IDA

Joint
Advanced
Warfighting
Program

INSTITUTE FOR DEFENSE ANALYSES

Improving Capabilities for Irregular Warfare

Volume I: Framework and Applications

William J. Hurley, Task Leader
Joel B. Resnick
Alec Wahlman

August 2007
Approved for public release;
distribution unlimited.
IDA Paper P-4267
Log: H 07-001240

This work was conducted under contracts DASW01-04-C-0003, Tasks AJ-8-2465 and AJ-8-2743, for the Director, Defense Research and Engineering in the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics. The publication of this IDA document does not indicate endorsement by the Department of Defense, nor should the contents be construed as reflecting the official position of that Agency.

INSTITUTE FOR DEFENSE ANALYSES
Joint Advanced Warfighting Program

IDA Paper P-4267

Improving Capabilities for Irregular Warfare

Volume I: Framework and Applications

William J. Hurley, Task Leader
Joel B. Resnick
Alec Wahlman

This page is intentionally blank.

Karl H. Lowe, Director, Joint Advanced Warfighting Division (JAWD)

Although not intended for such a role, this report addresses a challenge facing the 2009 Quadrennial Defense Review. The QDR will likely be asked to address the balance between preparedness for irregular wars that are increasingly common and a potentially more dangerous war with a future peer competitor. Big war preparedness is the essential ingredient of deterrence that makes a "clash of the titans" less likely. However, adversaries with lesser means will fight us anyway, using ways they can afford—an asymmetric contest that places a premium on human agility.

Following previous JAWP efforts on concepts and capabilities for conducting urban operations, the Office of the Secretary of Defense for Acquisition, Technology, and Logistics asked JAWP to expand that work to address the capabilities a joint force commander would need for irregular warfare (IW). The purpose of this report is twofold: (1) describe a broad framework, encompassing military and non-military dimensions, and a process for identifying the capabilities needed to plan and conduct an effective IW campaign; and (2) identify promising directions for initiatives across all elements of DOTMLPF+[1] and related categories of non-military programs.

As a means of achieving these ends, the report describes five attributes of IW that distinguish it from regular warfare:

- The central role of human terrain.
- The tight coupling of civilian and military organizations and activities.
- The emphasis on small-unit combat actions among the civilian population.
- The importance of consolidating security, stability, and reconstruction in an area.
- The criticality of transition of control to a secure, stable, and legitimate host-nation government.

This report illuminates for the QDR the critical importance of understanding (1) the motivation and ingenuity of opponents and the cultural milieu in which they operate; (2) the blurring of distinctions between the diplomatic, military, intelligence, and law-enforcement components of national power and the necessity of their collaboration; and (3) the criticality of purpose-trained, intelligence-enabled, and culturally knowledgeable small units in IW.

[1] Doctrine, organization, training, material, leadership and education, personnel, facilities, plus other areas such as policy, interagency, and coalition.

This page is intentionally blank.

Preface

This report was prepared under the task order Joint Advanced Warfighting Program (JAWP) for the Director, Defense Research and Engineering, Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics). It describes a framework, including processes, and applications for identifying program initiatives aimed at improving the Department of Defense (DoD) capabilities for irregular warfare (IW).

Study Background

This report summarizes a JAWP effort that addresses the nature of IW, its implications for US force planning, and the development of a framework to help DoD force planners determine program initiatives aimed at improving US capabilities for IW. The Iraq experience has evolved and generated a vast dialog and burgeoning literature on IW, providing real-time and real-world insight into the nature of IW in its many phases. The study team has been monitoring this activity and studying its implications for force planning. This report summarizes the results of that effort and illustrates the application of those results.

The study team's initial efforts focused on the nature of IW. Using the ongoing conflict in Iraq as a case study, the team identified the high-level missions and capabilities that could be required by a wide range of IW scenarios. This work used an analogous approach to one developed earlier by a JAWP team to determine program initiatives for improving DoD capabilities for combat operations in urban areas.[1] As complicated as the urban case was, IW proved to be much

---

[1] William J. Hurley et al., *Department of Defense Roadmap for Improving Capabilities for Joint Urban Operations*, IDA Paper P-3643, two volumes, (Institute for Defense Analyses, Alexandria, Virginia, March 2002), For Official Use Only.

broader and more complex, opening up many dimensions that were far more important to IW than either to urban operations or to the kinds of major contingencies that DoD prepared for in the post-Cold War era.

The study team sought a set of guidelines that could help the DoD force planner relate the high-level structure of IW missions and capabilities to specific areas for which program initiatives could be identified. The guidelines, captured in five "distinguishing attributes" of IW, are used in this report to help identify illustrative focus areas and program initiatives. Volume I describes the framework and applications, and Volume II, *Capabilities Analysis*, provides detailed discussions of the capabilities required for IW.

The sponsors of JAWP have provided an uncommonly adaptive analytical environment that supported a "Lewis and Clark" approach to this dynamic subject. The study team could modify its approach as team members gained more experience and insight, as field reports provided lessons-learned regarding what was working and what was not, and as an increasing number of thoughtful operators and observers shared their insights.

Joint Advanced Warfighting Program

JAWP was established at the Institute for Defense Analyses (IDA) to serve as a catalyst for stimulating innovation and breakthrough change. It is co-sponsored by the Under Secretary of Defense for Acquisition, Technology, and Logistics; the Under Secretary of Defense for Policy; the Vice Chairman of the Joint Chiefs of Staff; and the Commander, United States Joint Forces Command (JFCOM). JAWP includes military personnel on joint assignments from each Service and civilian specialists from IDA. JAWP is located in Alexandria, Virginia, and includes an office in Norfolk, Virginia, to facilitate coordination with JFCOM.

This paper does not necessarily reflect the views of IDA or the sponsors of JAWP. Our intent is to stimulate ideas, discussion, and, ultimately, the discovery and innovation that must fuel successful transformation.

Acknowledgments

The study team is pleased to acknowledge the principal sponsor of this work, Mr. Benjamin Riley, of the Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), for his guidance and support. In addition, the study team appreciates the constructive contributions of the study's reviewers: COL Scott R. Feil, USA (ret.); Dr. Theodore S. Gold; COL James H. Kurtz, USA (ret.); Mr. Drew R. Lewis; and COL Robert B. Polk, USA (ret.)

The team benefited from the contributions of countless individuals over the course of this study. In particular, the team would like to acknowledge the following people:

MG David J. Baratto, USA (ret.)

Mr. Kenneth J. Benway

Mr. John R. Brinkerhoff

Mr. Peter Brooks, SAIC/Hicks & Associates

Maj Robert Castro, USMC

Col John Costa, USAF

Dr. Janine Davidson, SAIC/Hicks & Associates

Mr. Theodore M. Kalmbach

Mr. Russell A. Keller

Mr. A. M. Lidy

Dr. Robert B. Mahoney, Jr.

Dr. Montgomery McFate

MAJ Sharon Moore, USA

Dr. Susan K. Numrich

Mr. Richard B. Polin

Mr. Donald L. Sampler

Mr. William B. Simpkins

Mr. Mark Smith, SAIC/Hicks & Associates

The team appreciates the assistance provided by Dr. James N. Miller of SAIC/Hicks & Associates for enabling Dr. Davidson and Messrs. Brooks and Smith to participate in this study and share their innovative approach to characterizing the human terrain.

Abstract

This two-volume report describes a framework for identifying program initiatives aimed at significantly improving US capabilities for irregular warfare (IW). The framework has two components: a characterization of the capabilities needed to conduct IW in terms of the *type* of capability (Understand, Shape, Engage) and the *object* being addressed (Environment, Population, Host-Nation Government, Red, Blue); and a set of five attributes (Human Terrain, Civil-Military Coordination, IW Combat Characteristics, Consolidation, and Transition) that distinguish IW from "regular warfare." The report first applies the framework to Iraq-like IW. It identifies a set of twenty-three high-level missions and ninety-two capabilities, which are broadly assessed based on recent performance. The report then applies the framework to specific areas of high importance: Transition; Theater Communications; Personal Interactions; Civilian and Military Organizations and Activities; Policing-Related Capabilities; and Technology. Each application illustrates the study approach to identifying directions for initiatives for improving performance. Finally, the report discusses steps for implementing IW-related initiatives within DoD and how the process may serve as a vehicle for focusing the attention of subject-matter experts and stakeholders on critical IW issues.

Contents

List of Figures

List of Tables

Contents for Volume II, Capabilities Analysis

Executive Summary

How do planners in the Department of Defense (DoD) think through the great complexity of irregular warfare (IW) and come up with a coherent set of initiatives that will better prepare US forces for this type of conflict? This report illustrates an approach for identifying program initiatives that will improve the "toolkit of (IW) capabilities" available to future US commanders (military or civilian) and better enable them to tailor operations in IW for any given set of conditions.

A. Definition of IW

The term "irregular warfare" covers a wide range of warfare types and scenarios and is often described in terms of what it is not: Not "traditional" warfare. Not "major combat operations." This study focuses primarily on the type of IW currently ongoing in Iraq.[2]

B. IW's distinguishing attributes

Figure ES–1 illustrates key differences between IW and regular warfare (RW), i.e., warfare between permanently organized bodies, each constituting the standing force of a state.[3]

The objective of RW is the defeat of Red forces. Needed capabilities focus on understanding, shaping, and engaging Red. The population is part of the background environment. In contrast, the objective of IW is the establishment of a secure, legitimate, stable host-nation government (HNG) and the population is the

---

[2] *See* Chapter I for a detailed discussion of the definition of irregular warfare.

[3] Paraphrased from *Webster's Ninth New Collegiate Dictionary*, Merriam-Webster Inc., 1985.

focal point. Needed capabilities for *understanding*, *shaping* and *engaging* address a much more diverse set of actors and the relationships among them: the population; Red force; HNG; the diverse members of the Blue team, which now includes both military and civilian components; and the environment. In short, IW is not a lesser-included case of RW.

