
FROM INTELLIGENCE TO EFFECTS:

THE IMPACTS OF IPOE ON TARGETING IN FULL-SCALE MILITARY OPERATIONS

BY: WARRANT OFFICER ONE
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In order to conduct successful lethal and nonlethal targeting, the fires community weighs heavily on the warfighting functions: command and control, movement and maneuver, intelligence, fires, sustainment and protection. While all six functions play significant roles in military planning and decision-making, intelligence serves as the fundamental element that supports and guides tactical, operational and strategic decisions. Predictability is achieved through proper analysis of the enemy's capabilities, systems, tactics and limitations. This analysis is completed through IPOE, which consists of four steps that optimize the targeting cycle, target development and target selection:

1. Define the operational environment.
2. Describe the environmental effects on operations.
3. Evaluate the threat.
4. Determine threat courses of action.

DEFINING THE OPERATIONAL ENVIRONMENT

The physical environment that military operations occur in is not wholly inclusive of the IPOE process. Some characteristics that are instrumental to aiding a commander's ability to visualize the area of operations or area of influence are both esoteric and ambiguous. Clarity of the battlespace is achieved through analysis of key environmental aspects around weather and terrain.



The nucleus of the environment is described by enemy composition, geographical features, climatic conditions and civil factors centric to that region. An analysis of these four characteristics allows targeting officers to make informed decisions during the decide phase of the targeting process.

The targeting cycle works in tandem with IPOE to produce outcomes that underscore the commander's intent. Defining the operational environment helps identify the limits of influence and effects in time and space. A commander's understanding of the area of operations enables decisions on the arrangement of forces, including purpose and command relationships, while remaining cognizant of adjoining units. The significant characteristics of the environment—enemy, terrain, weather and civil considerations—evoke the initial conceptualization of the battlefield. Once these are identified, targeting officers can ascertain equipment or personnel considered high-value targets (HVTs).

DESCRIBING THE ENVIRONMENTAL EFFECTS ON OPERATIONS

The second step of IPOE educates planners on how specific factors impact both enemy and friendly forces. Describing environmental effects assesses how hostile actors, terrain, weather and civil considerations influence capabilities and activities. Intelligence teams produce graphic overlays and tables to provide insights into a geographic region. These products hypothesize enemy locations and combat strength, offering a foundation for identifying who, what and where targeting should be focused.

Weather conditions are defined quantitatively during this phase, projecting potential constraints or opportunities. Understanding climate conditions informs planners about what may hinder collection assets, ground forces and weapon systems.



A key product is the Modified Combined Operations Overlay (MCOO), which portrays militarily significant features such as obstacles, key terrain and objectives.[1] This also helps locate areas for both enemy and friendly mobility corridors. The MCOO facilitates development of the threat overlay and description table, outlining adversary capabilities and likely geographic emplacements.

EVALUATING THE THREAT

At this point, planners understand the environment in which the mission will take place. Evaluating the threat requires analyzing enemy capabilities and the means they may use to contest friendly forces. Through intelligence collection, the staff can assess enemy strengths, capabilities, limitations and tactics. The intelligence enterprise is responsible for executing the information collection effort to detect high-payoff targets (HPTs) identified during the decide phase.[2]

This evaluation satisfies targeting development by identifying appropriate targets. Products from this step include threat data files, threat templates, high-value target lists and threat capability statements. These enable targeting officers to monitor and generate potential targets. The staff determines enemy systems and capabilities by warfighting function, helping prioritize targets. The Target Value Analysis (TVA) quantifies the value of HVTs relative to the threat operation.[3]

DETERMINING THREAT COURSES OF ACTION

The final IPOE step is visualizing the battlefield through the lens of the enemy. Using the threat template and MCOO, intelligence teams develop situation templates (SITEMPs) for likely enemy courses of action. This helps predict enemy movement and mitigate battlefield surprises.



The staff and fires cell refine the HVTL using SITEMPs to better understand enemy decisions. The refined list informs development of high-payoff target lists (HPTLs), which prioritize targets based on their importance to friendly success.

CONTRADICTIONS WITHIN DOCTRINE

Military planners rely on doctrinal tools to enhance effectiveness and reduce risk. However, 20 years of counterinsurgency warfare has left the Army less prepared for peer threats. The 2018 National Defense Strategy addressed these gaps by reforming doctrinal priorities. For example, the Army Targeting Methodology (D3A) is nested within MDMP.

FM 5-0 describes the decide function as occurring throughout MDMP, aligning planning and targeting efforts. [4] However, ATP 5-0.2-1 ends the decide phase at COA analysis and detect at COA approval.[5]

This rigidity poses questions about how to assign detection assets or deliver effects before order production.

Ultimately, unit SOPs and targeting officers must define the boundaries between decide and detect. FM 3-09 shows these functions have no clear start or end points, supporting a more fluid execution.⁶ Other discrepancies include outdated terminology. ADP 5-0 still refers to IPOE as Intelligence Preparation of the Battlefield (IPB), focusing more narrowly on enemy-centric analysis. IPOE considers traditional battlefield traits while adding nonmilitary factors such as civilian populations and political environments.

CONCLUSION

Commanders and staff need timely, accurate and predictive intelligence to support the targeting process, including selection, prioritization, execution and assessment.[7]



Effective targeting achieves strategic objectives by degrading enemy capabilities and shaping their decisions. This requires understanding enemy vulnerabilities and coordinating intelligence and fires. When executed well, targeting transforms the battlefield into a space of controlled destruction.

ENDNOTES:

1. U.S. Department of the Army. (2019b, March). Intelligence Preparation of the Operational Environment (ATP 2-01.3).
 2. U.S. Department of the Army. (2023b, October). Intelligence (FM 2-0).
 3. U.S. Department of the Army. (2023a, August). Army Targeting (FM 3-60).
 4. U.S. Department of the Army. (2024a, November). Planning and Orders Production (FM 5-0).
 5. U.S. Department of the Army. (2020, December). Staff Reference Guide Volume I (ATP 5-0.2-1).
 6. U.S. Department of the Army. (2024b, August). Fire Support and Field Artillery Operations (FM 3-09).
 7. U.S. Department of the Army. (2019a, July). The Operations Process (ADP 5-0).
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ABOUT THE AUTHOR

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