

The Use of Counter Improvised Explosives Device Information to Achieve Battlefield Effects for Targeting and Information Operations

by LTC Adrian Lee

Abstract:

Counter-Improvised Explosive Device (C-IED) is usually part of a broader counter-terrorism, counter-insurgency or law enforcement effort. According to the author, counter-insurgency is designed to combine both lethal and non-lethal actions to crumble insurgent networks. He explains the purpose of the campaign design, planning and targeting process of counter-insurgency efforts and the vital roles they play in overcoming challenges and fully utilising opportunities. The author also explains the importance of support from local host nation leaders and the populace and their art in the battle against insurgents in an irregular warfare environment. An in-depth analysis is done, using the ongoing war between Afghan security forces and the Taliban, studying the extensive use of Information Operations by both sides and also the campaign by the Afghan government to influence the Afghan populace to aid in IED neutralisation and effectively combat insurgents.

Keywords: Information Operations; Counter-Insurgency; Non-Lethal Warfare; Military Strategy; Intelligence

"Information and Intelligence" is the "Fire and Maneuver" of the 21st Century.

- Major General Michael T Flynn¹

INTRODUCTION

Military strategy in Afghanistan continues to place emphasis on targeting operations designed to crumble Insurgent (INS) networks as part of the population centric counter-insurgency (COIN) operations. In COIN, 'traditional' and 'irregular' warfare requires a mix of lethal and non-lethal actions.² These actions complement each other and create dilemmas for opponents in COIN operations. Thus, planning of both lethal and non-lethal actions are inseparable. The last 10 years of operations in Afghanistan have highlighted the need for non-lethal actions in the

conduct of 'irregular warfare' environment. Non-lethal activities such as inform and influence activities, Civil Military Operations (CMO) and reconstruction are being integrated early on during the design and planning stage.³ This is to achieve desired outcomes or effects as part of the campaign design, targeting and synchronisation processes.

CAMPAIGN DESIGN, PLANNING AND TARGETING PROCESSES

"...complexity is often rooted in patterns of interaction among agents."

- Robert Axelrod and Michael D. Cohen⁴

In HQ Regional Command (South) RC(S), it is imperative to understand the relationship between the campaign design, planning and targeting

processes so as to gain an understanding of the challenges and to ensure a relevant military solution to the situation. Design focuses on understanding the operational environment, the problem setting and the development of an operational approach to facilitate subsequent planning to solve the problem.⁵ Planning focuses on solving the problem through the development of concepts of operation, detailed plans and the allocation of resources to achieve the mission.⁶ Targeting enables the selection, prioritising targets and matching the appropriate lethal and non-lethal responses to them.⁷ The process begins during the early stages of the Intelligence Preparation of the Battlefield (IPB) as part of campaign planning and design in the Military Decision Making Process (MDMP).⁸

When operating in such complex realms, commanders must define the contemporary Operational Environment (OE) with sufficient clout to understand the challenges and opportunities.⁹ Hence, the insurgents' capabilities and doctrines in a geographical area, the terrain and the effects of weather on the Area of Operations (AO) including Tactics, Techniques and Procedures (TTPs) are analysed.¹⁰ The IPB provides the intelligence estimate and foundation for the targeting process. This is achieved through the application of the Political, Military, Economic, Social, Information and Infrastructure – Physical Environment and Time (PMESII-PT) and Area, Structure, Capabilities, Organisations, People and Events (ASCOPE) methodology.¹¹ At the operational level in RC(S), the staff officers and commander often leverage PMESII-PT to gain that understanding of the issues posed in IPB.¹²

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The understanding of these variables of the processes by all staff officers and commander is critical to enhance the situation awareness of the operating environment and to develop a plan to defeat the insurgents. Every echelon must use these operational variables as a way to define their operational environment, which often corresponds to developing plans for their AO.

During campaign design and planning, the staff officers and commander analyse civil considerations from several perspectives—the population, the insurgents and the coalition forces. This is to determine the effects on friendly and enemy courses of action. Analysing the six categories of PMESII from multiple civil and military perspectives aids the understanding of the operating environment and helps to isolate the insurgents from the population.¹³ This will enable the staff officers to focus their targeting operations by informing and influencing local populace, using both lethal and non-lethal actions against the insurgent.

TARGETING PROCESS¹⁴

The 'Targeting Scope' figure (see *Figure 1*) depicts that in traditional conflict, targeting may be more lethally focused whereas in irregular warfare, targeting is more balanced and even non-lethally focused.¹⁵ In RC(S), the terms 'fires' and 'weapons systems' encompass a multitude of non-lethal activities including Key Leadership Engagement (KLE), Provincial Reconstruction Team (PRT) and Military Information Support to Operations (MISO).¹⁶ These non-lethal activities in the 'Irregular' section of the figure seek to address the much greater non-lethal aspect of informing and influencing people. The focus is on informing and influencing numerous friendly and neutral audiences, which may include the local host nation leaders and populace.