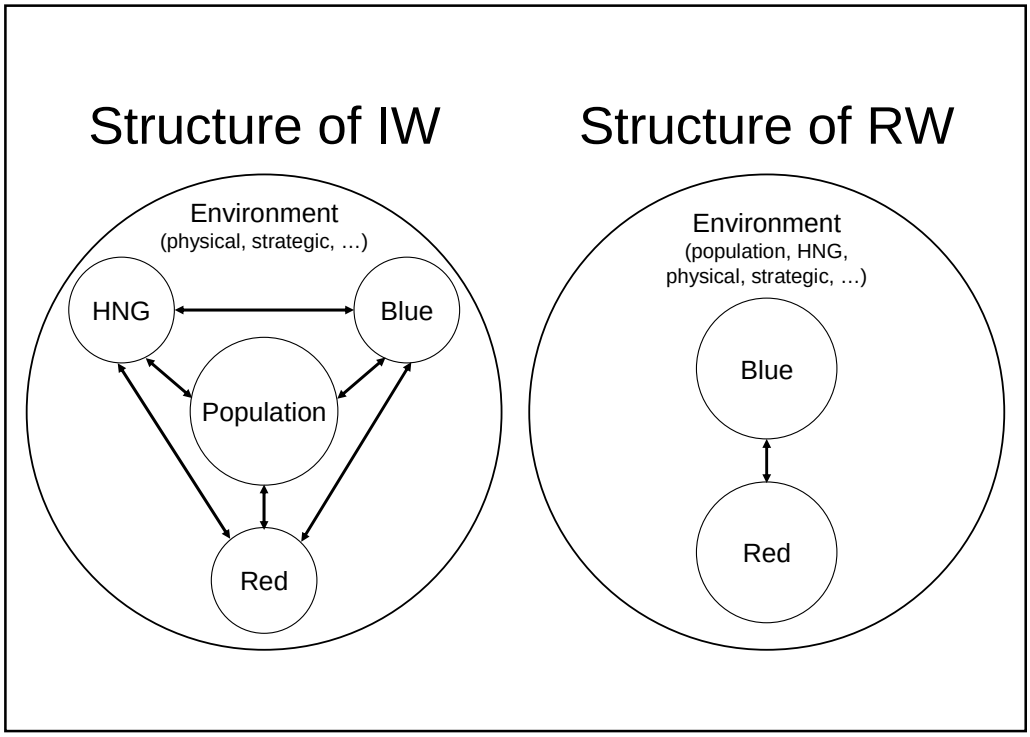


Figure ES–1. Key Differences Between RW and IW

This volume identifies five attributes of IW that distinguish it from RW. Because previous US force development has focused almost exclusively on RW, these distinguishing attributes are guides for identifying focus areas and program initiatives. Each distinguishing attribute is discussed in the following sections.

1. The central role of human terrain

In RW, the population plays a secondary role—the main focus is on defeating the enemy, and the control of physical terrain is a key feature. The analogous key feature of IW is to have the support of the population. Politically, popular support is key to the fundamental objective of the United States in IW—the

establishment of a legitimate and stable HNG. Militarily, the population is a critical partner in finding and identifying enemy forces. Economically, the population is the foundation for reconstituting national resources and civilian services. Thus, in IW the population becomes the "center of gravity" of the campaign.

Capabilities needed for effective operations regarding human terrain are the ability to understand the nature, structure, dynamics, and attitudes of the population, and the ability to shape the human terrain to advantage. These challenging capabilities have not traditionally been emphasized in DoD planning. To explore how to improve them, DoD must reach out to a wide range of disciplines, for example, the social sciences (anthropology, ethnology, sociology, social psychology), human networks, multicultural communications, and the mapping and monitoring of social activities and attitudes.

In addition, the capabilities to plan and conduct campaigns waged on human terrain must be developed. This entails developing concepts of operation focused on the attitudes of the population[4], the means of executing the concepts, and techniques for gauging progress. Focus areas that call for more attention include cultural understanding, human intelligence, influence operations, strategic communications, and the role of the media.

2. Extraordinarily tight coupling of civilian and military organizations and activities

Because IW involves both military missions and civilian missions (stabilization, reconstruction, transition of control to the HNG), coordination between military and civilian organizations and activities is critical from *before* the beginning and until the end of US involvement. Extraordinary coordination between DoD and non-DoD organizations is needed to develop effective organizational structures and processes for planning and unity of action in execution. The organizations that DoD must work with include the US Department of State, other US Government agencies, Coalition partners, the HNG, international organiza-

---

[4] *See* Appendix A for an example of such a concept.

tions such as the United Nations, non-governmental organizations (NGOs), and contractors.

3. Military actions emphasizing small units operating among the civilian population

This attribute has several implications. One is that Blue and Red have mutual physical access. This proximity presents threats and opportunities: threats because Blue is vulnerable to close-up attacks by, e.g., improvised explosive devices and snipers; and opportunities because Red is vulnerable to close-up identification, tracking, restricted movement, and interruption of his supply chain. Challenges include the difficulty in distinguishing Red from non-combatants, the additional complexity of IW missions, and the constraints imposed on military actions during IW. Other challenges include the following:

- Operational planning may have to trade *going after Red forces* for *alienating the population* because of collateral casualties, damage, or simply disrespect.
- The roles for more "measured effects" and non-lethal weapons are expanded.
- Operations must focus as much on protecting the population and civilian facilities as on protecting Blue personnel and facilities.
- Operations to isolate Red from noncombatants emphasize population management and law enforcement techniques.
- Operations tend to be conducted in urban environments; so emphasis is increased on small-unit, distributed operations marked by close-up engagements. This places enormous responsibility on junior leaders and the small teams they lead.
- Human intelligence is paramount, as is focusing intelligence assets at the small-unit level.
- Adaptability is key because Red may change concepts of operation and tactics, techniques, and procedures (TTP) from day to day.

- The conflict is long term, with each side trying to wear down the other's ability to influence the population. The pace of IW campaigns is fundamentally different from the "rapid decisive operations" that dominated late twentieth-century US military planning.

4. **Security, stability, and reconstruction need to be consolidated within an area, rather than defeating the enemy and moving on, as in RW**

This consolidation prepares for the transition of such responsibilities to other agencies, Coalition members, and host-nation partners. Short-term control of an area may do more harm than good because of the retribution that Red may subsequently inflict on members of the population who cooperated with Blue. A major challenge is achieving the force levels necessary to hold large areas. Economy-of-force initiatives that employ unmanned security systems and support partnering with host-nation forces are key. DoD must also be able to provide highly effective "first-responder" capabilities not only for establishing the security of the population but also for taking initial actions, at the local and national levels, toward providing a stable society, reconstruction, and transition of political control to a legitimate HNG. These DoD capabilities must be developed in cooperation with the agencies that will have longer-term responsibilities in these areas.

5. **The overarching objective is transition to a secure, stable, legitimate HNG**

The keys to transition are *leveraging* and *empowering* local resources. Capabilities are needed to perform the following:

- understand the HNG capacity for security and civil-support;
- plan with interagency, multinational, and host-nation organizations from the earliest point of engagement;
- engage with locals (partnering, supporting, hiring);
- train, advise, and monitor host-nation security and civilian personnel;

- equip host-nation security and civilian agencies with systems that are consistent with host-nation resources and safeguarded against unauthorized use; and
- share the products of US capabilities (such as intelligence or communications) without compromising those capabilities or sources.

C. Study processes

This report describes two sequential processes.

- The first explores the fundamental missions and capabilities of IW and helps identify critical focus areas from the vast range of IW topics and issues.
- The second process picks up where the first leaves off and helps identify directions for program initiatives for improving capabilities within a specific focus area.

These are not "crank-turning" processes but rather structured approaches for thinking about the challenges of IW. Both processes follow a basic planning sequence, first determining *what* has to be done, how it might be done, and the *current status* of needed capabilities; and then identifying either focus areas for remedial actions or needed program initiatives in a specific focus area. Finally, the question of *who* should implement the needed changes is addressed.

To help structure the processes, provide checklists, and describe the results, the study characterizes the types of capabilities and program initiatives.

D. Applications

The processes can be applied at many levels. The report first describes a detailed, comprehensive, high-level analysis of IW itself in the context of recent operations in Iraq. The needed capabilities are determined, and observations from the field provide insight into the status of the capabilities. The results of this analysis provide the foundation for identifying IW's distinguishing attributes and selecting topics for more detailed analysis.

The following topics were selected for more detailed analysis: Theater Communications, Personal Interactions, DoD Coordination with Diverse Organizations, Policing-Related Capabilities Valuable for IW, and Transition. Of course, these examples do not present a complete picture of all IW improvements needed. Rather, they illustrate how the process can be applied and the types of results that emerge. In addition to these topics, a cross-cutting look at IW from the perspective of implications for technology development is also described.

In practice, the process illustrated by these examples can provide a vehicle for focusing the input from operators, subject-matter experts, and others as part of a vetting/revision sequence that arrives at program recommendations while gaining insight and buy-in from stakeholders. Results from each of the above applications are summarized in the following sections.

1. General IW Capabilities

For an Iraq-type IW, the study team built upon previous work by the US Department of State and the Strategic Studies Institute of the US Army War College[5] at Carlisle, Pennsylvania, to develop a set of twenty-three IW missions. These missions relate to combat and support and civil-systems support. Combat and support includes neutralizing Red forces; protecting the Blue force, the population, and physical sites; working with indigenous security forces; and standing up indigenous military units. In addition, IW requires a very broad range of civil-systems support for humanitarian assistance, social well-being, governance, economic stabilization, infrastructure rebuilding, and justice and reconciliation.

The next step in the process is to identify the capabilities needed to carry out all the missions. The study team identified a total of ninety-two capabilities falling into three general categories:

---

5 US Department of State, Office of the Coordinator for Reconstruction and Stabilization, *Post-Conflict Reconstruction Essential Task*s (April 2005). Conrad C. Crane and W. Andrew Terrill, *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario*, (Carlisle, PA: Strategic Studies Institute, US Army War College, February 2003).

- **Foundational Capabilities**, which apply to essentially all of the missions;
- **Combat and Support Capabilities**, which emphasize neutralizing Red and protecting the population and physical sites; and
- **Civil-System Capabilities**, which emphasize creating an environment that is supportive of security, stabilization, and reconstruction.

The study team then examined the ninety-two capabilities. Based on US performance during recent operations in Iraq, the team judged that thirty-four of the ninety-two capabilities need substantial improvement. The report describes in detail the missions, capabilities, and rationales for these assessments (Chapter IV, Appendix B, and Volume II).

2. Applications to focus areas

a. Theater Communications. The "center of gravity" of IW is the host-nation population; the attitudes of that population will drive success or failure. Therefore, the ability to influence the thinking of the population is central to success. TC is the US effort to understand, engage, and shape (influence) the host-nation population. Experience in Iraq indicates that current US capabilities for TC generally need substantial improvement.

