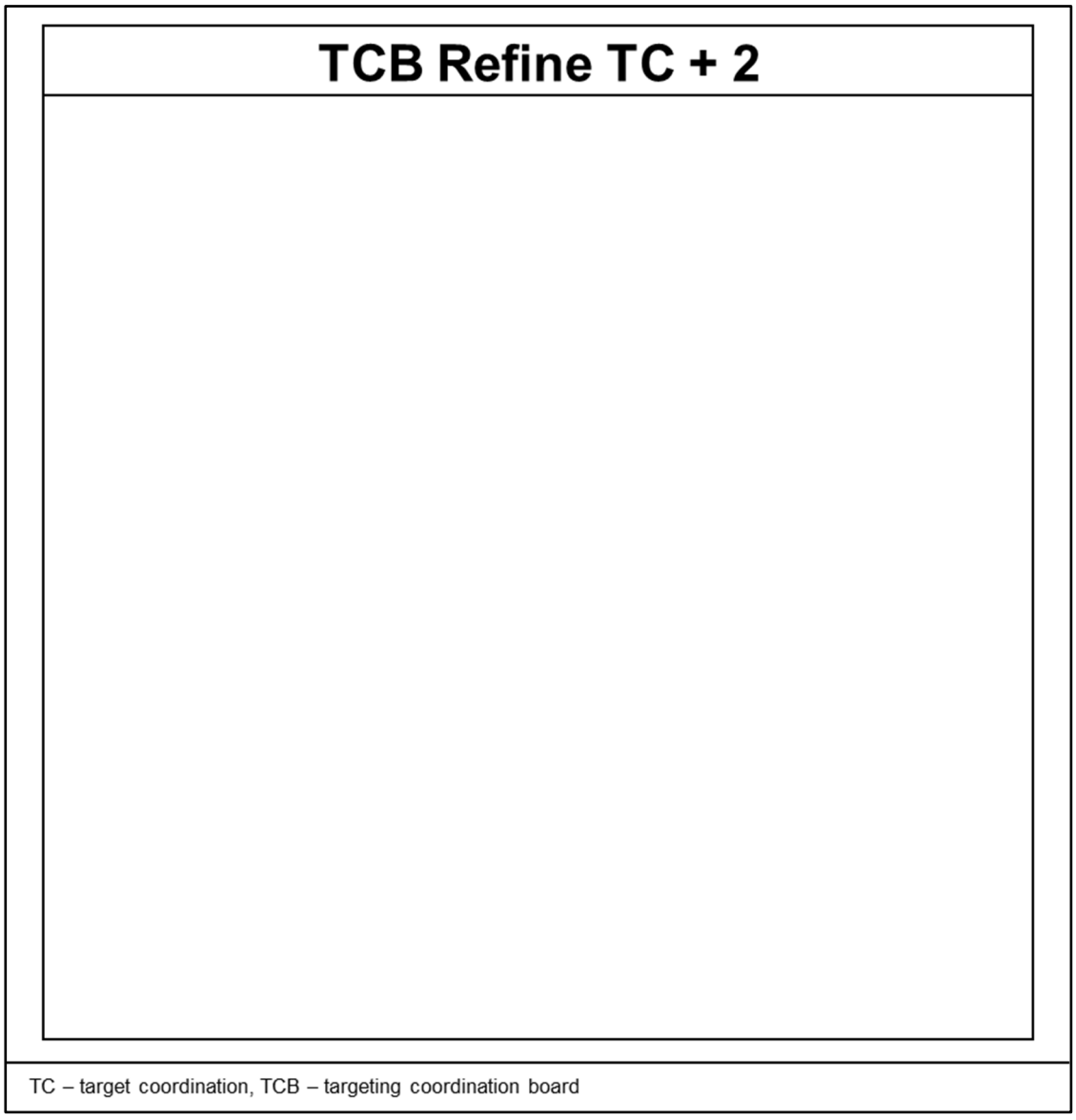

Figure E-19. Targeting coordination board slide 15 (Refine TC + 2)

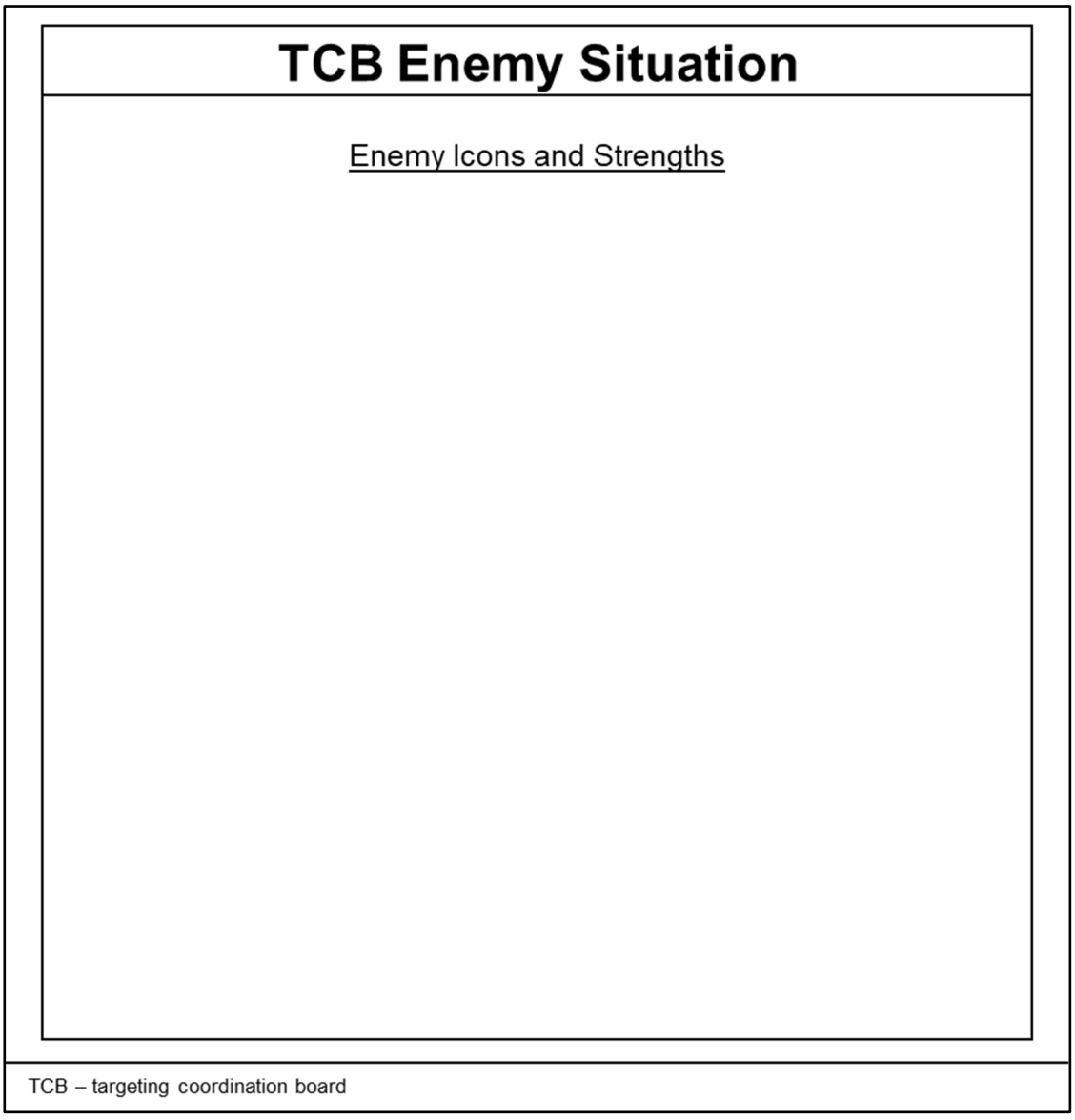

Figure E-20. Targeting coordination board slide 16 (Enemy Situation)

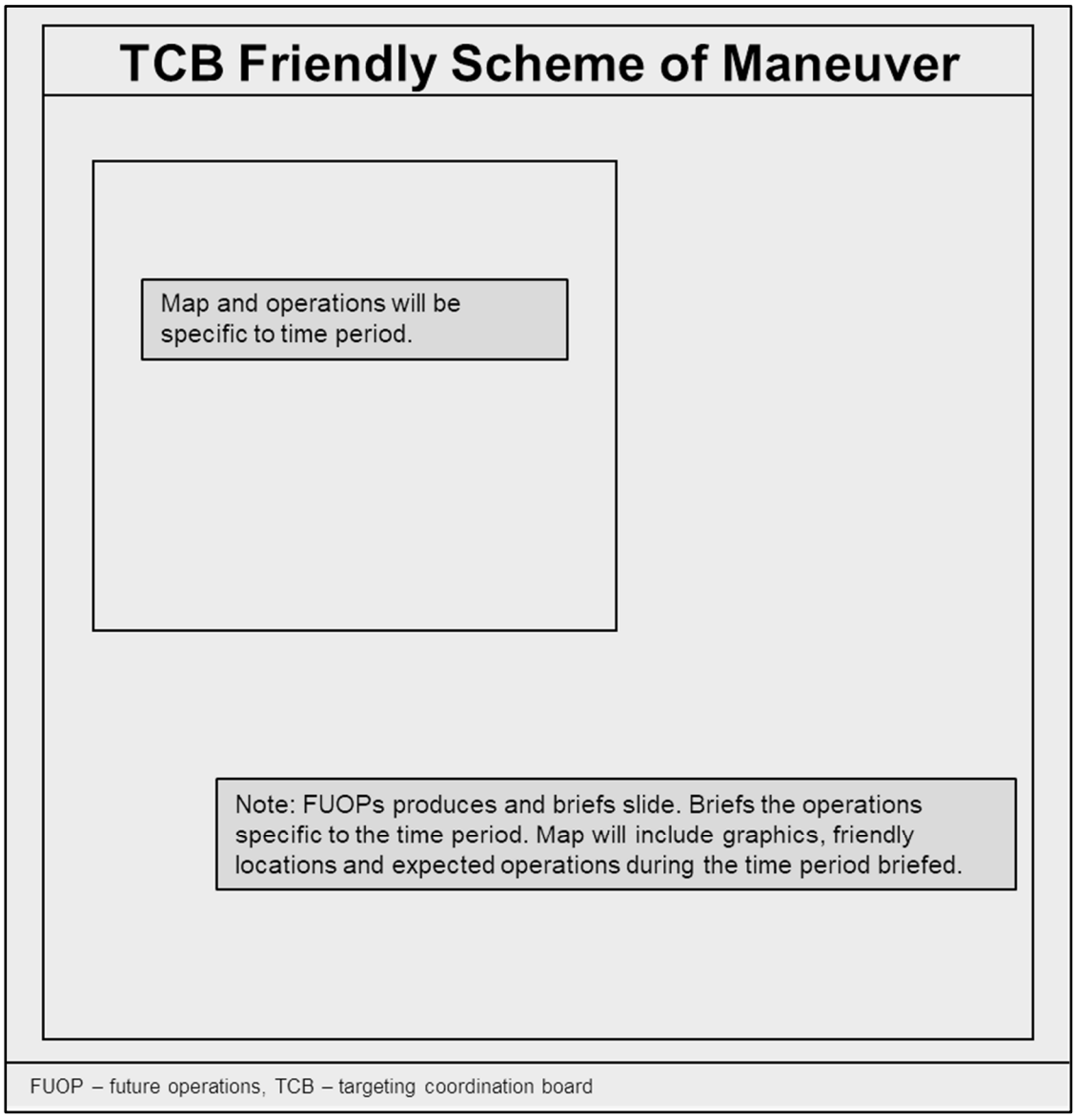

Figure E-21. Targeting coordination board slide 17 (Friendly Scheme of Maneuver)