TARGETING SCOPE - Traditional and Irregular

Traditional

- Focused on templated military forces and fixed facilities
- 'diMe' - focused
- Actions more lethally based
- Relies heavily on centralised command and control
- Mostly IMINT / SIGINT-based
- Finish = Kill / Destroy

Irregular

- Focused on population
- 'DimE' - focused
- Actions more non-lethally based
- Requires greater decentralization and empowerment of lower echelons
- Increasingly 'HUMINT' based
- Finish = Reintegration / Reconciliation / KLE / Economic Aid / Infrastructure Redevelopment
- Finish = Kill / Destroy

Targeting Best Practices (Irregular)

- Seek inclusion of stakeholders and maximum intelligence / information sharing for enhanced understanding of the environment.
- Provide tactical units with access to strategic capabilities for maximum agility / flexibility
- Encourage flexible and adaptive use of ISR assets

Note: For illustrative purposes only. Sources: FM 3-24/MCWP 3-33.5 Counterinsurgency and JCOA Counterinsurgency Targeting / ISR brief

Figure 1: Targeting Scope in Traditional and Irregular Warfare.¹⁷

Unlike conventional wars, where one military aims to defeat another on the battlefield, the Centre of Gravity (CoG) in insurgency is the population.¹⁸ Mission success cannot be achieved just by the number of High Value Individuals (HVI) or High Payoff Targets (HPT) killed or captured through lethal actions alone.¹⁹ In other words, the battle between the insurgent and the state is a tug-of-war for the loyalty and support of the population. As David Galula contends:

*"If the insurgent manages to dissociate the population from the counter-insurgent [the government], to control it physically, to get its active support, he will win the war because, in the final analysis, the exercise of political power depends on the tacit or explicit agreement of the population or, at worst, on its submissiveness."*²⁰

SEPARATE THE INSURGENT, ATTACK THE NETWORK

Improvised Explosive Devices (IEDs) are often used by the insurgents due to their unwillingness to engage in direct action and vastly limited resources in comparison to a military superior Coalition Force (CF). This is coupled with the fact that IEDs have been proven successful as a 'poor man's tool' that can achieve strategic effects in irregular warfare. Through the wanton use of IEDs, insurgents aim to discredit the International Security Assistance Force (ISAF) and the Government of the Islamic Republic of Afghanistan (GIROA) and show their ineptness in securing the general population's well-being, thus ensuring that the insurgent continues to gain support of the population for their causes.



This Cougar in Iraq, was hit by an IED approximately 136–227 kg in size.

Hence, it is imperative to secure the population that will then lead to the separation of the insurgent as the insurgency requires the support of the people to survive. This can be achieved via effective Information Effects (IE) or Information Operations (IO) to broadcast the ill-doings of the insurgents during an IED event, as well as to leverage on Biometric Enabled Intelligence (BEI) to prosecute these insurgents to undermine their efforts and to gain populace support.²¹ One of the key advances in modern counter-insurgency has been the application of biometric and forensic intelligence to catch the elusive enemy capable of blending in with the population. Biometrics has been put to use for IED forensics and for identifying and targeting suspected

insurgents.²² Once the suspected insurgents are identified, they are put on a watch list commonly known as Be-On the Look-Out (BOLO) list. Such use of biometric information has proven so successful that biometric enrolments are becoming part of campaign planning and targeting operations. With the addition of trained Explosive Ordnance Disposal (EOD) technicians, this vital intelligence has provided units with increasingly more information about the construction and origins of IEDs through their detailed post-blast analysis, information from weapon cache finds and captured materials being exploited. This information is used for force protection, targeting and staying ahead in the fight against the insurgents by understanding the IED indicators and hazards.

Through the deliberate use of IO, this information is used to inform and influence the local populace of the ill-effects of the insurgent's actions and to erode their support. Without the population's support, insurgents cannot survive. Likewise, without the population's support, a state government lacks legitimacy and is unlikely to survive. A successful counter-insurgency strategy requires winning the population away from insurgents by drawing on a mixture of lethal and non-lethal actions by promoting the credibility of the Afghan government and security forces. Finding the balance between lethal action and IO is perhaps the greatest challenge in counter-insurgency. If the goal is to build rapport with the population and win their trust, then lethal operations alone are unlikely to achieve this end. Furthermore, the insurgents understand this well and they fully exploit IO to gain the support of the local populace.