Proposed initiatives include developing new doctrine, establishing new organization, expanding training, and focusing recruiting to improve US capabilities to understand target audiences, formulate a coherent message to a local population, and engage the people through effective media.

b. Personal Interactions. Personal interactions influence the population. The effects of interactions that occur during routine operations such as patrols, checkpoints, and civil-military activities can be positive or negative. Improving US capabilities to conduct these interactions could significantly enhance popular support for US interests.

Proposed initiatives include new doctrine, training programs, training tools, and professional military education (PME) to improve the effectiveness of personal interactions by capturing and promulgating best practices, and preparing US forces under realistic conditions. Support systems are

needed to improve the local intelligence available to troops in the field, and to give them improved translation tools, material on local customs, and "hot-button" messages to convey. Finally, improved recruiting and selection techniques could screen for individuals who are well suited for personal interactions with local populations.

c. DoD Coordination with Diverse Organizations. IW requires many specialized skills and resources not commonly found in military units or government agencies but which are often available from NGOs, international organizations, and contractors. Such skills and resources include many related to governance, the Rule of Law, and socio-economic reconstruction. However, achieving unity of effort from such a diverse collection of organizations poses a great challenge to Coalition leadership. In the 2006 *Quadrennial Defense Review Report*, DoD recognized the need for diverse partners but focused on the partnerships of DoD with other US agencies, allies, and the host nation. However, experiences in Iraq and Afghanistan indicate that it is also critical to include NGOs, international organizations, and contractors in IW planning and execution.

Proposed initiatives focusing on capabilities to "shape Blue" include new doctrine for achieving unity of effort with NGOs, international organizations and contractors; increased investment in information technology that could help coordinate these organizations; the inclusion of information and guidance regarding these organizations in PME programs; and the inclusion of these organizations in joint IW exercises and simulations.

d. Policing-Related Capabilities Valuable for IW. US forces in Iraq and Afghanistan have faced challenges in several of the competencies associated with policing: institutional development and training; regular policing (e.g., street patrol); and specialized law enforcement (e.g., countering criminal networks).

One challenge associated with developing an effective justice system is building host-nation police forces that support the Rule of Law. The August 2006 State Department cable to the US Embassy in Iraq, "Rule of Law Demarche," describes the problems in Iraq today, e.g., "Security forces often operate with impunity and few officers have been held ac-

countable for even gross human rights abuses." [6] While the HNG is ultimately responsible for police behavior, there are ways that US forces, in conjunction with interagency and Coalition partners, can help the HNG address such problems in future IW:

- Increase US Government understanding of intelligence specific to Rule of Law by tasking the Under Secretary of Defense (Intelligence) to work with the intelligence community to provide this information on selected countries.
- Increase the attention that host-nation police give to conformity to Rule of Law by improving US Government capabilities to emphasize Rule of Law in helping to recruit, train, and organize host-nation police personnel and units.
- Increase oversight of host-nation police actions by extending the US system for tracking Blue forces to cover host-nation police cars and people.

Another challenge for the US military is to become more proficient in policing operations while maintaining the more traditional combat skills. DoD forces in Iraq have shown major shortfalls in policing-related capabilities, which is not surprising. These capabilities are not important in RW and so are not part of US force competencies. The new Army–USMC doctrine in *Counterinsurgency* recognizes both the differences between warfighting and policing, and the need for both in conducting IW:

> There is a clear difference between warfighting and policing. COIN operations require that every unit be adept at

---

[6] US Department of State, State [cable] 140016, "Rule of Law Demarche," cable to US ambassador in Iraq, 26 August 2006.

both and capable of moving rapidly between one and the other.[7]

To gain these competencies, a critical element of any initiative is to provide US forces with the policing tools, systems, and approaches drawn from regular policing and/or specialized law enforcement.

e. Transition: Security, Essential Services, and HNG Legitimacy. Transition is the transfer of responsibility and authority to a legitimate and stable HNG. It requires DoD capabilities to plan with, train, advise, equip, support, and monitor the HNG. It also requires DoD to work effectively toward these ends with other agencies, Coalition partners, international organizations, NGOs, and contractors.

Potential actions to improve capabilities for transition include two organizational initiatives, one for an ongoing contingency and another for potential future contingencies.

- **Ongoing contingency.** Establish a bilateral or multinational organization with the HNG to develop and enhance HNG capabilities to recruit and vet security forces; monitor and assess field performance; develop lessons-learned and TTP; design, test, and acquire material; create training and advisor programs; and develop concepts that enable the HNG to leverage Coalition capabilities without compromising them or slowing down the transition process. This organization would be analogous to a Service "Battle Lab" but focused on host-nation security, essential services, and legitimacy. It would also have links back to analogous organizations in the United States.
- **Potential future contingencies:** Establish a standing US-based interagency organization to anticipate potential trouble-spots, assess alternatives for US actions, propose agency responsibilities, construct cam-

---

[7] US Army and US Marine Corps, *Counterinsurgency,* Headquarters Department of the Army Field Manual FM 3-24 and Headquarters Marine Corps Combat Development Command Marine Corps Warfighting Publication MCWP 3-33.5, December 2006, p.7-6.

paign plans, conduct joint exercises, and develop a toolkit of capabilities for helping failing or failed states avoid crises, defeat internal threats, and reestablish stability. Security, essential services, and legitimacy would all be addressed. This organization would be a clearinghouse for information and contacts. It would have a permanent staff augmented by visiting members, by "reservists" who could be called upon in a crisis, by an outreach program to area experts, and by satellite programs in other organizations. It would establish cooperative programs with selected countries and a network of contacts from all elements of their societies.

f. Technology for IW. This application uses all five of the distinguishing attributes of IW to identify implications for DoD science and technology (S&T) programs and systems acquisition. Examples follow.

- **Human Terrain.** Areas that support this attribute but have yet to play a significant role in DoD S&T investment portfolios include acquiring, processing, and displaying information about the population; managing the information environment; communicating and interacting with the population; training Blue personnel to interact effectively with the population; and understanding, shaping, and leveraging human networks. The social sciences are much more relevant to these defense issues. The new emphases on multicultural communications and the nature and dynamics of human networks reflect the complexity and challenge of IW.
- **Civilian and Military Organizations and Activities.** Technology initiatives can support multi-agency connectivity through improved multi-access, multi-level-secure data, communications, and planning aids. Needed are improved, low-cost, rapidly transportable systems to support essential-service missions. Examples include advances in food technology, water purification, housing, waste treatment, and telemedicine. Such systems would also support disaster-relief missions abroad and at home.

- **IW Combat Operations**
  - **Because IW is more like law enforcement than RW is**, a number of technologies relevant to law enforcement have become relevant to military operations, including systems that support personal identification and on-the-street real-time access to central databases; surveillance, tracking, and tagging of people and vehicles, and the control of their movements; monitoring of communications and business transactions; human intelligence (communications, sensors, information processing, lie detection); forensics; and countergang-counternetwork operations.
  - **Defensive operations can stress Blue force levels** because of the shared battlespace, the need to protect the population, and the dispersal of Blue forces**.** These lead to the increased value of automated systems for persistent surveillance, forces with rapid response to warnings, barriers to control population movement, detection of explosives, and local protection of potential targets.
  - **Collateral casualties and damage** work against Blue's overall objective in IW. Thus, Blue use of force could benefit from the employment of systems that can provide "measured effects" such as highly localized kinetic effects or non-lethal weapons.
  - **The importance in IW of small units** (company and below) and **distributed operations** has major technology implications. It puts a premium on soldier technologies (protection, weapons, communications, mobility, support), and actionable intelligence generated and exploited locally. Improved intelligence support to small-units is possible using "police precinct-level" organizations with reach-back for data, forensics support, and "city-wide" intelligence. Distributed operations demand effective communications, networking, and logistic support for small-unit operations. These require hand-held real-time systems for troops on patrol with police-like reach-back to data on biometrics and criminal records; vehicles and drivers; quick-reaction support capabilities for engagement, reinforcement, or medical evacuation; and exploitation of the vertical di-

mension for communications, surveillance, engagement, and support.

- **IW places a premium on Blue continually assessing Red actions and adapting quickly to Red's changes.** In IW, Red employs simple weapons and small-unit TTPs that are easily changed in the face of Blue successes. Technology can contribute to Blue's quick adaptability by facilitating a rapid "lessons-learned" distribution system; improving the versatility of fielded equipment; and improving data-gathering during combat operations by introducing automated recorders that capture the locations, communications, electromagnetic environment, and actions (similar to black-box recorders on aircraft).
- **IW is a war with a long timeframe** and greater emphases on support functions, continuity of operations despite personnel turnover, and equipment maintenance load. Technical improvements are relevant to all of these areas. For example, improved reach-back and "virtual right-seat patrol rides" before and after personnel turnover can help improve turnover continuity.
- **The physical terrain on which IW is waged tends to be urban**, dominated by people, structures, and infrastructures. However, like IW, urban warfare has also tended to be neglected by military developers in the post-Cold War era. Many technology-related initiatives for urban warfare apply to IW as well. Some of the key directions for basic research and development are survivable air platforms in urban terrain; information technology that works in urban areas; miniaturization of sensors to facilitate stealth and portability in the urban environment; robotics to reduce casualties; non-lethal weapons to reduce collateral casualties and damage; and improved protection for personnel and vehicles.

- **Consolidation.** Consolidation emphasizes the maintenance of security and the initiation of reconstruction activities in partnership with the local population, the HNG, and other organizations. Because Consolidation requires a sustained presence, it places a burden on Coalition force

levels and a premium on leveraging local capabilities. Technology can help enable the following: unmanned security systems that can reduce manpower requirements for surveillance and response; systems that support population tracking and movement control; systems that support the "first-responder" role for stability and reconstruction efforts that may fall to the military; and systems and tools that help leverage the local population (such as translation devices) and local resources (such as existing infrastructure).

- **Transition.** Technology initiatives that can support transfer of authority to the HNG include tools for multicultural communications, planning, recruiting, vetting, and training; transferable technologies (sensors, weapons, platforms, communications, information processing, force protection, and reconstruction tools) that are affordable by the host nation and consistent with host nation skill levels and operational environments; systems and procedures that enable the host nation to leverage Coalition capabilities without compromising those capabilities such as access to Coalition intelligence products, remote strike assets, and logistics platforms; and technologies for remotely controlling or neutralizing systems that may fall into enemy hands.