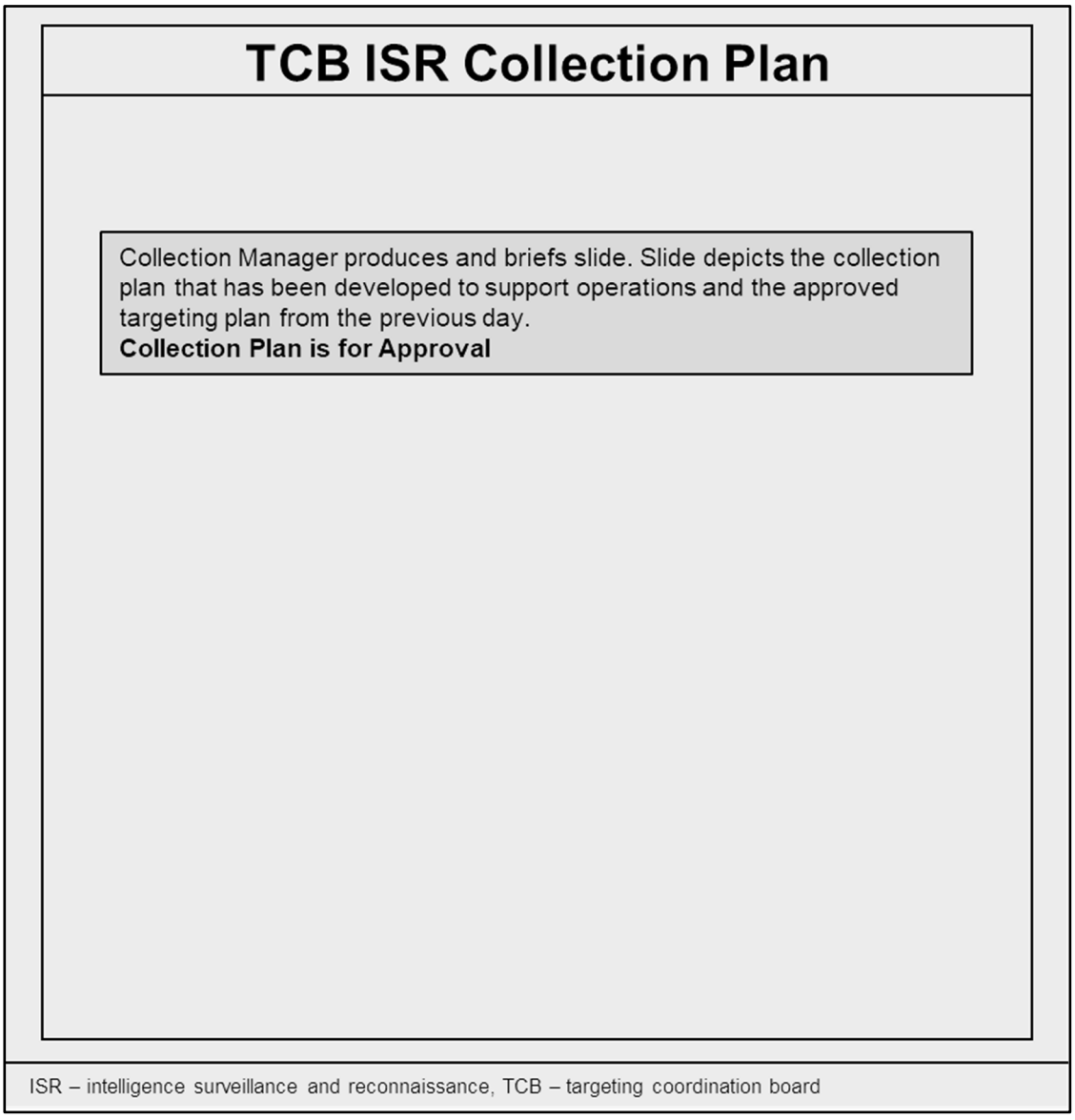

Figure E-22. Targeting coordination board slide 18 (Information Collection Plan)

Figure E-23. Targeting coordination board slide 19 (Approve TC + 3)

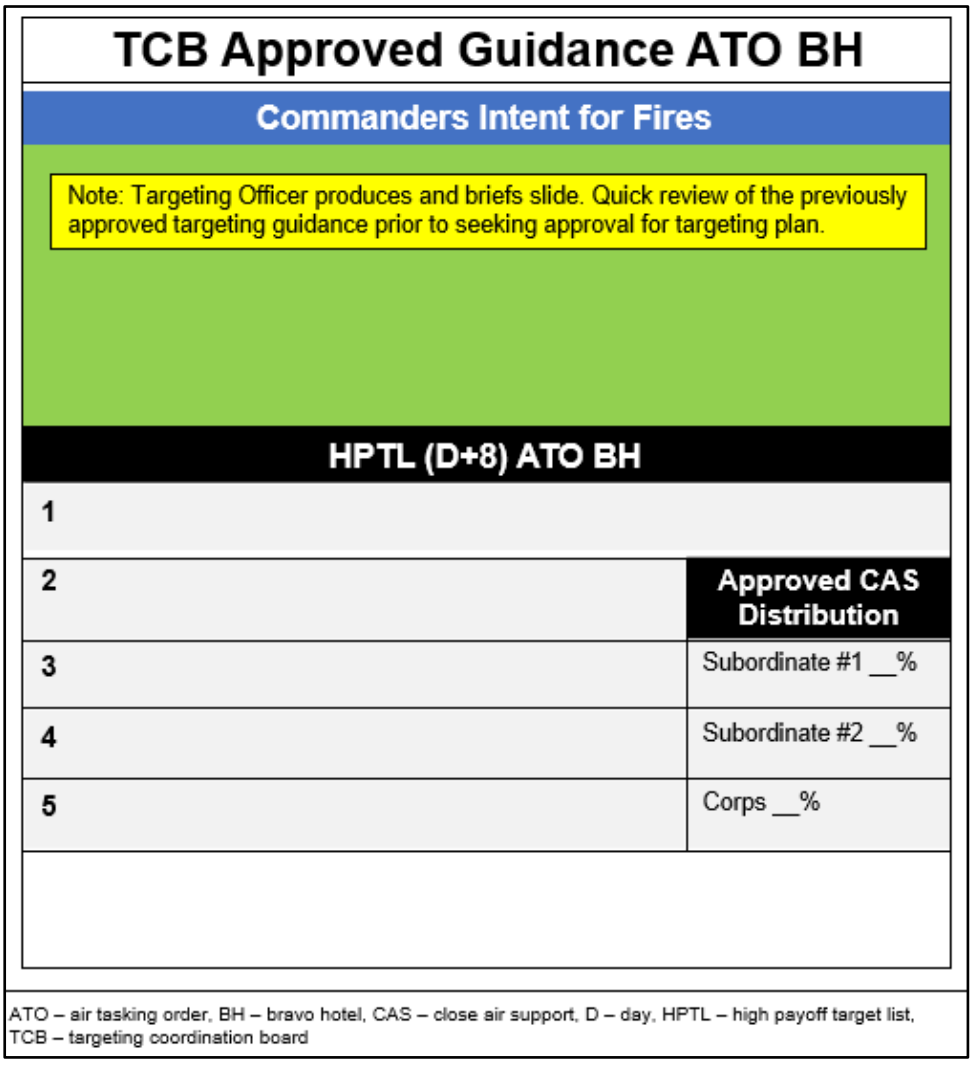

Figure E-24. Targeting coordination board slide 20 (Approved Targeting Guidance ATO BH)

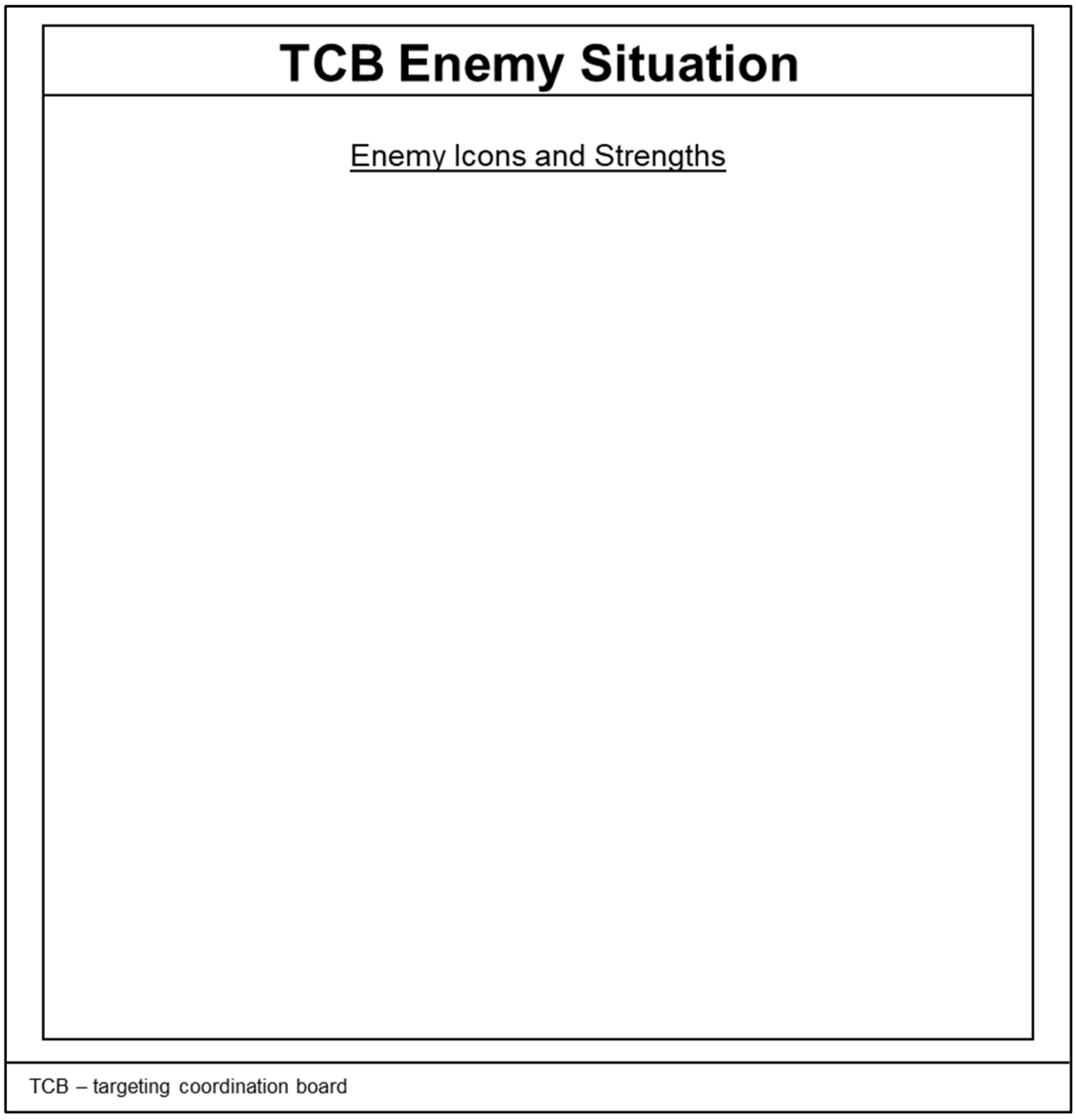

Figure E-25. Targeting coordination board slide 21 (Enemy Situation)