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INSURGENT IO EFFORTS – WHY ARE THEY BETTER AT IT?

Like ISAF and their Afghan allies, the INS / Taliban conduct their own extensive IO too. This is sometimes aided by international media. The insurgent exploitation of the Quran burning incident on 22nd



United States military personnel assigned broadcast television and radio programming, to aid in Information Operations.

February, 2012 at Bagram Airfield and the Kandahar Massacre by a United States (US) soldier on 11th March, 2012 epitomised the effectiveness of the insurgents to exploit the media to their advantage in the IO arena. The speed-to-market by which the insurgent exploits such incidents, from the start of the incident to gaining the international media attention, is phenomenal. They can quickly evoke negative sentiments from the local populace at the expense of all the good work done by the CF and GIROA.

Even though the insurgent's IO campaign in the war of narrative and allegations can be absolutely fallacious and fraudulently misleading, it has proven to be successful. The insurgent's success in the information arena can be attributed to:

- 1) non-hierarchical clearance of printed or broadcast material;
- 2) non attributable to the insurgent organisation;
- 3) materials based on insurgents' messages which may not be factually true; and
- 4) anecdotal evidence that are hardly indicative of accepted research or reporting standards.

The insurgent uses the information it gathers to probe for vulnerability and opportunity for suicide bombers, IED attacks and to monitor the movements of the CF and the Afghan forces. They continue to undermine efforts by GIROA to improve public services that help the government build credibility with civilians through their IO campaigns. They influence, coerce and threaten the Afghan population through face-to-face communication, use Short Messaging System (SMS) for propaganda, threaten Afghanistan National Security Forces (ANSF) through physical and verbal intimidation and exploit the wedge between the ISAF / GIROA and the Afghan people.

ENHANCING WARFIGHTING USING C-IED INFORMATION

The US Special Operations Forces pioneered a targeting methodology called Find, Fix, Finish, Exploit, Analyse and Disseminate (F3EAD), which enabled them to carry out HVI targeting operations and insurgent networks.²³ The Joint IED Defeat Organisation (JIEDDO) has integrated it into its 'Attack the IED Network' concept and has used it extensively in its targeting process. To elaborate, when insurgents mount an attack, it will usually have an IED-related or associated action which in turn, may activate an EOD response or generate tactical action i.e. targeting operations and quick response force. The tactical units then utilise and direct resources to assess the threat through focused enrolment, on-site exploitation and intelligence assessment of the insurgent network based on C-IED information.

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This C-IED information will then yield information of the insurgent's network in the Area of Interest (AOI) and recommend lethal and non-lethal targets.²⁵ This will then assist the operational and tactical units in mission planning and highlight any C-IED information or IED hazards in their areas so that they can shape their counter-insurgency fight.

In RC(S), IED incidents and bomb makers or facilitators are known to operate in a relatively small geographical (~2km) area and are therefore known by the local community. This offers an opportunity for the security forces (ANSF and CF) to engage the informal



An Unmanned Aerial Vehicle.

and formal local leaders, in an attempt to generate localised responsibility and communal security. This effect is achieved through focused engagements with the local populace and leaders through multiple mediums, such as through non-lethal activities like KLE, Female Engagement Teams (FET) and reconstruction projects. It is important to elicit the information and provide solutions that foster the co-operation of the local populace who are better at spotting insurgents, their bombs and providing indications or warnings 'left of boom' (before IEDs blow up).²⁶ The end-state is to secure the key and critical terrain leveraging on C-IED information to identify the insurgent network and separate them from the community.

The insurgents are known to build vast quantities of IEDs to hinder freedom of movement and action of security forces. In addition, they have developed large scale Home Made Explosive (HME) factories and IED processing plants amongst the population centres. Exploiting IEDs or captured enemy personnel and material for force protection aims to prevent insurgent attacks on friendly forces and installations. Items are collected and turned in for exploitation in the Afghanistan Captured Material Exploitation (ACME) laboratory. This has enabled the laboratories to identify individuals associated with the manufacture and emplacement of IEDs.²⁷ In RC(S), this allows intelligence personnel to trace the sources of insurgent network and origins, thus enabling security forces to cripple the insurgents' network.

Finally, exploitation enables the prosecution of insurgents after their captured materials have been fully exploited for intelligence purposes. As a result of such actionable intelligence, CF can conduct precision air strikes, deploy drones or Unmanned Aerial Vehicles (UAV) to eliminate these insurgent networks and IEDs that threaten civilians and security forces. Great care is taken to minimise any collateral damage to religious areas, i.e. mosques, and to reduce loss of life. Where possible, local officials are consulted to gain their approval prior to any release of munitions. The area is cordoned and announcements are made through local media such as Radio In A Box (RIAB).²⁸ Targeting in specific areas that the insurgent network operates allows security forces to engage insurgents to achieve lethal or non-lethal effects in a surgical manner.