E. Implementation

Although there appears to be a consensus on the importance of IW to US security interests, the implementation of IW-specific initiatives will require the direct involvement of senior DoD leadership, staff-level advocacy throughout DoD, and Congressional support. The next steps should include the development of a comprehensive, actionable DoD IW Master Plan; guidance to increase the urgency and priority of IW and its planning throughout DoD; and dedicated funding.

This page is intentionally blank.

Improving Capabilities for Irregular Warfare

Volume I:
Framework and Applications

This page is intentionally blank.

Chapter I. Introduction

A. Background

The purpose of this study, and this report on it, is to help improve capabilities for the kinds of wars being fought in Iraq and Afghanistan. This report refers to these wars as "irregular warfare" (IW).

The sponsor tasking comprises the following:

- Develop a broad framework, encompassing military and non-military dimensions, and a process for identifying the capabilities needed to plan and conduct an effective IW campaign.
- Identify promising directions for initiatives[8] across all elements of DOTMLPF+[9] and related categories of non-military programs.
- Goal: An improved "toolkit of capabilities" that will enable future commanders (military or civilian) to tailor an approach for any given set of conditions

As a first step, the study develops a structured approach to identify and catalog what missions may need to be carried out in IW and the capabilities—military and civilian—needed to do them. Discussions with people who served in Iraq and Afghanistan were important in doing this. US performance in Iraq is the basis used to assess how well the United States can do IW today, and to identify where the capability gaps are.

---

[8] In this report, "direction for initiatives" generally refers to a specific capability shortfall to be addressed by program initiatives, whereas "initiative" refers to a specific remedial program.

[9] DOTMLPF+ – Doctrine, organization, training, material, leadership, personnel, facilities, other (e.g., policy, legality, joint concept development and experimentation).

The study then explores what makes IW so different from the major wars the United States has prepared for in the post-Cold War era, and that the United States had fought in 1991 in Iraq. These differences are characterized by five distinguishing attributes that provide a focus on what's particularly different and important about IW.

- **Human Terrain:** The central role of human terrain in IW (vs. the physical terrain)
- **Civil-Military Coordination:** The extraordinarily tight coupling of civilian and military organizations and activities (vs. the centrality of military organizations and operations)
- **IW Combat Characteristics:** Military operations emphasizing small-unit action among the civilian population (vs. large-unit operations away from people)
- **Consolidation:** Of security, stability and reconstruction within an area (vs. defeat the enemy and move on)
- **Transition:** To a stable host-nation government (HNG) as the overarching objective (vs. decisive victory over enemy forces).

Table I–1 contrasts the distinguishing attributes of IW with regular warfare (RW).

Table I–1. Distinguishing Attributes of Irregular and Regular Warfare

Irregular Warfare	Regular Warfare
Central role of **human terrain**	Central role of **physical terrain**
Extraordinarily tight coupling of **civilian and military** organizations and activities	Dominance of **military** organizations and actions
Military actions emphasize **small units** operating **among the civilian populace**	Military actions emphasize **large units** operating **in the absence of civilians**
Consolidation of security, stability and reconstruction in area	Defeat enemy in area and **move on**
Transition control to HNG	**Decisive victory** over enemy

The team used these attributes to help identify Department of Defense (DoD) program initiatives while recognizing the need for non-DoD initiatives. This analysis benefited greatly from new thinking in US and foreign defense communities on how to improve IW capabilities, and from initiatives taken by US forces in Afghanistan and Iraq. The examples of program initiatives provided in this report are not a complete description of what future commanders (military and civilian) would need for IW. The framework provided in this report is the basis for identifying such capabilities.

The report will also help the following people in DoD and non-DoD communities who are already dealing with IW problems:

- Concept developers and experimenters exploring new concepts and capabilities for IW.
- Agencies addressing individual changes to DOTMLPF+ to improve US effectiveness in IW, e.g., those providing Professional Military Education (PME) to future commanders and training to units that could be involved in IW.
- Contingency planners in joint headquarters preparing to use DoD and non-DoD capabilities in future IW contingencies.

B. Characterizing IW

The term *irregular warfare* is not defined in the *Department of Defense Dictionary of Military and Associated Terms.*[10] However, it is used in various writings on military issues in ways that cover a wide range of scenarios and specific types of warfare that are often given their own descriptors.

- **Objectives.** Some of these types of warfare are described in terms of objectives. These descriptors include security operations, stability op-

---

[10] US Department of Defense, *Department of Defense Dictionary of Military and Associated Terms*, 12 April 2001 (As Amended in 12 July 2007), Joint Publication 1-02, (Washington, DC: US Department of Defense, 2007).

erations, peace operations, reconstruction, counterinsurgency, and foreign internal defense.

- **Major combat operations.** Others descriptors relate IW to the kind of regular wars DoD prepared for in the post-Cold War era, often labeled as *major combat operations* (MCO) and with terms like *post-MCO* and *pre-MCO, Phase IV operations*, and *fourth-generation warfar*e.
- **Size.** Other terms describe it by size: small wars, guerrilla warfare, and low-intensity conflict.
- **Proposed definition.** Finally, one recently proposed definition of IW characterizes it by who are involved, the type of approaches emphasized, and the purpose, "to erode an adversary's power, influence, and will." [11]
- **"Un-" and "other than-".** Some labels describe it by what it is not: *un*conventional war, *non*-traditional war, *a*symmetric war, *unrestricted* war, and *operations other than* war.

This report does not attempt to end the debate over how to define IW and what types of warfare should be included in IW. It simply uses the term "irregular warfare" or IW to cover the wide range of warfare types that have been waged in Iraq and Afghanistan.

C. IW and the primacy of local conditions

Although this report draws heavily on the US and Coalition experience in Afghanistan and Iraq, it recognizes that many variables determine the character of any particular IW. It is common, and correct, to say that "every IW scenario is

---

[11] "IW is a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations. IW favors indirect and asymmetric approaches, though it may employ the full range of military power and other capabilities, to erode an adversary's power, influence, and will." This definition was proposed by the Deputy's Advisory Working Group (DAWG), [personal communication], 6 February 2007.

unique." The uniqueness can be seen to affect both how IW should be fought and what can be accomplished.

Critical variables

Some situations that involve IW can be unsolvable, at least from the perspective of an outside power.[12] If key elements of the HNG or the population either can't or won't work with the outside power, then success may be impossible.[13] The primacy of local conditions elevates the importance of understanding the human environment (over the military environment) for designing a situation-specific approach to the IW campaign—or the avoidance of it altogether.

Human terrain. Understanding the IW environment involves addressing the details of the human terrain within which the IW will take place, e.g., demographic structure, religious beliefs, history, standard of living, trusted sources of information, relations between the insurgents and the government, security needs, satisfaction with government services, quality of leaders, and/or movement patterns.

Strengths of the contending forces. Another set of critical variables are the strengths and weaknesses of the contending forces (HNG and factions within it, insurgent groups, and the United States and its Coalition partners). Examples:

- The competence and organization of the HNG and its goals, various civil systems, attitudes of various factions and their relationships to each other and the population, the plan for dealing with insurgents, and international support.

---

12 D. Michael Shafer's *Deadly Paradigms: The Failure of US Counterinsurgency Policy*, (Princeton, NJ: Princeton University Press, 1988).

13 "The extent to which a coherent legitimate government exists, or can be created, is arguably the most important factor in determining the success or failure of a post-conflict reconstruction effort." Robert C. Orr, "Governing when Chaos Rules," in *Winning the Peac*e, Robert C. Orr, editor, (Washington, CSIS Press, 2004), p. 58.

- The size and capabilities of the insurgent groups, their relations with the population and criminals, financial support networks, entry patterns for foreign insurgents, internal divisions, attitudes and beliefs, motivations and goals, command structure and personalities, and international support.
- The roles, organizations, and goals of the United States and its Coalition partners; the capacity of each member; domestic political will supporting each member; and international support outside the Blue forces.

Recognizing the importance of all these variables on the character of the war labeled as IW, there are three reasons why this report focuses on the wars in Afghanistan and Iraq:

- First, readers of this report will be familiar with these conflicts, and any initiatives based on them are more likely to be understood and acted on than those initiatives from a more distant period of history.
- Second, these wars are proving to be extremely demanding, with the specific type of war changing over time. By observing them, we can learn about many different types of IW (e.g., insurgencies, civil wars, terrorism campaigns).
- Finally, a careful study of these wars will teach us how to prepare for future IW that the United States will likely face.

D. Importance of IW in twenty-first century conflict

The 2006 *Quadrennial Defense Review Report* (hereafter *QDR Report*) notes that "In the post-September 11 world, irregular warfare has emerged as the dominant form of warfare confronting the US, its allies and its partners…"[14] Sev-

---

[14] US Department of Defense, Secretary of Defense, *Quadrennial Defense Review Report*, Washington, DC, February 2006, p. 36, downloaded 20 August 2007 from https://acc.dau.mil/CommunityBrowser.aspx?id=32488.

eral considerations make it likely IW will be an important challenge to US national security interests in the twenty-first century.

- The North Atlantic Treaty Organization (NATO) IW in Afghanistan, supported by the United States, is unlikely to end quickly. The Taliban is again mounting a strong insurgency and the US Congress is showing bipartisan support to wage this war. The US ability to help end this war could well depend on how quickly American IW capabilities improve.
- Many oil-producing states in the Middle East face internal challenges from Islamist jihadist organizations. DoD could be an important player in providing foreign internal defense to support them.
- The US national strategy for combating terrorism calls for denying sanctuary to terrorists. This makes failed states and ungoverned territories a concern to the United States. DoD would have an important role in preventing these regions from being used by terrorists.
- A government could threaten weapons of mass destruction use against the US homeland or an overseas region. US political and/or diplomatic leverage in getting a negotiated settlement depends on the credible capability to take down the government and then replace it. In these situations, improved IW capabilities would provide negotiating leverage.

Each of these situations involves a form of war where the enemy can hide within the civilian population, many military and civilian organizations will be involved in the host country, small-unit military actions will be important to providing security, and a long duration could be needed to consolidate security and transition governance and security to a stable HNG. The United States cannot be so weak in this form of warfare that it becomes a viable option for an adversary.