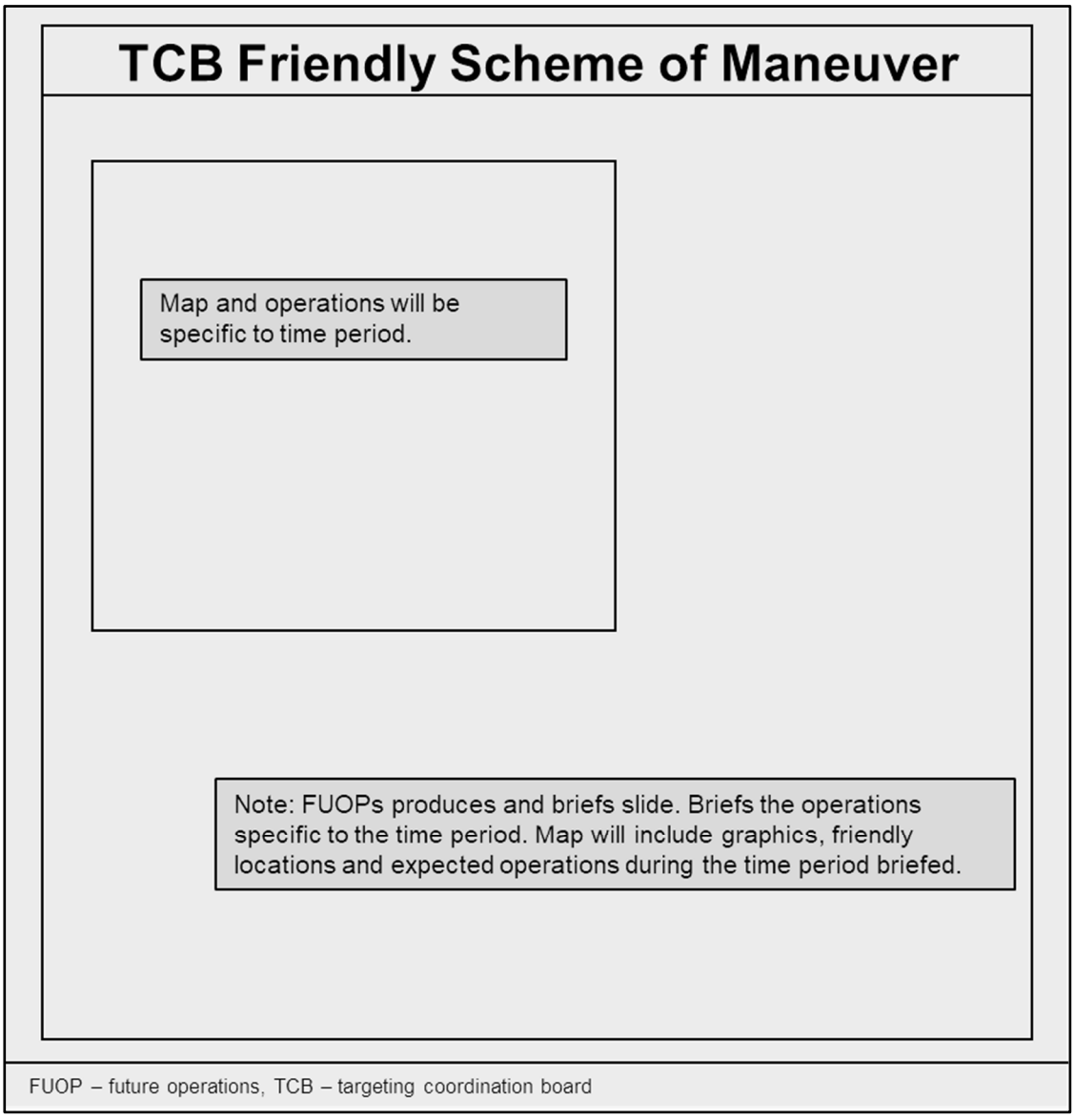

Figure E-26. Targeting coordination board slide 22 (Friendly Scheme of Maneuver)

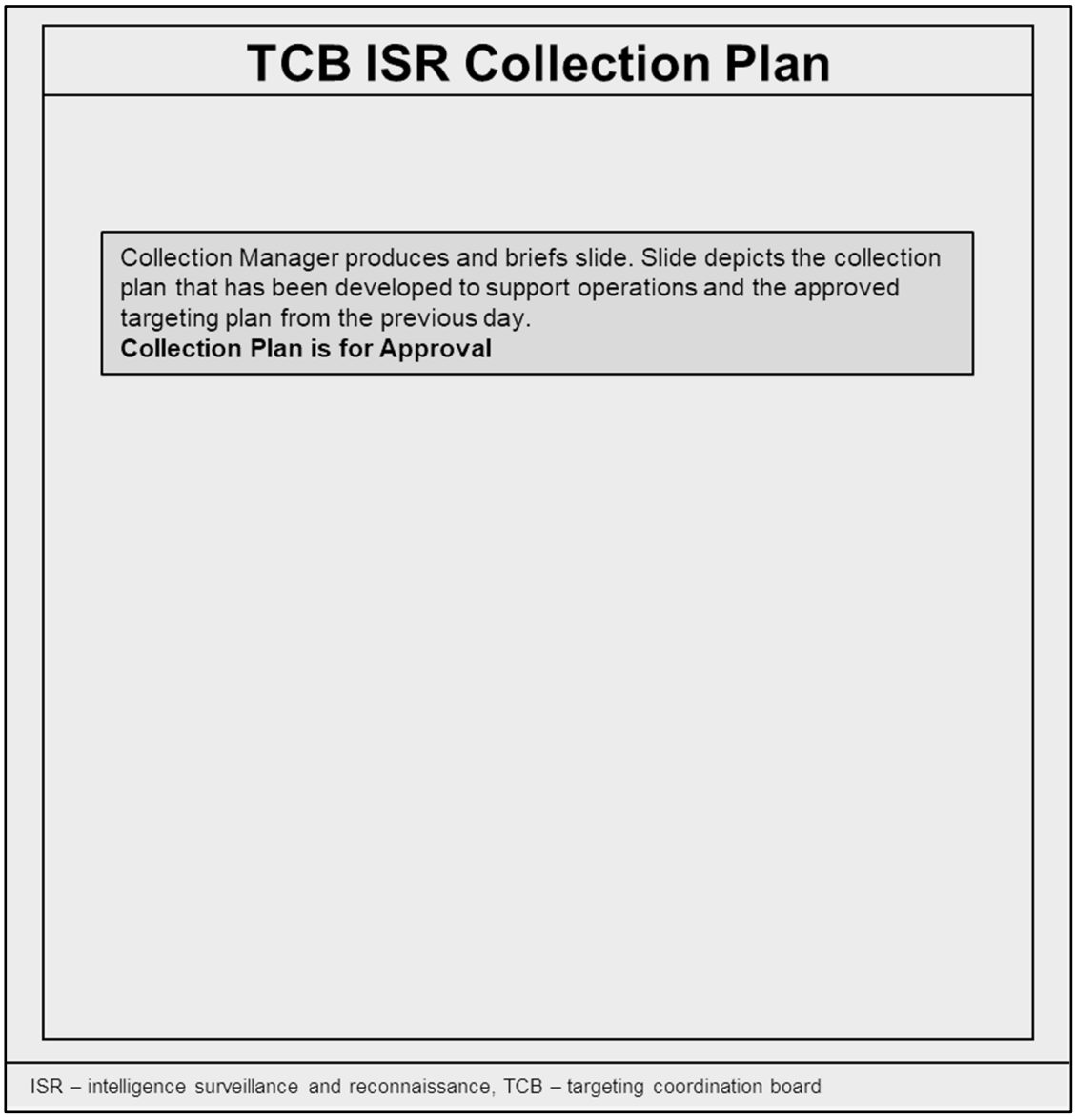

Figure E-27. Targeting coordination board slide 23 (Information Collection Plan)

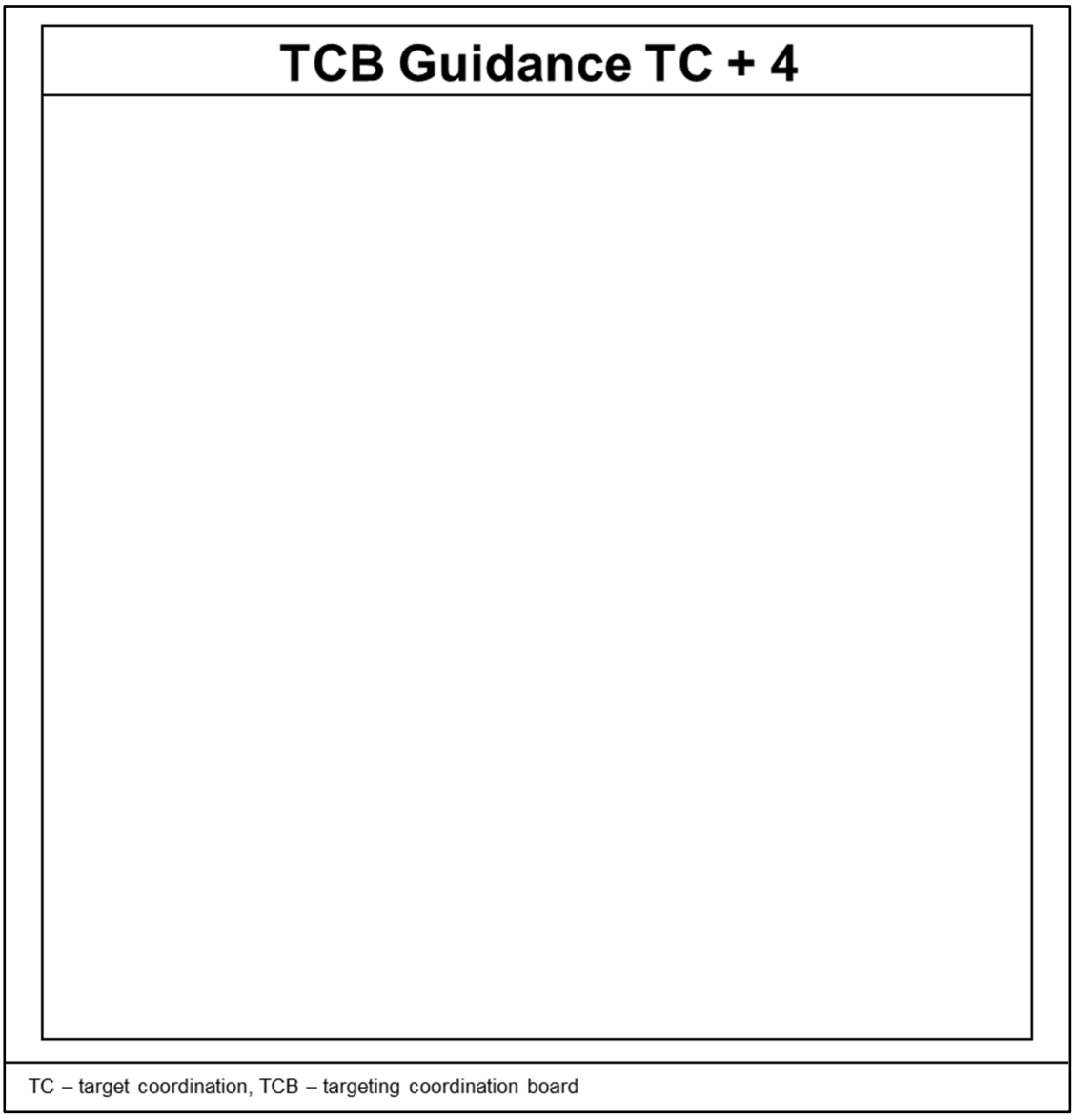

Figure E-28. Targeting coordination board slide 24 (Guidance TC + 4)