In addition, leveraging on the C-IED's Biometric Enabled Intelligence (BEI) and Evidence-Based Operations (EvBO) contributes to the building of GIRoA's credibility and co-operation amongst the ANSF, investigators, prosecutors, judges and prison officials.²⁹ They enable the successful prosecution of the insurgents. The enrolment of biometric information at focussed threat or target areas increases the insurgents' database so as to reduce the IED incidents and to protect the Afghan people, ANSF and GIRoA. In addition, getting biometric associated bomb-makers or facilitators will have significant impact on decreasing casualties. To reinforce the success of the C-IED effort, it is important to keep the insurgents

‘pinned down’ operationally and discredit them through continuous non-lethal actions and IO. This is to reduce and disrupt the influence in the known and emerging insurgent areas.

Coupled with success stories, such as when the ANSF interdict an IED facilitation route or attack supply chains, it will have tremendous effect on the Afghan people. In the long run, the population will increase their trust in GIRoA and ANSF.

CONCLUSION


Targeting operations will continue to focus against insurgents’ networks, building a credible governance system and re-construction effort. It is important for the commanders and their planners to leverage on the C-IED information and BEI for targeting operations, utilising lethal and non-lethal actions in the planning process and the conduct of operations. With a clear understanding of the commander’s intent, these serve to provide the necessary up-front direction for the coherent integration of lethal and non-lethal actions.

The end-state is to promote and provide a secured environment for the Afghan people through successful non-lethal activities and IO initiatives by curbing or limiting the insurgent’s ability to conduct complex attacks, employ IEDs and intimidate the Afghan populace, GIRoA and ANSF. This is achieved through leveraging on the C-IED’s BEI as they contribute to the building of Afghan capacity, develop a credible, accountable and sustainable GIRoA and ANSF.

In conclusion, the tools needed to effectively neutralise IEDs as a battlefield threat will not be found in technological systems or equipment, nor in killing insurgent leaders, but rather in building relationships with the people who have become the battleground for all modern military conflicts. Winning the information

arena leveraging on the C-IED information, addresses the concerns of the people and this will in turn win them over. The population’s silence speaks as loudly as the next explosion in many ways.

“Know your patch. Know the people, the topography, economy, history, and culture. Know every village, road, field, population group, tribal leader and ancient grievance. Your task is to become the world expert in your particular district. Neglect this knowledge, and it will kill you.”

- Dr. David Kilcullen, former Special Advisor for Counter-insurgency to the Secretary of State.³⁰ 

ENDNOTES

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2. *Irregular Warfare*, (DoD Directive, 2008), v._11
3. *Civil Military Operations*, (Joint Publication), v._12, 3-57
4. Axelrod, Robert and Cohen, Michael D, *Harnessing Complexity: Organisational Implications of a Scientific Frontier*, (New York: Basic Books, 2000), 26
5. FM 5-0, *The Operations Process*, 2-7
6. FM 5-0, *The Operations Process*, 2-9
7. FM 3-60, *Targeting Process*, 1-2
8. FM 2-0, *Intelligence*, 1-10
IPB identifies unique and significant characteristics within and throughout the Operating Environment (OE). It evaluates terrain, weather and the infrastructure and their effects on coalition and threat forces.
FM 101-5, *Staff Organisation and Operations: Chapter 5 - Military Decision Making Process (MDMP)*, 5-1
9. *DoD Dictionary of Military and Associated Terms*, (Joint Publication, 2009), v._01, n._02, 195