E. Many views on preparing for IW

During the Cold War, US national strategy focused on deterring the Warsaw Pact. Over time, a consensus developed on the size and shape of a triad of forces: US strategic nuclear forces; United Kingdom, French, and US theater nuclear forces; and large conventional forces, forward deployed, capable of major

combat operations in Central Europe. Challenges elsewhere in the world were treated as lesser-included cases. These were fought with the forces that were intended to fight the Warsaw Pact. The frustrating US experience in Vietnam led some to conclude “No more Vietnams.”

In the post-Cold War era, the total number of US military personnel was reduced by 25% and the US national strategy was focused on deterring and fighting two major regional conflicts. Gradually, a consensus developed within the United States on the size and shape of active and reserve forces needed. Again, the United States planned for other challenges (called *smaller-scale contingencies*) as lesser-included cases, and fought them with the forces prepared for major regional conflicts. Frustration with discretionary operations for nation-building in Haiti and Somalia reinforced a belief held by some that DoD should not get into such operations.

In the post-9/11 era, the makers of US strategy had to address terrorism and the problems posed by weak and failed states, in addition to fighting major regional contingencies. But US forces still had the same size and shape as those planned earlier to fight major regional conflicts. These were the forces that successfully accomplished the major combat missions in Iraq in early 2003. These forces were used in the IW that followed. The frustrating experiences that followed reinforced the view of some that DoD should not do these kinds of missions.

Today, no consensus exists on the lessons to be learned from the prior and current experiences in conducting IW. A wide range of different positions can be found within the US defense community:

- DoD should not plan for or conduct any IW contingency. Rather, the United States should prepare diplomatic and economic measures to influence an IW contingency.
- DoD should not plan for or conduct a sizable IW contingency. Rather, DoD should prepare for small, discretionary IW campaigns, with no high stakes for the United States, that can be handled by US special operations forces trained for this specific role.

- DoD should not plan for or conduct an IW contingency that could involve large US ground forces. However, DoD should have the capabilities needed to conduct an IW campaign so long as it could be done without large US ground forces. For example:
  - conduct a campaign with a combination of Special Forces and US air power drawn from forces planned for major combat operations (like the air campaign conducted against Serbia over ethnic cleansing in Kosovo); *or*
  - conduct a campaign modeled on the air and ground campaign initially conducted in Afghanistan with the help of Northern Alliance ground forces; *or*
  - persuade US allies to provide their presence of a long duration for the IW campaign after major combat operations are over.
- DoD should plan for the possibility of an IW campaign that requires large US ground forces with significantly improved capabilities for IW. From this view, the United States has to shape its forces to be effective in an IW campaign requiring large ground forces—but recognizing that the new capabilities will be different from, and in addition to, the capabilities needed to fight the kinds of major wars that DoD has planned for after the Cold War.

This report focuses on the last of the above positions, in view of the importance of IW in the twenty-first century.

F. Concerns with current capabilities

The wars in Iraq and Afghanistan revealed long-standing problems in US capabilities to conduct a sizable IW campaign.

- IW contingencies involve a long-duration campaign (years, not weeks), emphasizing small-unit actions for the control of, and support of, the population, with continuing casualties (military, contractor, local civilian) from ongoing attacks (e.g., improvised explosive devices

(IEDs)); and conducted in a media-rich environment. DoD forces were not prepared to engage in this complex environment.

- In IW, important roles are played by non-DoD US agencies, allies, international organizations, non-governmental organizations (NGOs), contractors, the HNG, and the population. Civil-military operations (CMO) will be conducted in close collaboration with other military and civilian organizations. The processes (e.g., for sharing information, for contracting) and the organization needed for US forces to do this were not in place.
- Success in IW depends on consolidating gains made by military forces (e.g., conducting urban combat operations in Falluja, sealing the borders, protecting oil pipelines) and then transitioning these missions to host-nation forces. The US Government was not prepared for this task (e.g., with economy-of-force operations designed to seal the borders and protect extended oil pipelines; with processes for planning transition; and with capabilities to organize and prepare host-nation military to provide security and police who would contribute to the Rule of Law).

In the 2006 *QDR Report*, DoD recognized that IW cannot be viewed as a lesser-included case of the kinds of regular wars for which it had been preparing. Instead, IW must be recognized—and planned for—as a different type of warfare.[15] The implication is that there is limited overlap in capabilities between IW and these kinds of regular wars. The capabilities needed for IW are just different from those needed for regular war.

---

[15] US Department of Defense, 2006 *QDR Report* February 6, 2006.

G. Major improvements in IW capabilities are possible

IW operations will always be challenging but major IW improvements are becoming possible as a result of the following:

- lessons-learned from Iraq and Afghanistan on how to conduct IW;
- new technologies, tools, and systems useful in IW; and
- the growing awareness inside and outside DoD of the need for better IW capabilities.

1. Lessons from Iraq and Afghanistan on how to conduct IW

New thinking on how to conduct IW is emerging from the Iraq and Afghanistan campaigns. This thinking ranges from the importance of discretionary funds for US commanders to gain local support to the importance of sustained security for the local populace to how to counter IEDs to how to use contractors. The new thinking is already reflected in the doctrine in the new Army–USMC *Counterinsurgency*, and in the training of deploying units at the National Training Center at Ft. Irwin, California.

2. New technologies, tools, and systems

DoD has recently created a new program and office focused on biometrics. Systems incorporating new biometric technologies could dramatically change how well US forces can secure a local population.

Tools and systems used by police in all major US cities give them information about the vehicle and human environment in which they operate. Using these tools and systems would greatly improve the situation awareness of US forces in future IW.

The Director, Defense Research and Engineering is reshaping the DoD S&T program to increase non-kinetic capabilities while decreasing relative emphasis on kinetic systems. These non-kinetic capabilities—information technology, persistent surveillance, decision-making and cognition, and so forth—could improve the conduct of IW operations.

Technologies by themselves do not constitute capabilities. But they can enable changes when integrated into the force through combinations of changes to DOTMLPF+.

3. Growing awareness of the need for new IW capabilities

At all levels, people with experience in IW campaigns are emerging from the wars in Iraq and Afghanistan. These people have an appreciation of the need for better IW capabilities. If given the opportunity, they will affect how the Services organize, train, and equip their forces to conduct IW, and the support given, in turn, to IW by the Defense agencies, the Joint Staff, and the Office of the Secretary of Defense.

Non-DoD organizations deployed very little of the unique civilian capabilities and expertise in Iraq or Afghanistan, so DoD had to improvise. This shortfall is now widely understood in DoD, e.g., DoD's willingness to support funding for an office for stability and reconstruction by the US State Department.

NATO involvement in Afghanistan is leading to a growing understanding within the alliance of the need for better IW capabilities. The NATO initiative for a multinational special operations force could be one source of improvements for future IW campaigns.

The challenge for DoD is to encourage US Government agencies and our allies to develop and train deployable capabilities for IW.

H. Organization of this volume

Volume I of this report presents a systematic approach to IW issues, identifying key directions to pursue and focusing on issues unique to IW and major program initiatives that offer large-scale improvements at the operational level. The report supports a process that could lead to a comprehensive DoD IW Master Plan with actionable program initiatives. The remaining Volume I chapters are described next.

Chapter II, Distinguishing Attributes of Irregular Warfare. Describes the five attributes that distinguish IW from the wars DoD prepared for in the post-

Cold War era: the central role of the human terrain; the extraordinarily tight coupling of civil and military organizations and activities; military operations that necessarily are small-unit actions taking place among the civilian population; consolidation of security, stability, and reconstruction; and transition to a stable HNG as the overarching objective.

Chapter III, Processes. Provides a summary of the two processes used in this report: (1) to determine broad capabilities and critical areas, and (2) to analyze specific focus areas and identify program initiatives.

Chapter IV, Overview of IW Missions and Capability Patterns. Reviews the range of activities in IW: combat and support; governance and participation; humanitarian assistance and social well-being; economic stabilization and infrastructure; and justice and reconciliation. It describes twenty-three missions that are associated with these five activities and the capabilities needed to conduct them. It also identifies which ones need substantial improvement, based on how well the United States has been using them in Iraq. A full description of IW missions and capabilities is in Volume II of this report.

Chapter V, Applications. Illustrates the application of the processes to identify directions for program initiatives in five areas: Transition; Influencing the Population (Theater Communications, Personal Interactions); Civilian and Military Organizations and Activities; Policing-Related Capabilities; and Technology.

Chapter VI, Implementing Improved IW Capabilities. Describes the steps needed to implement the initiatives discussed in the paper. The three overarching steps are senior-level DoD direction going to all of DoD: to prepare a comprehensive actionable IW Master Plan for DoD (with funding and schedule); to quickly increase organizational focus on IW; and to quickly increase the sense of urgency and priority to IW within currently funded activities.

Appendix A, Mapping the Human Terrain. Provides a simple example that illustrates a population-centric operational concept.

Appendix B, IW Missions and Supporting Capabilities. Describes the missions and capabilities, and identifies the capabilities judged as needing substantial improvement.

Appendix C, Irregular Warfare and the Joint Capabilities Integration and Development System. Briefly describes the Joint Capabilities Integration and Development System (JCIDS) process, and how and why the process used in this study to identify capability needs differs from JCIDS, a standard DoD process.

Appendix D, Bibliography. Volume II has its own bibliography.

Appendix E, A**cronyms and Abbreviations.** Volume II has its own list of acronyms and abbreviations.

Note: Volume II, Capabilities Analysis. The second volume of this report provides a detailed analysis and assessment of the capabilities needed for IW. The missions supported by these capabilities are organized into two major groupings: Combat and Support Missions, and Civil-System Support Missions. This volume also includes rough assessments as to how the US Government has effectively demonstrated the capabilities in the context of current operations in Iraq. Assessments were judgments of the authors of this report, informed by a wide range of unclassified sources, including conversations and correspondence with military personnel with experience in Iraq.

Chapter II. Distinguishing Attributes of Irregular Warfare

Previous US force development has focused almost exclusively on regular warfare or RW. This chapter characterizes key differences between irregular and regular warfare in terms of five distinguishing attributes, and discusses implications of these differences for force planning. **Figure II–1** below depicts the different structures of IW and RW.