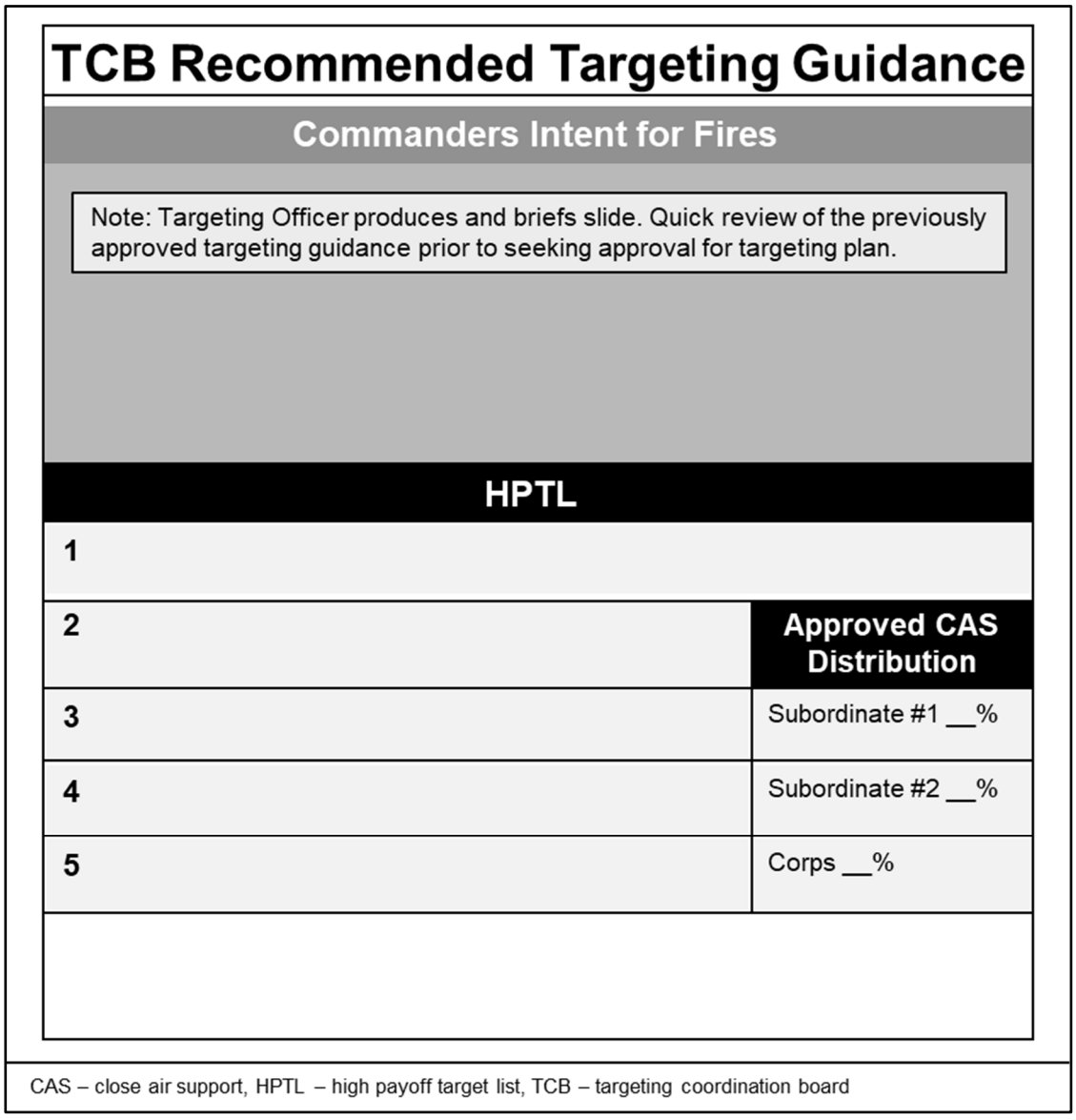

Figure E-29. Targeting coordination board slide 25 (Recommended Targeting Guidance)

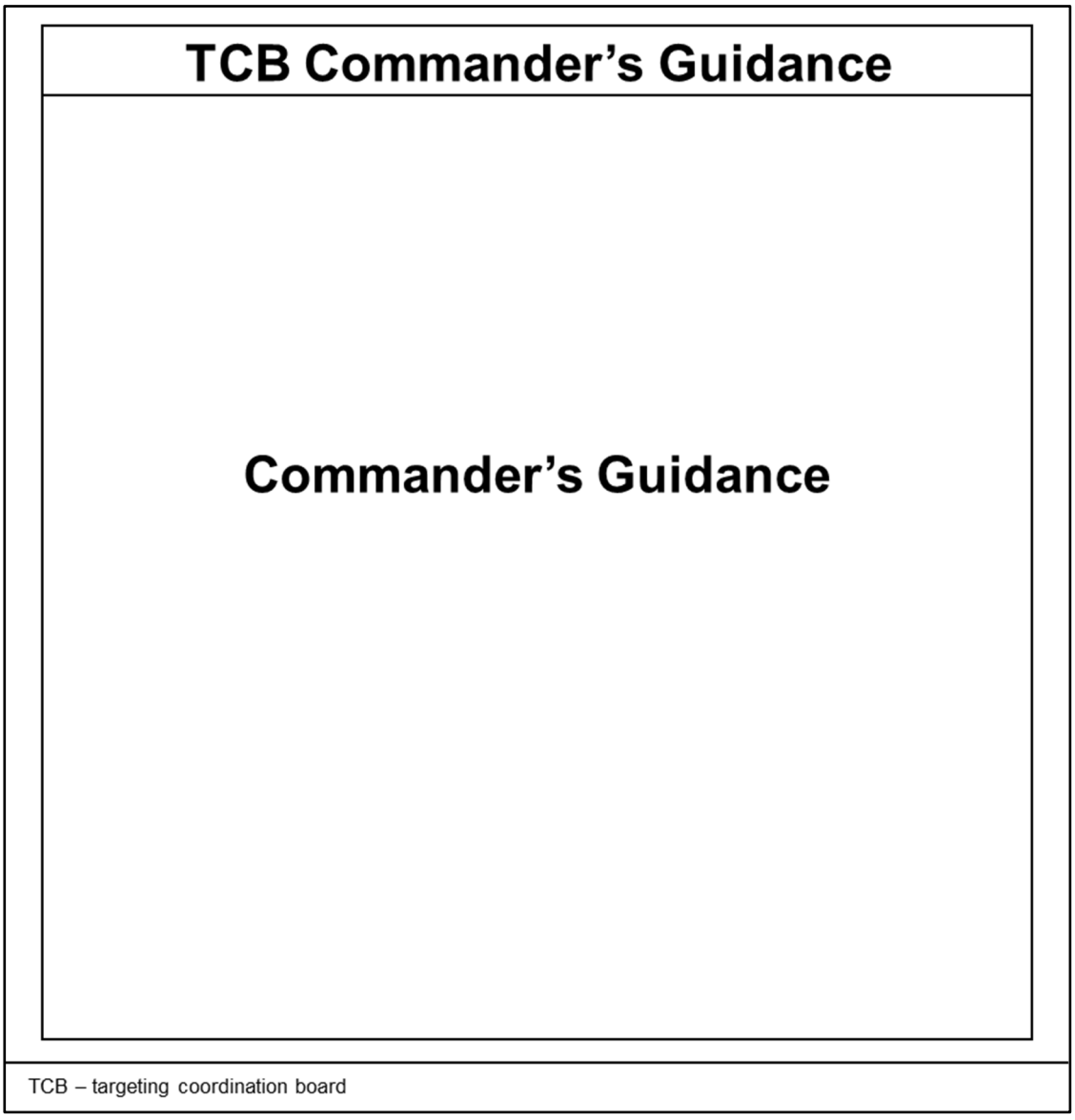

Figure E-30. Targeting coordination board slide 26 (Commanders Guidance)

ASSESSMENT WORKING GROUP

E-11. The assessment working group is the battle rhythm event that allows staffs to formally assess changes in the operational environment and determine if effects are achieving operational objectives. After operations and target execution have begun, it is imperative the assessment working group meets before the targeting working group for the upcoming targeting cycle. This ensures the targeting team is armed with the most up to date assessment of the operational environment and understands the progress toward operational objectives. Assessment is a key step in Army and Joint targeting methodologies and thus makes the assessment working group and targeting meetings inextricably linked in the battle rhythm. Targeting team members must participate in the assessment working group as subject matter experts in the application and assessment of their respective effects on the operational environment. Targeting specific related inputs to the assessment working group can include the following:

- Current assessment of enemy composition and disposition.
- Assessment of intelligence collection operations during the assessed targeting cycle.

- All portions of the combat assessment from the assessed targeting cycle.
- Relevant Intelligence Analysis of effects created during the assessed targeting cycle that may not have resulted in measurable BDA.
- All Warfighting functions must provide an assessment of their planned and executed effects for the assessed targeting cycle. At a minimum if time is constrained the assessment should include:
  - Fires
  - Maneuver
  - Intelligence
  - Sustainment
- Supporting organizations must provide an assessment of their planned and executed effects for the assessed targeting cycle. Table E-1. is an example assessment working group agenda as displayed in FM 6-0. The assessment working group is executed in accordance with the organizational battle rhythm. For more information of assessment working groups and their execution see FM 6-0 or ATP 5-0.3.

Table E-1. Assessment working group agenda (example)

General Information	*Participants*
Title: Assessment working group. **Purpose:** Assess progress of operations toward the mid- to long-range planning horizons. **Frequency:** Weekly (IAW Organizational Battle Rhythm to match targeting cycle). **Duration:** Two hours. **Location:** Plans cell. **Medium:** Face-to-face, defense collaboration services.	**Staff lead:** G-5. **Chair:** Chief of staff. **Members:** Coordinating, special, and personal staff representatives; liaison officers; and others as required.
Inputs and Outputs	***Agenda (Responsibly Party)***
Inputs: • Assessment plan. • Higher echelon, subordinate, and unified action partner assessments. • Running estimates. **Outputs:** • Updated assessment products. • Recommended adjustments to the assessment and information collection plans. • Assessment reports to higher headquarters.	• Roll call (G-5). • Plan review (G-5). • Subordinate unit's assessments (G-5, LNOs). • Unified action partner assessments (G-5, LNOs). • Assessment discussions (staff leads). • Assessment summary (G-5). • Guidance (chief of staff).
G-5 assistant chief of staff, plans IAW in accordance with LNO liaison officer	

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Appendix F

Example Target Information Folder

The Army targeting methodology does not have a prescribed target packet format or requirements unlike the joint targeting standards. Nevertheless, in order to database, sort, and share the targets developed through D3A, a digital format must be established by SOPs and Commander's guidance and built on specific information points. This appendix will display an example format and content to be completed. This example is meant to support all target types but does not represent any prescribed requirements.