10. *DoD Dictionary of Military and Associated Terms*, (Joint Publication, 2009), v._01, n._02, 17
11. PMESII stands for Political, Military, Economic, Social, Information, and Infrastructure. Later, the U.S. military doctrine writers added Physical Environment and Time as additional factors to consider in defining an operational environment. U.S. Army Field Manuals 5-0 and 3-0 advocate PMESII, PMESII-PT, ASCOPE, or METT-TC as methodologies to ascertain a better understanding of an environment. Furthermore, these methods are generally categorised as sub steps to a larger process. For example, according to FM 5-0, one can use METT-TC (or PMESII) during the Intelligence Preparation of the Battlefield (IPB) process which consists of four additional steps and is a part of the larger Military Decision Making Process (MDMP).
Assessment and Measure of Effectiveness in Stability Operation handbook, 1, 10-45, http://usacac.army.mil/cac2/call/docs/10-41/ch_1.asp;
ASCOPE stands for Area, Structure, Capabilities, Organisations, People and Events.
12. *Assessment and Measure of Effectiveness in Stability Operation handbook*, 5, 10-41
FMI 3-24.2, *Tactics in Counterinsurgency*, 1-2
13. FM 3-0, *Operations*, (2008)
FM 6-0, *Mission Command: Command and Control of Army Forces*, (2003)
14. FM 3-60, *Targeting Process*, 1-1
15. FM 3-24/MCWP 3-33.5, *Counterinsurgency*
16. KLE is a method for building relationships with people and entities of influence in the area of operation. <https://info.publicintelligence.net/AWG-KeyLeaderEngagement.pdf>
MISO are planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behaviour of foreign governments, organizations, groups, and individuals in a manner favourable to the originator's objectives.
17. FM 3-24/MCWP 3-33.5, *Counterinsurgency*
18. Von Clausewitz Carl, *On War*, (London: N. Trübner, 1873)
In Chapter 6, Clausewitz defines Centre of Gravity as "the hub of all power and movement upon which everything depends", indicating targets of great strategic importance that if destroyed will cripple the enemy.
19. FM 3-60, *Targeting Process: Find, Fix, Finish, Exploit, Analyse and Disseminate* (F3EAD), 1-6
FM 3-60, *Targeting Process*, 2-5
20. Galula David, *Counterinsurgency Warfare: Theory and Practice* (New York: Frederick A. Praeger, Publishers, 1964), 10
21. FM 3-39, *Military Police Operations* (2013), 3-9, <http://info.publicintelligence.net/DoD-BiometricIntelligence.pdf>
22. Iannotta Ben, *Biometrics: A New Intelligence Discipline - New technological choices bring challenges*, <http://www.defensenews.com/article/20130513/C4ISR01/305130017/Biometrics-New-Intelligence-Discipline>
23. Find, Fix, Finish, Exploit, Analyse and Disseminate (F3EAD) is a targeting methodology used by the US special operations forces (SOF) to anticipate and predict enemy operations, identify, locate, and target enemy forces, and to perform intelligence exploitation and analysis of captured enemy personnel and materiel. It fuses operations and intelligence functions so as to establish priorities and direction to accomplish the mission.
<http://smallwarsjournal.com/jrnl/art/f3ead-opsintel-fusion-%E2%80%9Cfeeds%E2%80%9D-the-sof-targeting-process>
24. <http://www.dtic.mil/ndia/2011GlobalExplosive/Gaghan.pdf>
25. *DoD Dictionary of Military and Associated Terms*, (Joint Publication, 2009), 17, v._1, n._2
26. MG T Flynn Michael, *Fixing Intel: A Blueprint for Making Intelligence Relevant in Afghanistan*, http://www.cnas.org/files/documents/publications/AfghanIntel_Flynn_Jan2010_code507_voices.pdf

27. The ACME lab analyses and examines evidence such as media, cell-phones, documents, weapons, DNA, blood samples and IED components collected at Afghan crime scenes. The tour of the ACME lab included a briefing on the myriad of improvised explosive devices used in Afghanistan and how the IEDs reveal clues and details about their maker and their social networks. http://www.army.mil/article/93303/Verdict_clear_to_Afghan_officials__Evidence_based_operations_vital/
28. MAJ (R) McKenna Sean and MAJ (R) Hampsey Russell, *The COIN Warrior: Waging Influence*, <https://www.mca-marines.org/files/hintsforcoin.pdf>
29. Evidence Based Operations (EvBO) are operations where Afghan law enforcement authorities, supported by ISAF, effectively investigate, apprehend, search or seize criminal suspects and affiliated property in accordance with Afghan law. ISAF, in cooperation with International Community (IC)'s Rule of Law (RoL) personnel and GIROA, will focus on supporting EvBO in the designated Provincial Justice Centres (PJC) by providing training, mentoring and partnership.
30. Lt Col Kilcullen David, *"Twenty-Eight Article": Fundamentals of Company-level Counterinsurgency*, *Military Review*, (2006)



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In addition, he was the first Singaporean Officer to be appointed Deputy Chief C-IED, deployed in RC(S) in Kandahar, Afghanistan with the US 82nd Airborne Division. He was awarded the US Army Commendation Award, NATO (Non-Article 5) medal and the SAF Overseas Medal during his deployment in Afghanistan.

He graduated from Edith Cowen University with a Masters of Science in Security Management in 2011, from the University of Western Australia with a Masters of Business Administration in 2007 and from the University of New South Wales with a Bachelor of Engineering degree (Missile Design) in 1996.