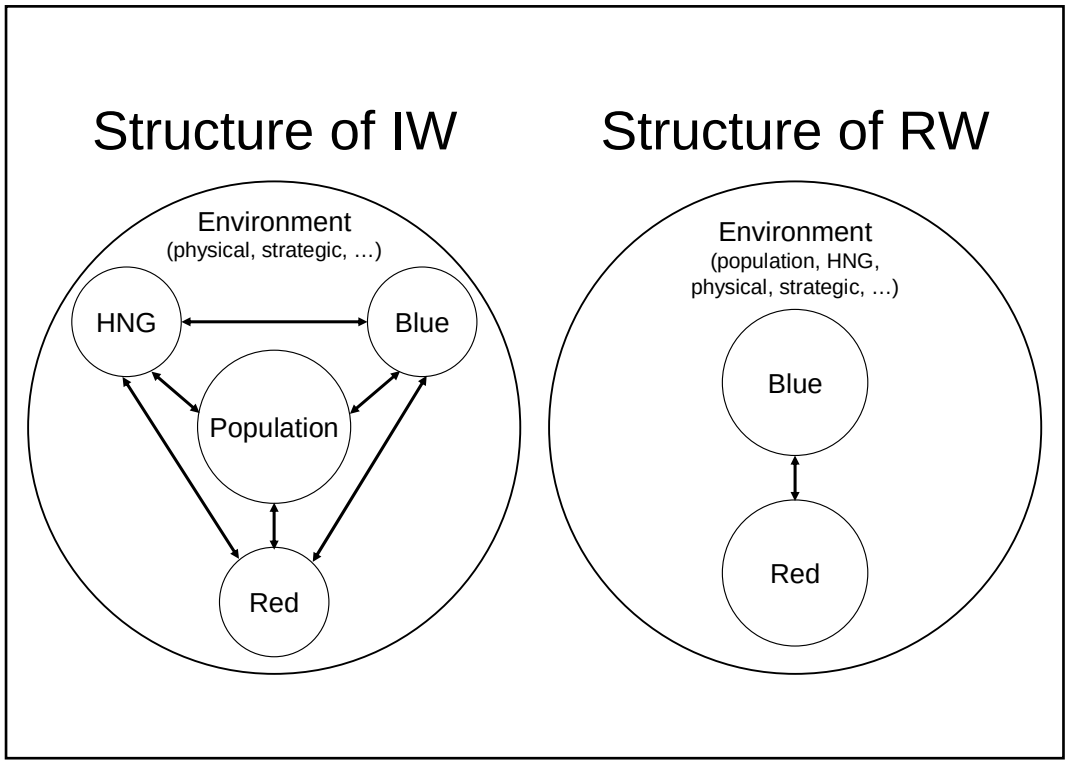


Figure II–1. Different Structures of IW and RW

The main objective of RW is the defeat of Red forces. Capabilities needed involve *understanding*, *shaping*, and *engaging* Red.[16] The population is part of the background environment. The main objective of IW is the establishment of a secure, legitimate, and stable HNG. The focal point is the population. Needed capabilities for understanding, shaping, and engaging address a much more diverse set of objects and the relationships among them: the population; Red; HNG; the complex Blue team, which now includes both military and civilian components; and the environment. In short: IW is not a lesser-included case of RW.

The study team identified five attributes that distinguish IW from RW and used these as guides for later identifying key IW focus areas and program initiatives. The five distinguishing attributes follow the key actors of IW illustrated previously in **Figure II–1,** and are contrasted with RW in **Table II–1** below. These attributes are discussed in the next sections.

Table II–1. Distinguishing Attributes of Irregular and Regular Warfare

IW	RW
Central role of **human terrain**	Central role of **physical terrain**
Extraordinarily tight coupling of **civilian and military** organizations and activities	Dominance of **military** organizations and actions
Military actions emphasize **small units** operating **among the civilian populace**	Military actions emphasize **large units** operating **in the absence of civilians**
Consolidation of security, stability and reconstruction in area	Defeat enemy in area and **move on**
Transition control to HNG	**Decisive victory** over enemy

[16] Joint Staff, *Doctrine for Joint Urban Operations*, Joint Publication 3-06, 16 September 2002, pp. II-8 to II-13. The following terms were used to categorize the capabilities: *Understand:* A capability designed to enhance knowledge about the conflict participants or environment. *Shape:* A capability designed to alter generally the conflict participants or environment in Blue's favor. *Engage:* A capability for directly interacting with Red or the civilian population—kinetic or otherwise.

A. Human terrain plays the central role

In RW, the objective is to defeat the enemy. Planning an RW focuses on physical terrain, either occupying it or denying it to the enemy. Terrain features may drive campaign plans and concepts of operation. Specific areas may emerge as critical or advantageous to the campaign (e.g., a hill, river, or bridge). The population plays a secondary role, often placing constraints on operations to reduce civilian casualties or avoid major population displacements that place a humanitarian assistance burden on already-strained logistics.

In contrast, in an IW campaign the population, the "human terrain," is much more central to the conduct of the campaign. The IW analogy to controlling physical terrain in RW is to have the support of the population. Politically, popular support is key to the fundamental objective of IW—the establishment of a legitimate and stable HNG.[17] Militarily, in IW the population is a critical partner in finding and identifying enemy forces. And economically in IW, the population is the foundation for reconstituting national resources and civilian services. In IW, the population becomes the "center of gravity" of the campaign.

In IW, attitudes within the population determine which side prevails. A host of factors drives these attitudes, with key elements being an individual's sense of security and social well-being. In addition, opinion-makers, social networks, media, religious traditions, and/or ethnic beliefs may drive attitudes. The struggle for popular support may entail both carrots (such as security and social services) and sticks (such as terrorist acts by Red or the denial of reconstruction aid by Blue).

Just as maps of the physical terrain are needed in RW, maps of the human terrain that address all the factors listed in the previous paragraph must be developed for IW. And just as a country-wide physical map is of little use when trying

---

[17] ". . . the long-term objective for all sides remains acceptance of the legitimacy of one side's claim to political power by the people of the state or region." US Army and US Marine Corps, *Counterinsurgency*, Headquarters Department of the Army Field Manual FM 3-24 and Headquarters Marine Corps Combat Development Command Marine Corps Warfighting Publication MCWP 3-33.5, December 2006, p. 1-2.

to navigate the side streets of an urban area, insights into human factors at the national level may be equally irrelevant to local commanders in an IW campaign. The human terrain must be understood at all levels. As insight into the nature of the human terrain is gained, it can be used to shape the terrain to advantage by influencing the population through words and actions.[18]

To continue the analogy to physical terrain: Armed with a knowledge of the human terrain, concepts of operations can be developed to coordinate and focus influence operations. A simple example of a human terrain "map" is shown in **Figure II–2** below.[19]

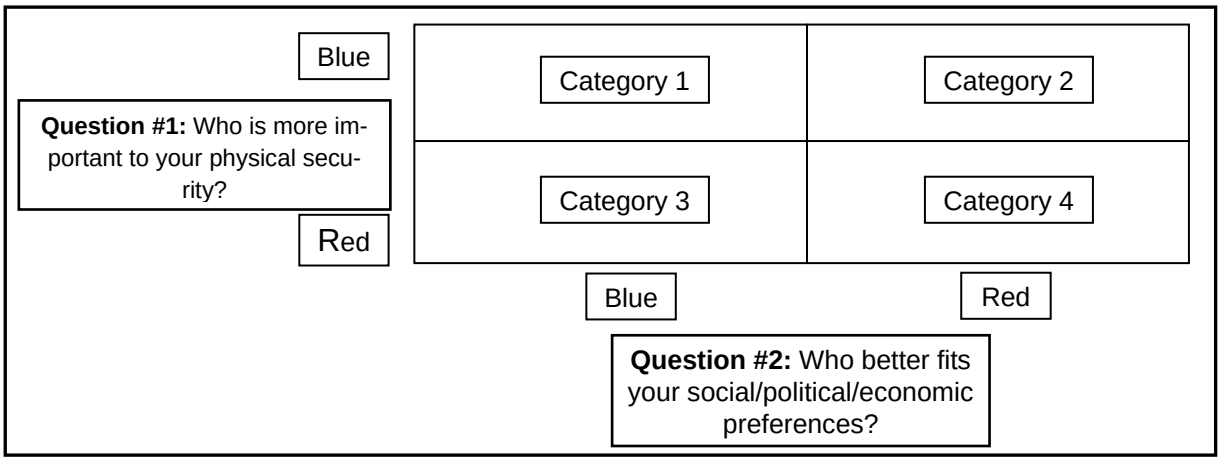


Figure II–2. A Simple Human Terrain "Map"

This map divides a population into four categories as determined by who (either Blue or Red) they believe is more important to their physical security (Question #1), and who they believe better fits their social/political/economic preferences (Question #2).

---

[18] For example, al Qaeda in Iraq exploits existing fissures in Iraqi society to undermine unified support for the Iraqi government.

[19] This construct was developed by Jaine Davidson, Mark Smith, and Peter Brooks at SAIC/Hicks & Associates.

- **Category 1:** The people who see Blue as more important to their security *and* as better for their social/political/economic preferences.
- **Category 2:** The people who see Blue as more important to their security but Red as better for their social/political/economic preferences.
- **Category 3:** The people who see Red as more important to their security but Blue as better for their social/political/economic preferences.
- **Category 4:** The people who see Red as more important to their security and better for their social/political/economic preferences).

This simple categorization provides insight into how to craft IW operations. For example:

- a *containment strategy* may be the best that is possible (at least in the short term) for the people in Category 4 (who see Red as more important to security and better for social/political/economic preferences) *but*
- a *vigorous economic support program* may be best for the people in Category 2 (who see Blue as more important to security but who see Red as better for social/political/economic preferences) to shift their views to Category 1 (Blue is seen as more important to both security *and* social/political/economic preferences).[20]

Implications of this distinguishing attribute

The key capabilities needed are the ability to *understand* the nature, structure, and dynamics of the population; and based on this understanding, the ability to *shape* this human terrain. These hard-to-achieve capabilities have not traditionally been emphasized in DoD planning. To improve them, DoD must reach out to a wider range of disciplines and expertise; see the following examples in the next section.

---

[20] *See* Appendix A for a discussion of this model.