TARGET PACKETS

F-1. Targeting often requires that targets be in a shareable format. Whether in a joint or Army role, targeting teams must maintain the ability to save progress, share, or database targets during the development process to satisfy validation requirements. In an Army role, the presentation of a target is entirely unit and SOP based. The method, format, and content in which to build a target packet is typically driven by the commander's requirements, FSCOORD and targeting officer's guidance, and intelligence capabilities at echelon.

F-2. In a joint role, CJCSI 3370.01D establishes the target development standards that must be met to present an electronic target folder to a validation authority.

EXAMPLE TARGET INFORMATION FOLDER

F-3. Target information folders (TIF) have proven to be an efficient and effective way of tracking information related to targets that require more than a cursory recommendation. The TIF typically contains three primary sections of data, they are listed and described below.

F-4. The first section is the administrative data located at the top of every page of the TIF. The administrative data contains the following data fields:

- Target System or HPTL category- Depending typically on the guidance from the commander, FSCOORD, or unit SOP, the targeting team will track targets by the systems, warfighting functions, or HPTL items they are attempting to affect.
- Supported Operation- This will delineate which phase, critical event, or operation this target is supporting.
- Date of Information (referred to as DOI) - This specifies the latest date of intelligence supporting this target.
- Basic Encyclopedia (BE), Counter-Terror Identification (CTID), Unique Identification (UID), Target Number- Depending on the target type or how the target is defined will determine the BE/CTID/UID/ Target Number. Any target being nominated to the joint level must have a BE, CTID, or UID. Targets at the tactical army level should be assigned a target number. These target numbers are unit or SOP based.
- Location/ Military Grid Reference System (referred to as MGRS) - Typically in MGRS coordinate form that can provide a horizontal accuracy sufficient to make the target geospatially distinct from any other target in the surrounding area. In some cases, a common name is added to the location data field to further identify the target within an AO. For example, if a target is within a geographic area without civil identification such as city, village, or town name.
- Targeting Tasks or Objectives- This data field provides the operational linkage to the target. Not to be confused with supported operation, this field identifies the specific operational effort that will be aided in creating the desired effects against this target.

F-5. The second section of the TIF contains the essential target information. The essential target information includes how the target functions, supports the target system, and its description, among other relevant categories that aid a validation authority in determining the validity of a target. Essential target information typically includes:

- Target Significance- A target significance statement should address target affiliation and importance to the threat's target system(s) or the capability it provides to the threat ("This target is important to the system because. . ." or "This target provides the threat with the capability to. . ."). It should neither state nor re-state the targets' function, functional characterization, or expectation statement, nor should it be a continuation of the target. Rather, it should relay the target's value given its identified function(s) and relationship to the system and threat.
- Target Description- Aids in identifying and characterizing the target and differentiating the target from similar or collocated potential targets. The distinguishing features used for the target do not necessarily support the target's function; rather, this remark uniquely characterizes the target from other potential targets. Target description statements vary by target type and consist of physical descriptions, unique aspects, and/or patterns of life sufficient to identify and distinguish the target from similar or collocated targets.
- Functional Characterization- Functional characterization must define the specific actions or activities that the target accomplishes, or the capabilities it provides to the target system. Many targets have multiple functions (especially individuals), and there is utility in considering more than just its primary function. The functional characterization statement provides the space and flexibility to describe multiple secondary functions that fall under a single, primary function. The functional characterization should reflect when a facility type target is a dual-use facility. Clearly identify in the functional characterization statement the primary functions representing both the civilian and military functions of a dual-use facility.
- Expectation Statement- The focus of the target expectation statement is not the target itself, but the affect(s) on the target system and threat capability with which it is associated. The target expectation statement should address the following questions:
  - (1) How will neutralizing the target's function affect the target system or threat capability (such as, minimal, moderate, or significant operational or psychological impact)?
  - (2) What is the estimated degree of impact on the target system (such as, short, medium, or long-term effect)?
  - (3) What is the functional recuperation time estimate for the target if the target's function is neutralized?
  - (4) What distinct short/long-term military or political advantage/disadvantage to the joint force do we expect if the target's function is neutralized, delayed, disrupted, or degraded?
  - (5) What is the expected threat reaction to loss or degradation of the target's function(s)?
  - Intelligence Gain Loss Statement- Describes potential intelligence gains or losses resulting from affecting the target. Descriptions of the type of intelligence gained, the intelligence value, any known or potential mitigation techniques, the anticipated significance of the loss or preservation of the intelligence, and an engagement recommendation.

F-6. This is by no means an all-inclusive list. Aspects such as commander's guidance, unit SOPs, or mission may affect the specific essential target information captured in a TIF. Concerns are one form of additional information that can be included in this section of a TIF. They can include collateral concerns derived from collateral damage estimation, law of armed conflict concerns derived from the assessment of a target potentially being used for military or civilian purposes, or political concerns derived from the potential ramifications of effecting a target tied to political individuals or organizations.

F-7. The last section of the TIF is the supporting intelligence. Supporting intelligence is the intelligence supporting the statements made about the target in the essential target information section. In the example TIF, supporting intelligence is listed in two ways and two locations. The first is in the data block on the first page of the TIF. This is intended to list the total number of intelligence reports supporting this TIF, by intelligence discipline if capable. The second method and location for listing supporting intelligence is through subsequent pages of the TIF, and in as many additional pages as necessary. Preferably by intelligence discipline, intelligence reports are listed with report number, classification, and brief description of report.

For human intelligence, a source validation statement is recommended for each report. The supporting intelligence section can also include information outside of typical intelligence disciplines such as weapons locating radar analysis, biometrics, or operational reporting. At the end of the supporting intelligence an assessment or summary can be used to describe the target to a validation authority in the event the target can't be briefed either in-person or electronically.

F-8. Figures F-1 and figure F-2 on page F-3 are graphic examples of the TIF. Figure F-1 is the first page and is often referred to as a baseball card. Figure F-2 is an example supporting intelligence page.

Note. Target information folders (TIFs) become classified when actual data is filled in.

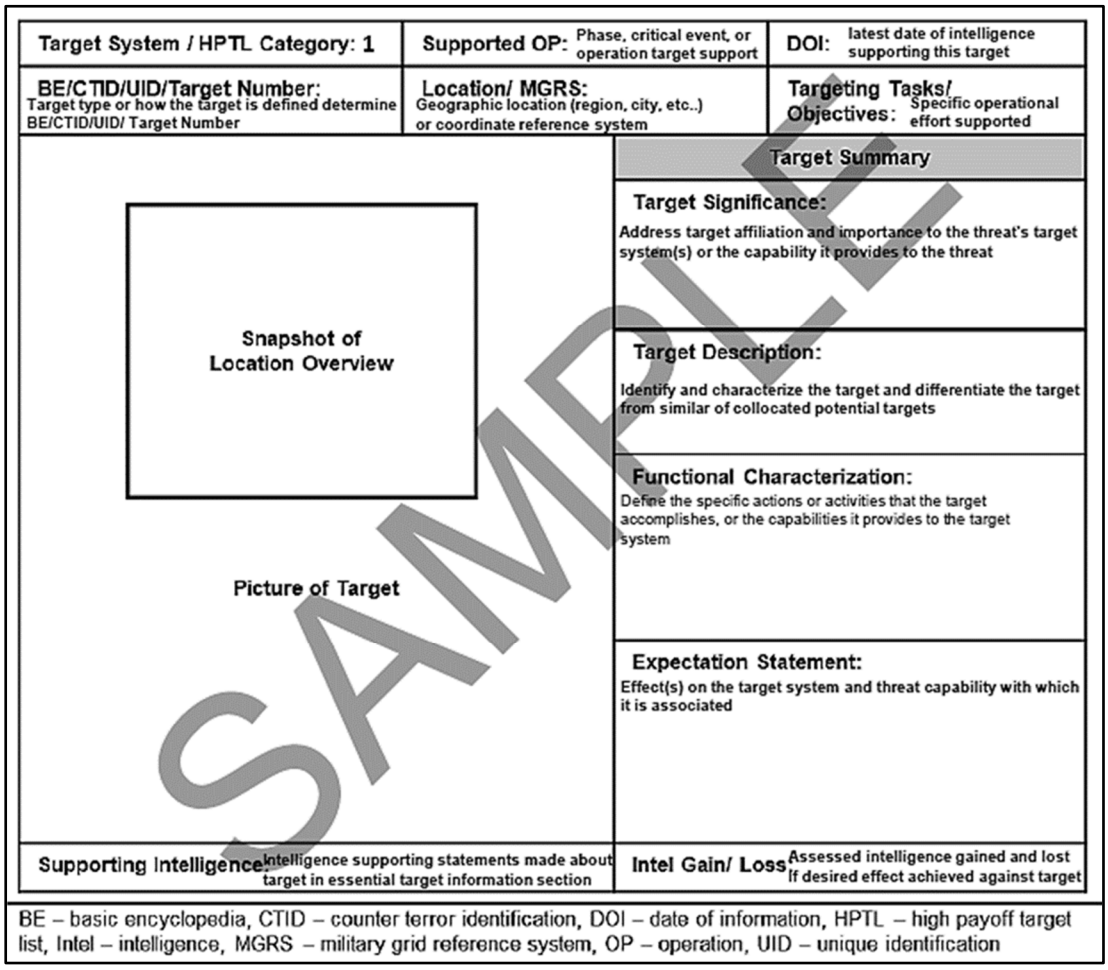

Figure F-1. Target Information Folder page 1 (baseball card) (example)

Target System / HPTL Category:	Supported OP: Phase, critical event, or operation target supports	DOI: latest date of intelligence supporting this target
BE/CTID/UID/Target Number: Target type or how the target is defined Determine BE/CTID/UID/ Target Number	**Location/MGRS:** Geographic location (region, city, etc..) or coordinate reference system	**Targeting Tasks/ Objectives:** Specific operational effort supported

Supporting Intelligence
SIGINT
By intelligence discipline, intelligence reports are listed with report number, classification, and brief description of report
HUMINT
By intelligence discipline, intelligence reports are listed with report number, classification, and brief description of report For human intelligence, a source validation statement is recommended for each report
GEOINT/ FMV Hours
By intelligence discipline, intelligence reports are listed with report number, classification, and brief description of report
Other Supporting Intelligence
By intelligence discipline, intelligence reports are listed with report number, classification, and brief description of report
Assessment
Can be used to describe the target to a validation authority in the event the target can't be briefed either in-person or electronically

BE – basic encyclopedia, CTID – counter terror identification, DOI – date of information, FMV – full motion video, GEOINT – geospatial intelligence, HUMINT – human intelligence, HPTL – high payoff target list, Intel – intelligence, MGRS – military grid reference system, OP – operation, SIGINT – signals intelligence, UID – unique identification

Figure F-2. Target Information Folder page 2 (baseball card) (example)

Appendix G

Target Value Analysis Tool

CARVER is a memory aid tool that stands for criticality, accessibility, recuperability, vulnerability, effect and recognizability and is a tool used to identify and rank (prioritize) specific targets so that attack resources can be efficiently used. CARVER is a target selection and risk, or vulnerability assessment used by calculating the value of a given potential target and the ease with which such a target could be affected. CARVER helps to identify targets that are vulnerable to attack and for defensive purposes.