Understand the nature, structure, and dynamics of the human terrain

- **Information sciences:** Finding, generating, and sharing information (national, regional, local), e.g., on attitudes.
- **Psychological/Social sciences** (e.g., sociology, anthropology, ethnology): Understand what is being observed; understand perceptions, attitudes, and motivations; understand structure and dynamics of human networks (e.g., tribal, religious, business, criminal).

Shape and engage the human terrain

- Influence operations, psychological operations, public affairs, public diplomacy, communications, media, and marketing.
- Tagging and controlling the movement of people, vehicles, money, and commodities.
- Personal interactions and personal relationships.
- Actions aimed at exposing Red networks and creating an environment that is hostile to them.

B. Extraordinarily tighter coupling is needed between civilian and military organizations and activities

The main objective in RW is the destruction of the enemy force. The main objective of IW is building a secure, stable society and a legitimate HNG. IW involves both military actions and civilian activities (reconstruction, stabilization, transition of control to the HNG). Therefore, coordination between military and civilian organizations and activities is critical, starting *before* the beginning of US involvement. Such organizations include other US Government agencies, Coalition partners, the HNG, international organizations such as the United Nations, NGOs, and contractors.

Implications of this distinguishing attribute

The primary implication of this distinguishing attribute is the need for extraordinarily tight coordination between DoD and other bodies. For example:

- DoD and other US Government agencies (particularly the Department of State) in developing effective US organizational structures and processes for planning and executing IW; and
- DoD and non-US and non-governmental civil-support organizations, all of whom could be involved in CMO, civil affairs, logistics, supply, reconstruction, and nation building. Such structures and processes must be available for timely responses before the opportunities presented by a given contingency are lost.

A second implication is the need to determine the degree to which DoD must be prepared to assume "first-responder" responsibilities for initiating stability and reconstruction activities where combat operations are winding down while reconstruction is just starting up.[21]

C. Military actions emphasize small units operating among the civilian populace

Although some IW combat actions are hard to distinguish from actions during RW (such as the 2004 battles for control of Fallujah), for the most part IW entails different types of combat than those seen in typical RW. These types of combat have not received significant attention in DoD plans. Two of the differences that lead to these types of combat are discussed next.

- One key difference between IW and RW is that in IW *Blue and Red generally share a common battlespace and therefore have mutual access.* This proximity presents both *threats* and *opportunities*: *threats* because Blue is vulnerable to close-up attacks by, e.g., IEDs and snipers; and *opportunities* because Red must operate in Blue's battlespace,

---

[21] For a discussion on these topics, *see* Appendix B.

enabling Blue to exploit this proximity to identify Red, restrict his movements, and interrupt his supply chain. The separation of forces in RW has driven much of the development of capabilities for RW: surveillance, targeting, and attacking in denied areas by remote means. In IW, however, Blue has full access to Red's battlespace and the opportunity to develop capabilities that exploit this access.

- A second key difference between IW and RW is that in IW *the conflict (and enemy forces) is generally embedded within the population.* This also presents both *challenges* and *opportunities*:
  - challenges because of the difficulty in distinguishing combatants from non-combatants, the exposure of Blue actions to members of the population who may sympathize with Red, and the constraints imposed on military actions; and
  - opportunities because Red forces must live and operate within the population, making them also vulnerable to human intelligence and surveillance operations.

Implications of this distinguishing attribute

The nature of the IW environment has implications affecting all dimensions of combat. Examples follow.

- **Shaping.** IW operations emphasize isolating Red from noncombatants, bringing increased emphasis on population management and law enforcement techniques.
- **Defensive operations.** These focus on protecting Blue personnel, vehicles, and facilities while interacting with the population, protecting the population during its day-to-day activities, and protecting civilian facilities, including extended ones such as pipelines and rail lines.
- **Offensive operations.** These must deal with tradeoffs between prosecuting Red and alienating the population because of collateral casualties, damage, or simply disrespect. In addition, there is an expanded role for the use of "measured effects" and the development and use of non-lethal weapons.

- **Partnering.** The objective in IW is to transition control to the HNG, so it is important to begin that process as early as possible. Thus, IW combat places strong emphases on partnering with host-nation forces and understanding their capabilities and motivations.

Because IW combat operations are population-centric, they tend to be conducted in urban environments (characterized by people, structures, and infrastructure). This places increased emphases on small-unit, distributed operations marked by close-up engagements—*local intelligence is paramount*.

Progress is made by holding an area, not merely clearing it. *Adaptability is key* because Red may change concepts of operation and tactics, techniques, and procedures (TTP) on a daily basis. Conversely, the IW campaign is long-term attrition warfare aimed at wearing down the enemy and gaining support of the population. *In short: IW is fundamentally different from the "rapid decisive operations" that dominated US military planning in the late twentieth century.*

D. Security, stability, and reconstruction must be consolidated within an area

Once an area has been cleared, US forces, in conjunction with Coalition and HNG forces, must have the capabilities to sustain security, begin stability and reconstruction activities, and prepare for the transition of such responsibilities to other agencies, Coalition members, and host-nation partners.

Implications of this distinguishing attribute

US forces must have the capabilities to maintain security and provide "first-responder" stabilization and reconstruction roles. Special emphases are placed on sufficient force numbers and capabilities to hold cleared areas, to partner with local personnel and organizations, and to initiate stability and reconstruction activities in the following areas: finance; governance; healthcare; media; training; construction, repair, and maintenance; management and administration; Rule of Law, including courts, detention facilities, and police; and transportation, utilities, logistics, and supply.

Key capabilities are needed for defensive military operations; population management; the establishment of effective working relationships with interagency, multinational, and NGOs; and the population and HNG to leverage local resources. Finally, civil-military operations and effective civil-affairs organizations play essential roles.

E. The overarching objective is Transition

Transition is the transfer of responsibility and authority for security, social well-being, and reconstruction to the HNG. It is the overarching objective of IW, and therefore drives all other IW distinguishing attributes.

Implications of this distinguishing attribute

The key to transition is leveraging and empowering local resources (i.e., build partner capacity). Capabilities are needed to perform the following:

- understand HNG capacity for security and civil-support;
- plan with interagency, multinational and host-nation organizations from the earliest point of engagement;
- engage with locals (partnering, supporting, hiring);
- train, advise, and monitor host-nation security and civilian personnel;
- equip host-nation security and civilian agencies with systems that are consistent with host-nation resources and safeguarded against unauthorized use; and
- share the products of US capabilities (e.g., intelligence or communications) without compromising those capabilities.

See Chapter V, Section A, for a discussion of the Transition distinguishing attribute.

Chapter III. Processes

This chapter describes two sequential processes. The first one is a high-level process that helps identify critical focus areas from the vast range of IW topics and issues where US capabilities are likely to be needed. The second process starts with examples of focus areas and identifies program initiatives needed to improve capabilities in these particular focus areas. These are not "crank-turning" processes but rather structured approaches for thinking about the challenges of IW.[22] These two processes lead to recommendations regarding needed initiatives, but they do not explicitly address *who* should take action. The "who" is addressed for the high-level process in Chapter VI and for the focus area examples in Chapter V.

The subject of IW is, in itself, complex, dynamic, controversial, and rife with uncertainties. No process can reduce it to a set of remedial initiatives that will be universally agreed-upon. The two processes described here are intended to be used as vehicles to engage and focus the perspectives and insights of the affected communities, and achieve buy-in to remedial actions through the communities' participation in their design. Therefore, vetting and revision by operators, subject-matter experts, and stakeholders are important parts of the execution of these processes.

A. Process for determining broad capabilities and key focus areas

This high-level process employs five steps, shown in **Figure III–1** (next page), to identify those key focus areas where improvements to US capabilities are likely to be needed.

---

[22] The relationship of these processes to the formal DoD planning processes is discussed in Appendix C.

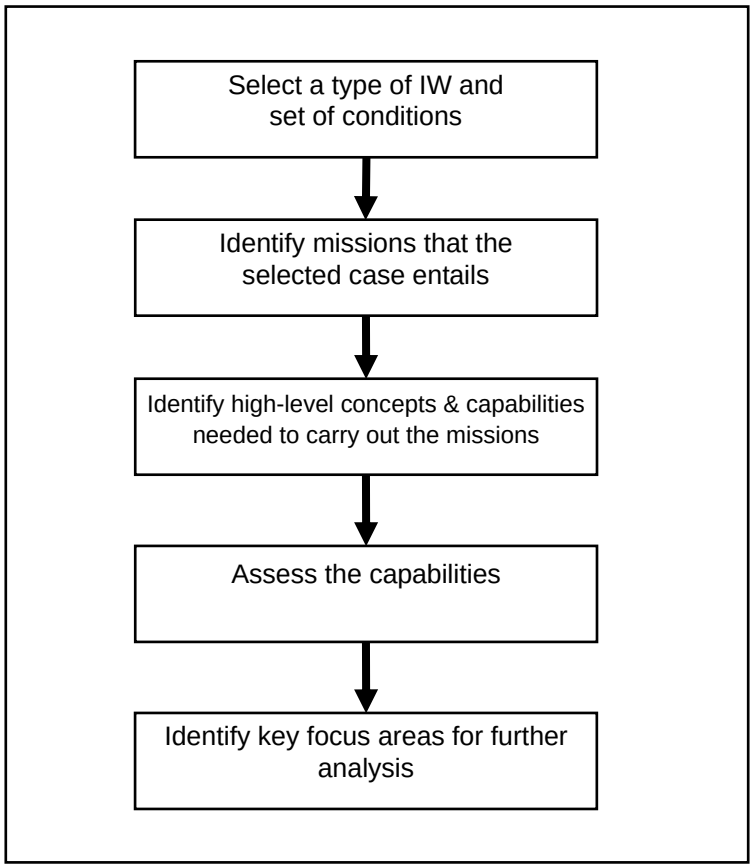


Figure III–1. Process for Determining Key Focus Areas for IW

1. Select a type of IW and set of conditions

As discussed in the previous chapter, the term “irregular warfare” covers a wide range of warfare types and scenarios. This study takes as its starting point, an important, familiar, and challenging case: operations in Iraq over the last several years.

2. Identify the missions that the selected case entails

To identify IW missions, the study team started with the results of a US Army War College study group and a report by the Office of the Coordinator for

Reconstruction and Stabilization at the US Department of State.[23] The team then modified and updated those results, based on official reports, open literature, and input from individuals with recent operational experience. The team identified twenty-three military and civilian IW missions. *See* **Figure IV–2** in the next chapter for the complete list of missions.