CARVER TOOL

G-1. The CARVER matrix tool can indicate high-risk targets that require additional security assets allotted to them to prevent the degradation of these assets via enemy assault or terrorist action.

CRITICALITY

G-2. Criticality means target value. This is the primary consideration in targeting. A target is critical when its destruction or damage has a significant impact on military, political, or economic operations. Targets within a system must be considered in relation to other elements of the target system. The value of a target will change as the situation develops, requiring the use of the time-sensitive methods which respond to changing situations. For example, when one has few locomotives, railroad bridges may be less critical as targets; however, safeguarding bridges may be critical to maneuvering conventional forces which require use of such bridges.

ACCESSIBILITY

G-3. A target is accessible when an operational element can reach the target with sufficient personnel and equipment to accomplish its mission. A target can be accessible even if it requires the assistance of knowledgeable insiders. This assessment entails identifying and studying critical paths that the operational element must take to achieve its objectives and measuring those things that aid or impede access.

RECUPERABILITY

G-4. A target's recuperability is measured in time; that is, how long will it take to replace, repair, or bypass the destruction of or damage to the target? Recuperability varies with the sources and type of targeted components and the availability of spare parts availability.

VULNERABILITY

G-5. A target is vulnerable if the operational element has the means and expertise to successfully attack the target. When determining the vulnerability of a target, the scale of the critical component needs to be compared with the capability of the attacking element to destroy or damage it.

EFFECT

G-6. The effect of a target attack is a measure of possible military, political, economic, psychological, and sociological impacts at the target and beyond. This is closely related to the measure of target criticality. The type and magnitude of given effects desired will help planners select targets and target components for attack. Effect in this context addresses all significant effects, whether desired or not, that may result once the selected

target component is attacked. Traditionally, this element has addressed the effect on the local population, but now there are broader considerations.

RECOGNIZABILITY

G-7. A target's recognizability is the degree to which it can be recognized by an operational element and intelligence collection and reconnaissance assets under varying conditions. Weather has an obvious and significant impact on visibility. Rain, snow, and ground fog may obscure observation. Road segments with sparse vegetation and adjacent high ground provide excellent conditions for good observation. Distance, light, and season must also be considered. Table G-1 is an example of a CARVER matrix tool.

Table G-1. CARVER matrix tool

Value	*Criticality*	*Accessibility*	*Recuperability*	*Vulnerability*	*Effect*	*Recognizability*
5	Loss Would Be Mission Stopper	Easily Accessible Away from Security	Extremely Difficult to Replace, Long Down Time	Definitely Have the Means and Expertise to Attack	Favorable Impact on Civilians	Easily Recognized by All with No Confusion
4	Loss Would Reduce Mission Performance	Easily Accessible Outside	Difficult To Replace with Long Down Time (<1 Year)	Probably Have the Means and Expertise to Attack	Favorable Impact No Adverse Impact on Civilians	Easily Recognized by Most with Little Confusion
3	Loss Would Reduce Mission Performance	Accessible	Can Be Replaced in Relatively Short Time (Months)	May Have the Means and Expertise to Attack	Favorable Impact, Some Adverse Impact on Civilians	Recognized With Some Training
2	Loss May Reduce Mission Performance	Difficult To Gain Access	Easily Replaced in A Short Time (Weeks)	Little Capability to Attack	No Impact on Forces Adverse Impact on Civilians	Hard To Recognize Confusion Probable
1	Loss Would Reduce Mission Performance	Very Difficult to Gain Access	Easily Replaced in A Short Time (Days)	Very Little Capability to Attack	Unfavorable Impact Assured Adverse Impact on Civilians	Extremely Difficult to Recognize Without Extensive Orientation

G-8. For more information on how to use CARVER as a target value analysis tool see ATP 2-33.4 and ATP 3-05.20.

Appendix H

Target Numbering

Target numbering is a system for expressing lethal and nonlethal actions against an entity or object considered for possible engagement or other actions. This numbering system identifies a wide array of mobile and stationary forces, equipment, capabilities, and functions that an enemy commander can use to conduct operations. The Army identifies targets using alphanumeric characters when selecting and prioritizing targets. The Army assigns target numbers that adhere to the provisions of NATO standardized agreement 2934.

H-1. The targeting alphanumeric system represents the following-

- Organizations.
- Elements.
- Cell, sections, or teams within a brigade size element.
- Cell, sections, or teams within a BN size element.
- Block of numbers.

H-2. The target number is comprised of six characters consisting of two letters and four numbers in the following positions, for example AB1234. The two letters indicate the originator of the target number and the echelon holding the target data. The senior HQ establishes and publishes the assigned first letter in the operations order. The letter "Z" is the only permanently assigned first letter. The target number prefix "Z" is reserved for technical use by automatic data processing systems among nations when transferring target information from one nation to another. The second letter "E" is allocated for Service components forces in automatic data processing systems in those instances where a "Z" prefix target is generated for example "ZE." Table H-1 is an example of the assignment of first letters for targeting in an OE.

Table H-1. Assignment of first letter (example)

Organization	*Letter*
CENTCOM	C
United States	A
United Kingdom	B
EUROCORPS	E
France	F
Germany	D
MNC	M
NRDC Italy	N
CENTCOM – Central Command EUROCORPS – European Corps MNC – Multinational Corps NRDC – NATO Rapid Deployable Corps	

H-3. Target numbers serve as an index to all other information regarding a particular target, such as location, description, and size. Normally, a common target numbering system is used at corps and within a major force. Target block numbers are traceable to its originating source to specific users. Corps down to BCT level may assign the second letter (A through Z). See table H-2.

H-4. Once a target is assigned a target number that association remains as long as the target exists. The target and target number maintain their association even when passed to an adjacent, higher or lower HQ.

Table H-2. Assignment of letters (example)

Elements	*Letters*
Corps	AA
FSE/Fires Cell	AB
TACP	AC
X Division	AD
1 BCT	AE
2 BCT	AF
3 BCT	AG
4 BCT	AH
Y Division	AJ
1 BCT	AK
2 BCT	AM
3 BCT	AN
4 BCT	AQ
BCT – brigade combat team, FSE – fire support element, TACP – tactical air control party	

H-5. Table H-3 is an example of standard blocks of numbers assigned within a brigade.

Table H-3. Assignment of blocks of numbers (example)

Numbers	*Brigade elements*
0000-2999	BCT FSE
3000-3999	FSE, lowest numbered maneuver battalion or squadron
4000-4999	FSE, second lowest numbered maneuver battalion or squadron
5000-5999	FSE, third lowest numbered maneuver battalion or squadron
6000-6999	FSE, cavalry squadron or additional fire support assets
7000-7999	FDC, BCT field artillery battalion
8000-8999	Counterfire targets
9000-9999	Spare
1 Lowest regimental number	
BCT - brigade combat team, FDC – fire direction center, FSE - fire support element	

H-6. Table H-4 on page H-3 is an example of how a BN size element with a block of numbers may allocate their numbers. Consult the unit SOP for specific unit target numbers. Additional number blocks are requested from the supervising fire support element.

Table H-4. Additional assignment of blocks of numbers (example)

Numbers	*Battalion elements*
X000-X199	Battalion FSE
X200-X299	Fire support team, Company A
X300-X399	Fire support team, Company B
X400-X499	Fire support team, Company C
X500-X599	Fire support team, Company D
X600-X699	Additional fire support team or fire support assets
X700-X799	FDC, battalion or company mortars
X800-X999	Spare
FDC – fire direction center, FSE—fire support element, X – numeral assigned by higher headquarters	

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Appendix I

Alternate Targeting Methodologies

Two alternative methods have been used and implemented for a varying degree of needs. The two most common methods are the multi-service tactics, techniques, and procedures for dynamic targeting known as find, fix, track, target, engage and assess (referred to as F2T2EA) and a Special Operations Forces methodology used predominantly for Counterinsurgency/HVI targeting known as Find, Fix, Finish, Exploit, Analyze, and Disseminate (F3EAD).

SECTION I – FIND, FIX, TRACK, TARGET, ENGAGE AND ASSESS

I-1. *Dynamic targeting* is targeting that prosecutes targets identified too late, or not selected for action in time to be included in deliberate targeting (JP 3-60). Dynamic targeting occurs during detect, deliver and assess functions of the D3A methodology and the joint targeting cycle phase 5: mission planning and execution. A target of opportunity may emerge, or a change in the situation may necessitate a change to a planned target. These targets still require confirmation, verification, validation, and authorization, but in a shorter timeframe than deliberate targeting allows.

I-2. The process developed to facilitate dynamic targeting at the joint level is— find, fix, track, target, engage, and assess (referred to as F2T2EA). While the steps are listed in the order presented to ease explanation, several steps are accomplished simultaneously and overlapped. For example, the track step frequently continues through the completion of the assess step. Figure I-1 shows find, fix, track, target, engage, and assess in the joint targeting cycle. For a more in-depth explanation of each of the steps in the targeting process refer to ATP 3-60.1.

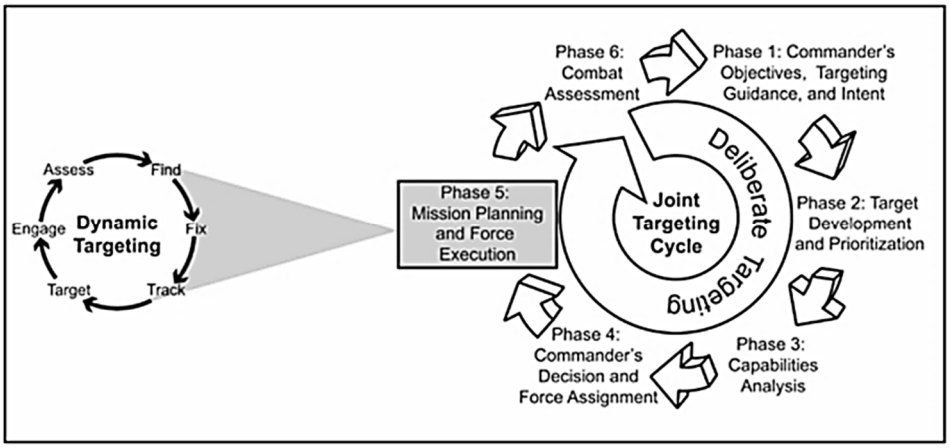

Figure I-1. Find, fix, track, target, engage, and assess within the Joint Targeting Cycle

SECTION II – FIND, FIX, FINISH, EXPLOIT, ANALYZE, AND DISSEMINATE

I-3. F3EAD provides maneuver leaders at all levels with a methodology that enables them to organize resources and array forces across the range of military operations. While the targeting aspect of F3EAD is consistent with D3A methodology, F3EAD provides the maneuver commander an additional tool to address certain targeting challenges, particularly those found in a counterinsurgency environment. F3EAD is not a

replacement for D3A nor is it exclusive to targeting; rather it is a technique that works at all levels for leaders to understand their OE and visualize the effects they want to create.

I-4. In counterinsurgency operations, engaging targets with nonlethal effects are frequently more important than engaging targets with lethal effects, and F3EAD is equally applicable for both. Effective targeting identifies options to support the commander's intent and objectives. For nonlethal effects, those options may include civil-military operations, civil affairs operations, cyber electromagnetic activities, information, psychological operations, and political, economic, and social programs. Engaging targets with lethal effects are most typically designed to kill.

I-5. F3EAD is especially well suited and is the primary means for engaging HVIs. **A *high-value individual* is a person of interest who is identified, surveilled, tracked, influenced, or engaged.** A HVI may become an HPT that must be acquired and successfully attacked (exploited, captured, or killed) for the success of the friendly commander's mission. In this role, F3EAD features massed, persistent reconnaissance, or surveillance cued to a powerful and decentralized all source intelligence apparatus to find a HVI in the midst of civilian clutter and find his exact location. This accurate location enables surgical finishing effects (lethal or nonlethal) that emphasize speed to catch a mobile target. The emphasis on speed is not only to remove a combatant from the AO, but also to take the opportunity to gain more information on the threat enemy advisory. The exploit and analyze steps are often the main effort of F3EAD because these steps provide insight into the enemy's network and may open new targeting efforts. The information accumulated during the exploit and analyze steps frequently start the cycle over again by providing leads or start points into the network that can be observed and tracked.

SECTION III – THE PROCESS WITHIN THE PROCESS

I-6. To gain an understanding of the F3EAD process, it is instructive to see how F3EAD is used within D3A and can begin during any phase of D3A methodology. The process still begins with a decide function in which decisions are made on priorities and the allocation of resources. The decide step is performed continuously, and requires extensive, persistent analytical work by operations and intelligence personnel. They analyze large quantities of all-source intelligence reporting to determine the:

- Threat validity.
- Actual importance of potential targets.
- Best means to engage the target.
- Expected effects of engaging the targets (which will guide actions to mitigate negative effects).
- Changes required to the exploitation plan.

I-7. Figure I-2 on page I-3 indicates, the detect function is broken into two parts - find and fix. During the find step, the HVI is identified, and the target's network is mapped and analyzed. During the fix step a specific location and time to engage the HVI is identified, and the validity of the target is confirmed.

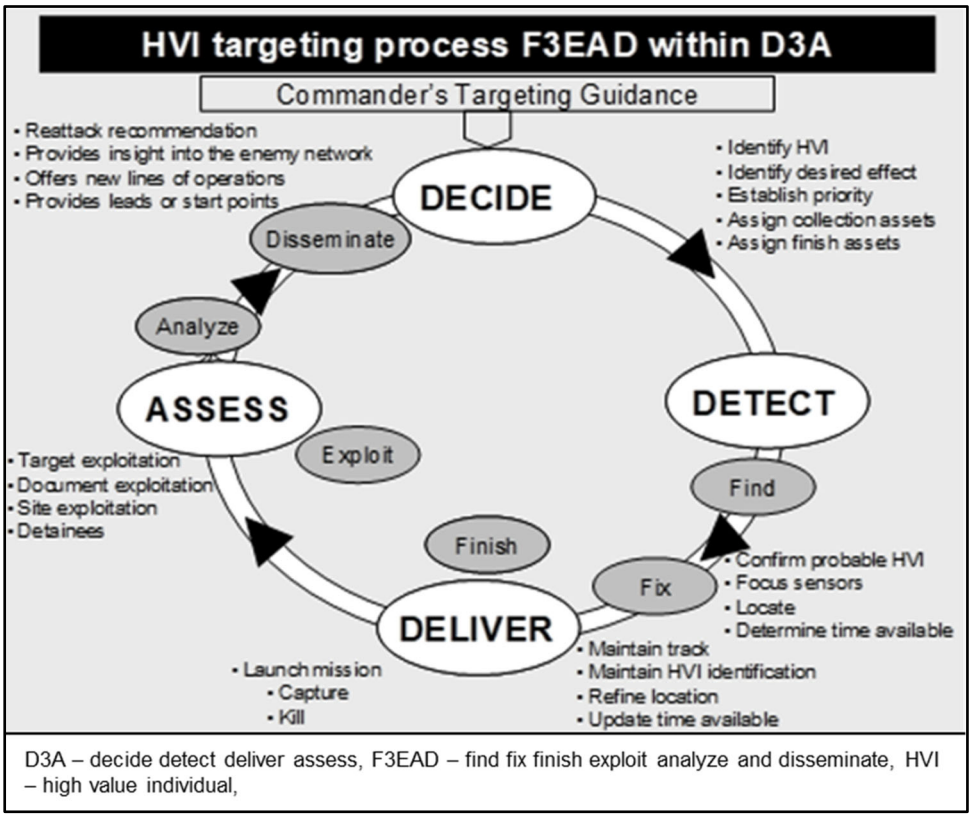

Figure I-2. High-value individual targeting process

I-8. In counterinsurgency operations, the target sets often will include HVI that require special care or caution in treatment because failure to engage them or to engage them improperly can lead to adverse consequences. As a result, the find step may take a considerable amount of time from days to even weeks as targets are identified, and the target's network is mapped and analyzed.

I-9. The finish step of F3EAD mirrors the deliver function of D3A when the action planned against the target is initiated and completed. Where the finish step differs from the deliver function in D3A is the nature of the means the commander will apply against identified target sets. In addition to systems typically associated with delivering effects in the D3A methodology, means used by a maneuver commander in counterinsurgency operations can include actions such as sniper, counter sniper, tactical callout, vehicle interdiction, and small ambush teams.

I-10. The exploit, analyze, and disseminate steps amplify the assess function. The engaging unit takes the opportunity to gather additional information during the exploit step, determines the implications and relevance of the information during the analyze step, and publishes the results during the disseminate step.

I-11. It is important to remember that targeting is conducted continuously. For any given target, the process tends to follow the flow depicted in figure I-1, on page I-1. At any given time however, a unit may be at the find step for some targets, the exploit step for several other targets, and at the fix, finish, analyze, or disseminate step for still other targets. Similarly, the unit may disseminate information pertaining to the location of a target prior to the finish step or exploit step. Generally, the process will follow the depicted flow; do not let the process restrict what needs to happen next.

FIND

I-12. Collection plans that support the F3EAD process are, driven by the requirement for time compression. IPB and area SA collection are an ongoing effort. Once an insurgent cell or HVI is identified, the targeting folder must be quickly developed. After the targeting folder is approved for collection, very specific information on possible engagement locations must be collected quickly without alerting the HVI. This requires layering of collection efforts and assets.

I-13. HVI targeting will most often be conducted in counterinsurgency operations where the enemy frequently hides among the civilian population. Persistent and high-fidelity intelligence is often the key to defeating a threat whose primary strength is denying friendly forces access to a target.

I-14. Reconnaissance and surveillance assets are most effective against such enemies when massed. The insurgent's ability to hide in plain sight demands persistent collection in order to detect their presence. Persistent collection requires long dwell times and must be focused using multiple sensors on discrete parts of the network in order to achieve the fidelity of information required for targeting.

I-15. The effectiveness of reconnaissance and surveillance grows exponentially when it is cued to and driven by other sources of intelligence rather than operating alone. The enemy is so well hidden that it takes multiple sources of intelligence to corroborate information. SIGINT for example, can locate a target but may not be able to discern who it is. An airborne sensor with full motion video can track but not necessarily identify the target. HUMINT can provide intent but may not be able to fix a target to an accurate location. However, these disciplines working together can focus the spotlight on a HVI who is hidden in the general population. Without a robust, collaborative intelligence network to guide it, sensors are often used in reactive modes that negate their true power and tend to minimize their full potential. These intelligence sources provide a start point into the enemy network that can be exploited through persistent and patient observation. With this type of start point, one can mass reconnaissance forces with confidence that assets are not being wasted.

I-16. Massing intelligence resources implies focus and priority. Selected parts of the enemy's network receive focus, which should be unwavering for a specified time. The problem with a low-contrast and fleeting target is that threat actions are not easily predictable. Without prediction, the next best things are redundancy and saturation. The inability to mass employment of collection assets over a large geographic area often results in a loss of effectiveness.

I-17. One technique that is critical to improve effectiveness against an insurgent is nodal analysis (or link analysis). Insurgent networks do not exist in a vacuum. They interact with supporters in the population and, less directly with their supporters buried in the power structure. An HVI may interact with key leaders in politics, security, the economy, and real estate, as well as the general population.

I-18. Life pattern analysis is connecting the relationships between places and people by tracking their patterns of life. While the enemy moves from point to point, reconnaissance or surveillance tracks and notes every location and person visited. Connections between those sites and persons to the target are built, and nodes in the enemy's network emerge. Link analysis and life pattern analysis identify these relationships in order to complete the targeting folder. To be effective, there must be sufficient intelligence on the network the HVI belongs to in order to know the effect of their removal. Just because they are the cell leader may not be a good enough reason to target the individual. How will the cell be degraded by their removal? How long will it take to replace the individual?

I-19. This analysis has the effect of revealing the HVI's physical infrastructure for things such as funding, meetings, HQ, media outlets, and weapons supply points. As a result, the network becomes more visible and vulnerable. Nodal analysis uses the initial start point to generate additional start points that develop even more targeting opportunities within the enemy's network. The payoff of this analysis is huge but requires patience to allow the network's picture to develop over a long period of time.

I-20. Networks are notably resistant to the loss of any one or even several nodes. The focus of targeting is not just to identify an individual who is a leader in the network. Instead, it is to identify the critical leader whose removal will cause the most damage to the network. The ultimate success is to remove sufficient

I-21. critical nodes simultaneously--or nearly so--such that the network cannot automatically reroute linkages but suffers catastrophic failure.

Inputs

I-22. Inputs to the FIND step:

- Commander's guidance and priorities.
- IPB, to include identified NAI, TAI, and cross cueing of intelligence disciplines to identify potential target sites or OEs.
- Life pattern analysis.
- Collection plans based on the IPB.

Outputs

I-23. Outputs of the FIND step:

- Potential HVI detected and nominated for further development.
- Targeting folders.
- HVI network identified and analyzed.

FIX

I-24. The continued collection effort paints a picture of the HVI. The intelligence staff officer can draw broad behavior patterns that will focus the specific collection requirements from analysis of the intelligence. The information harvested from the focused and persistent collection reveals the life patterns of the HVI including overnight locations, daily routes, visitations, and trustworthy associates. National and unit intelligence assets then corroborate the life patterns. As the details are filled in, it becomes possible to anticipate where the HVI is most likely to spend time or visit.

I-25. Maintaining persistent, continuous intelligence support is particularly hard at lower echelons of command and small units where intelligence assets are less available than at the brigade and higher echelons. At lower-echelon units, it is important for the command to establish intelligence support teams with personnel who know the targets and are trained in the unit SOPs for sensor preparation and briefings, patrol debriefings, data collection, and able to fuse this information with the unit's operational plan to finish the target.

I-26. As the probable location of the HVI target is narrowed to a few sites, the unit is able to identify feasible courses of action and begin refining the planned actions of the finish force. At some point the information leads the unit to determine a HVI target is likely to be a specific location (Fix) at a specific time or within a specific time frame. Depending on the accuracy and reliability of the information, the unit may choose to verify the information through other means. Once the unit is satisfied that the Fix is valid, they may choose to launch the finish force.

Inputs

I-27. Inputs to the FIX step:

- Probable HVI.
- Information on the target and the target's network.

Outputs

I-28. Outputs of the FIX step:

- Target identification and confirmation.
- Target location accuracy refined to the level required for target engagement.
- Determination or estimation of target time characteristics.

FINISH

I-29. The window of opportunity to engage the target requires a well-trained and rehearsed finish force and a well-developed SOP. The force will normally not have the time to create elaborate plans. Instead, the force will be required to adapt a known drill to the existing conditions and rapidly execute the required actions, such as a raid, ambush or cordon and search. The force must also be prepared to conduct follow on operations based on information found during exploitation on the objective.

Inputs

I-30. Inputs to the FINISH step:

- HVI location within a given time frame.

Outputs

I-31. Outputs of the FINISH step:

- Target isolated and engaged.
- Target location secured.
- Exploitation force on site.

EXPLOIT

I-32. F3EAD differs from other targeting models because of its emphasis on the exploit and analyze steps as the main effort. This recognizes the importance of information in fighting the low contrast threat and aggressively supplying multisource start points for new information collection. More than the other steps, this feeds the intelligence operations cycle in which intelligence leads to operations that yield more intelligence leading to more operations. The emphasis on raids is essential to gather intelligence on the enemy network; simply killing the enemy will not lead to greater effectiveness against their networks. In fact, capturing the enemy for purposes of interrogating is normally the preferred option.

I-33. Once secured, the target site must be exploited. *Site exploitation* is a series of activities to recognize, collect, process, preserve, and analyze information, personnel, and/or materiel found during the conduct of operations (JP 3-31). Effective site exploitation requires prior planning to include SOP, search plans, prepared site exploitation kits, and tactical questioning plans. Units must make these preparations in advance of the finish step in order to enable effective actions on the objective. For a more detailed discussion of site exploitation activities and enablers see ATP 3-90.15.

I-34. The site exploitation team may have a variety of enablers in direct support, or it may come solely from the unit. In any case, they must have clear instructions on what to look for in the specific site and training in how to conduct the search and collection. Some units use smart cards with target specific information and predetermined questions. Such aids have been useful in preparing and guiding the exploitation teams. Some organizations prefer designated assault or exploitation units. Continual preparation for these type missions allows the development and refinement of SOP.

I-35. Target exploitation and document exploitation are important operations and intelligence activities critical to F3EAD. Documents and pocket litter, as well as information found on computers and cell phones, can provide clues that analysts need to evaluate enemy organizations, capabilities, and intentions. The threat's network becomes known a little more clearly by reading their email, financial records, media, and servers. Target and document exploitation help build the picture of the threat as a system of systems.

I-36. The tactical questioning of detainees is crucial to revealing the threat's network. The ability to talk to insurgent leaders, facilitators, and financiers about how the organization functions offers significant insight on how to take that organization apart. Intelligence from detainees drives operations, yielding more detainees for additional exploitation and intelligence.

Inputs

I-37. Inputs to the EXPLOIT step:

- Secured target location.
- Targeted questions.
- Site exploitation preparation and SOP.

Outputs

I-38. Outputs of the EXPLOIT step:

- Documented information.
- Detailed reports.
- Follow on targets for immediate execution.

ANALYZE

I-39. The bottom line of the analyze step is to examine and evaluate information and Identify Intelligence (referred to as I2) rapidly turn it into actionable intelligence that can be applied to defeat the threat's network. Some information may be immediately actionable, such as information providing the location of another HVI. Other information may need further analysis and corroboration.

I-40. The information requires the staff to streamline operations to allow for this data to be stored, analyzed, recalled, and disseminated as necessary. New or additional players must be included in the collection and assessment process. National and theater level technical assets will also be critical and mechanisms to facilitate their integration must be developed. All of this will require modifications of existing planning mechanisms and procedures and learning how to incorporate new sources.

I-41. The objective is to make intelligence, not information. To do this you have to invest resources and focus on preparation. The level of dedicated resources (mainly personnel) will have a direct correlation to the quality and quantity of developed intelligence. Too few resources result in an extrication of raw information effort, instead of an analytical and understanding effort. The right balance of personnel and resources creates a greater return; under or over resourced teams risk diminished returns.

Inputs

I-42. Inputs to the ANALYZE step:

- Document and media exploitation.
- Detailed reports.

Outputs

I-43. Outputs of the ANALYZE step:

- Actionable intelligence.
- Correlated information.
- Intelligence assessments.

DISSEMINATE

I-44. The Disseminate step is simple but time consuming. The goal is to make sure everyone else knows what you know. Even information that appears to be irrelevant may hold the key to unlocking a network for someone else. Fortunately, the various computer programs and networks greatly aid the dissemination process.

I-45. Prioritizing the dissemination effort is essential. Some information will answer a PIR and should be forwarded to the requesting agency immediately. Other information may be important based on the OE. Still other information will be routine and can be handled routinely.

Inputs

I-46. Inputs to the DISSEMINATE step:

- Relevant and correlated information.
- Actionable intelligence.
- Intelligence assessments.

Outputs

I-47. Outputs of the DISSEMINATE step:

- Databases, matrices, and assessments are updated.
- Intelligence and information are pushed to higher, lower, and adjacent units.
- Information is made available to everyone with a need to know.

SECTION IV - MEASURING SUCCESS

I-48. Measuring success when conducting F3EAD requires analysis conducted in two stages. The first stage occurs immediately after the finish step and should answer questions associated directly to the target and its network. Examples of first stage metrics include:

- Killed or captured insurgents.
- Changes in insurgent patterns.
- Collected exploitable material.

I-49. The second stage of analysis takes the longer view. These metrics provide the yardstick for the JFC to examine progress made toward meeting objectives established in the joint campaign plan to include:

- Changes in observable local behavior towards United States and Host Nation Forces to include public actions.
- Changes in the quality or quantity of information provided by individuals or groups.
- Changes in the economic or political situation of an area.

Glossary

The glossary lists acronyms and terms with Army or joint definitions. Where Army and joint definitions differ, (Army) precedes the definition. The glossary lists terms for which FM 3-60 is the proponent with an asterisk (*) before the term. For other terms, it lists the proponent publication in parentheses after the definition.

SECTION I – ACRONYMS AND ABBREVIATIONS

ACE	analysis and control element
ADP	Army doctrine publication
AGM	attack guidance matrix
ALO	air liaison officer
AO	area of operations
ARFOR	Army forces
ATP	Army techniques publication
BCD	battlefield coordination detachment
BCT	brigade combat team
BDA	battle damage assessment
BE	basic encyclopedia
BN	battalion
C2	command and control
CBRN	chemical, biological, radiological, and nuclear
CEMA	cyberspace electromagnetic activities
CEWO	cyber electromagnetic warfare officer
CFA	critical factors analysis
CI	counterintelligence
CJCSI	Chairman of the Joint Chiefs of Staff instruction
COA	course of action
CTID	counter-terror identification
D3A	decide, detect, deliver, and assess
DA	Department of the Army
DIVARTY	division artillery
DOD	Department of Defense
EAC	echelons above corps
E-MIB	expeditionary-military intelligence brigade
EW	electromagnetic warfare
F3EAD	find, fix, finish, exploit, analyze, and disseminate
FAB	field artillery brigade
FAIO	field artillery intelligence officer

FM	field manual
FS	fire support
FSCOORD	fire support coordinator
FSE	fire support element
FSO	fire support officer
G-2	assistant chief of staff, intelligence
G-3	assistant chief of staff, operations
G-4	assistant chief of staff, logistics
HPT	high-payoff target
HPTL	high-payoff target list
HUMINT	human intelligence
HQ	headquarters
HVI	high-value individual
HVT	high-value target
ICSM	intelligence collection synchronization matrix
IEW	intelligence and electronic warfare
IO	information operations
IPB	intelligence preparation of the battlefield
JAGIC	joint air-ground integration center
JFC	joint force commander
JFLCC	joint force land component commander
JP	joint publication
JPP	joint planning process
JTF	joint task force
JTL	joint target list
LCC	land component commander
MDMP	military decision-making process
MDTF	multidomain task force
MIB-T	military intelligence brigade-theater
MOE	measure of effectiveness
MOP	measure of performance
NAI	named area of interest
NATO	North Atlantic Treaty Organization
NSL	no-strike list
OE	operational environment
OPLAN	operation plan
OPORD	operation order
PED	processing, exploitation, and dissemination
PIR	priority intelligence requirement
ROE	rules of engagement
RTL	restricted target list

SIGINT	signals intelligence
SIR	specific information requirement
S-2	battalion or brigade intelligence staff officer
S-3	battalion or brigade operations staff officer
SJA	staff judge advocate
SOP	standard operating procedure
STANAG	standardization agreement (NATO)
TAI	target area of interest
TIF	target information folder
TLE	target location error
TSA	target system analysis
TSM	targeting synchronization matrix
TSS	target selection standards
TST	time-sensitive target
TUAS	tactical unmanned aircraft systems
TVA	target value analysis
UID	Unique Identification

SECTION II – TERMS

attack guidance matrix

A targeting product approved by the commander, which addresses the how and when targets are engaged and the desired effects. (FM 3-09)

battle damage assessment

The estimate of damage composed of physical and functional damage assessment, as well as target system assessment, resulting from the application of fires. (JP 3-0)

board

A grouping of predetermined staff representatives with delegated decision authority for a particular purpose or function. (FM 6-0)

chief of fires

The senior fires staff officer at echelons above corps who advises the commander on the best use of available fires resources and provides input to the necessary orders. (ADP 3-19)

combat assessment

The determination of the overall effectiveness of force employment during military operations. Also called CA (JP 3-60)

collection plan

A systematic scheme to optimize the employment of all available collection capabilities and associated processing, exploitation, and dissemination resources to satisfy specific information requirements. (JP 2-0)

dynamic targeting

Targeting that prosecutes targets identified to late or not selected for action in time to be included in deliberate targeting. (JP 3-60)

fire support coordinator

(Army) The senior field artillery commander for the theater, corps, division, and brigade combat team who is the maneuver commander's primary advisor to plan, coordinate, and integrate field artillery and fire support in the execution of assigned tasks. (FM 3-09)

high-payoff target

A target whose loss to the enemy will significantly contribute to the success of the friendly course of action. Also called HPT (JP 3-60)

***high-payoff target list**

A prioritized list of high-payoff targets by phase of the operation.

***high-value individual**

A person of interest who is identified, surveilled, tracked, influenced, or engaged. Also called HVI.

high-value target

Is a target the enemy commander requires for the successful completion of the mission. Also called HVT (JP 3-60)

intelligence preparation of the battlefield

(Army) The systematic process of analyzing the mission variables of enemy, terrain, weather, and civil considerations in an area of interest to determine their effect on operations. (ATP 2-01.3)

planning

The art and science of understanding a situation, envisioning a desired future, and determining effective ways to bring that future about. (ADP 5-0)

site exploitation

A series of activities to recognize, collect, process, preserve, and analyze information, personnel, and/or materiel found during the conduct of operations. (JP 3-31)

synchronization

The arrangement of military actions in time, space, and purpose to produce maximum relative combat power at a decisive time and place. (JP 2-0)

target

An entity or object that performs a function for the threat considered for possible engagement or other action. (JP 3-60)

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. (JP 3-60)

targeting

The process of selecting and prioritizing targets and matching the appropriate response to them, considering operational requirements and capabilities. (JP 3-0)

time-sensitive target

A joint force commander-validated target or set of targets requiring immediate response because it is a highly lucrative, fleeting target of opportunity or it poses (or will soon pose) a danger to friendly forces. Also called TST (JP 3-60)

validation

A part of target development that ensures all candidate targets meet the objectives and criteria outlined in the commander's guidance and ensures compliance with the law of war and rules of engagement. (JP 3-60)

vetting

A part of target development that assesses the accuracy of the supporting intelligence to targeting. (JP 3-60)

weaponeering

Is the process of determining the specific means required to create a desired effect on a given target. (JP 3-60)

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11 August 2023

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