3. Identify the high-level concepts and capabilities needed to carry out the missions

The team used the same sources described previously in Section 2 to identify capabilities needed to carry out the missions. Ninety-two general IW capabilities (e.g., "map the physical terrain") were identified. They are summarized in Chapter IV and described in detail in Appendix B and Volume II.

Table III–1 (next page) illustrates a general framework for categorizing IW capabilities in terms of their types (Understand, Shape, Engage) and their objects (Environment, Population, HNG, Red, Blue). For example, the capability to "map the physical terrain" would be placed in the "Understand Environment – Physical" cell.

The Understand, Shape, and Engage categories were used in previous analyses of urban operations,[24] and the five "objects" in **Table III–1** correspond to the key actors in **Figure II–1** (*see* page II–1)**.** This table provides an organizing framework and checklist for the types of capabilities relevant to IW.

---

[23] Conrad C. Crane and W. Andrew Terrill, *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario*, (Carlisle, PA: Strategic Studies Institute, US Army War College, February 2003). US Department of State, Office of the Coordinator for Reconstruction and Stabilization, *Post-Conflict Reconstruction Essential Task*s (April 2005).

[24] The Understand, Shape, Engage types are described in Joint Staff's *Doctrine for Joint Urban Operations*, Joint Publication 3-06, September 16, 2002. For examples of their use in analytical frameworks, *see* Hurley et al., *Department of Defense Roadmap for Improving Capabilities for Joint Urban Operations*, Volume I, For Official Use Only.

Table III–1. Example of Irregular Warfare Capabilities by Type and Object

Capability Type	Objects				
	Environment • Physical • Strategic • Information • Etc.	**Population**	**HNG**	**Red**	**Blue** • DoD • Interagency • Multinational • NGOs • Contractors
Understand	X				
Shape					
Engage					

Operational concepts for the IW general capabilities

Because the ninety-two capabilities are general IW capabilities, they can enable a range of potential *operational concepts*. We distinguish two general types of operational concepts at this level: "Red-centric," which focus on finding and neutralizing Red, and "population-centric," which focus on building up the population's resistance to Red. (*See* Appendix A for a more detailed discussion of "population-centric" concepts.)

4. Assess the capabilities

The team identified two types of assessments for capabilities:

- **Demand:** The first type addresses the importance of a capability to specific missions and the breadth of its applicability to many missions. (e.g., some IW capabilities were categorized as "fundamental" because they apply to all IW missions.)
- **Supply:** The second type of assessment addresses the *level of performance* currently observed. The team assessed the IW capabilities based on recent experience reported from Iraq, and identified those

needing substantial improvement. *See* Chapter IV, Appendix B, and Volume II for detailed discussions.

5. Identify key focus areas for further analysis

Using patterns that emerge from the analysis of IW missions and capabilities, observations from Iraq and Afghanistan, and earlier historical experiences, the team identified key differences between IW and RW. These "distinguishing attributes" of IW serve as useful guides for identifying critical focus areas for program initiatives. The distinguishing attributes (e.g., an emphasis on "human terrain") were discussed in Chapter II, and several illustrative critical focus areas (e.g., influence operations focused on the population) are addressed in Chapter V.

B. Process for analyzing key focus areas and identifying program initiatives

The second process, which is analogous to the high-level process shown previously in **Figure III-1,** is illustrated in **Figure III–2** (next page). This process starts with a given focus area and identifies program initiatives needed to improve capabilities in that area. The focus area may be quite broad (e.g., "Transition") with its own substructure, or less broad (e.g., improving "Personal Interactions" between Blue forces and the population.) Both of these topics are discussed in more detail in Chapter V.

1. Select focus area for detailed analysis

The criteria for selecting a focus area for detailed analysis include a broad applicability to IW, special operational challenges, opportunities that seem ripe for exploitation, and policy issues. Example:

> Transition of authority to a stable, legitimate HNG is the overall objective of an Iraq-like IW. The ability of the HNG to provide security to the population is essential to its legitimacy. A *key focus area* is therefore the effectiveness of HNG security forces.

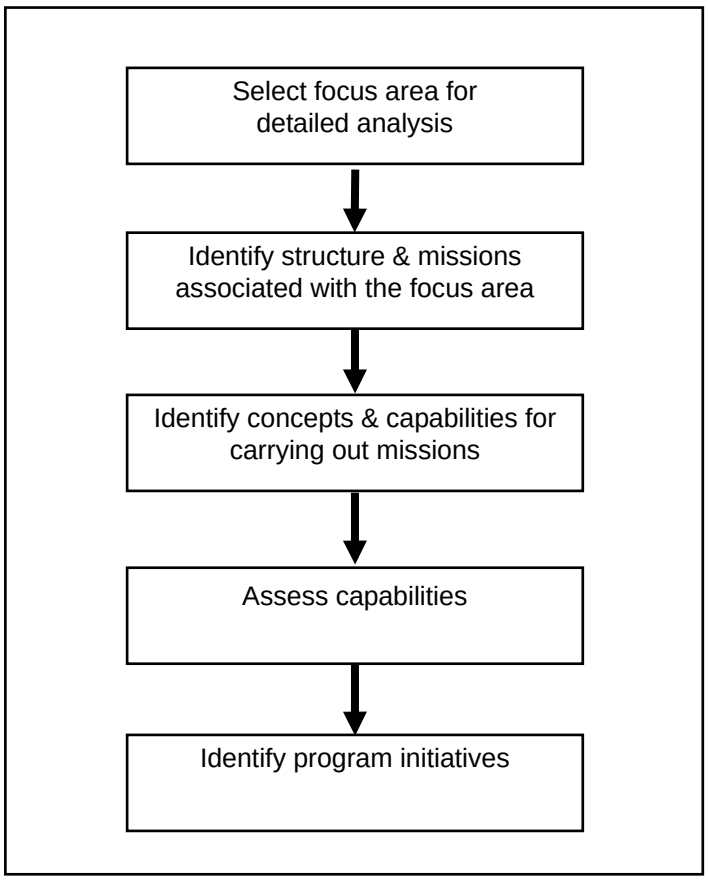


Figure III–2. Process for Analyzing Focus Areas and Identifying Program Initiatives

2. Identify structure and missions associated with the focus area

Identify what has to be done. Example:

> The United States must help the HNG organize, train, and equip effective security forces.

3. Identify concepts and capabilities for carrying out the missions

Identify *how* it is to be done. Example (equip):

> The United States must have the capability to provide equipment to the HNG that is compatible with HNG resources (funds, personnel skills, operational environment, technical environment).

(This would be a "Shape HNG" capability depicted previously in the framework of **Table III–1**, page III–4.)

4. Assess capabilities

What is the status of this capability? Example:

> *This capability needs substantial improvement.* The US material development enterprise has not been significantly engaged to develop systems for HNG security forces that are compatible with HNG resources.

5. Identify program initiatives

How can capabilities be improved? **Table III–2** (next page) illustrates a general framework for relating the *type of capability* to *type of program initiatives*. The improvement of a given capability will require a package of initiatives, and a given initiative may support many types of capabilities. Example:

> The development of improved equipment for HNG security forces (a "Shape HNG" capability) could be patterned after the US material-development enterprise but with the added constraint that the products be consistent with HNG resources. For example, a collaborative "Battle Lab" with Blue and HNG participation and reach-back to Blue expertise (Organizational Initiative) could monitor and assess field performance (Assessment Initiative), develop new doctrine and TTP for HNG forces (Doctrine Initiative), identify material requirements (Material Initiative), conduct evaluations (Test & Evaluation Initiative), and develop the required system support (Support Initiative) and training (Training Initiative)—all within the limitations imposed by HNG resources. Thus, a package of program initiatives could improve US capabilities to "shape" HNG security forces so that they may "transition" to independence.

Table III–2. Program Initiatives by Type of Capability and Initiative

Capability Type	Type of Program Initiative									
	Doctrine	Organization	Training	Material	Leadership	Personnel	Facilities	Policy	Evaluation	Other
U (Env)										
U (Pop)										
U (HNG)										
U (Red)										
U (Blue)										
S (Env)										
S (Pop)										
S (HNG)										
S (Red)										
S (Blue)										
E (Pop)										
E (HNG)										
E (Red)										

Later in this report, Chapter V will illustrate how this process may be applied to several focus areas:

- Aspects of Influencing the Population (Theater Communications and Personal Interactions)
- Civilian and Military Organizations and Activities (with a focus on the involvement of international and NGOs)
- Policing-Related Capabilities
- Transition

Chapter V takes the perspective of a single type of program initiative ("Technology Development") and uses the distinguishing attributes of IW to identify promising directions.

This page is intentionally blank.

Chapter IV. Overview of IW Missions and Capability Patterns

This chapter provides an overview of the IW missions and supporting capabilities generated in this study. It describes the missions involved in IW and a summary of capabilities that support them, from both supply and demand perspectives. The actual capabilities are not listed in this chapter but are found in Appendix B, which contains the complete list of the capabilities.

Volume II further expands the discussion of this topic. It contains extensive descriptions of the capabilities the study team generated and then assigned to missions, and the team's assessments on how those capabilities have been demonstrated in Iraq during the study's timeframe. Volume II supports the analysis of patterns that emerge from the capabilities required for IW, and the assessment of how well these capabilities have been supplied in Iraq. These patterns, in turn, aided the study team in identifying broad distinguishing attributes for IW and directions for improving how DoD contributes to IW.

A. The Mission-Capability Process

The team did not use the Joint Staff's Joint Capabilities Integration and Development System (JCIDS) to generate either the IW missions or their supporting capabilities. The JCIDS process uses a wide range of inputs, some of which did not exist relative to IW at the time of this study was conducted. Given the ill-defined and complex nature of IW, a custom-built approach better suited the needs of the study.[25] (*See* Appendix C, which briefly describes JCIDS and the differ-

---

[25] An August 2006 study by the Joint Warfighting Center at the US Joint Forces Command (JFCOM) found the term "irregular warfare" had no widely accepted definition and often was used as a general term to denote a range of other more narrowly defined terms (e.g., "Foreign

(Continued)

ences between a JCIDS capability-based assessment and the process used in this study.)

In looking at Iraq, as a challenging example of an IW campaign, the study team asked what were the missions that supported the overall campaign objective of "preserving and strengthening a HNG" to the point it can stand on its own. The study team then generated a list of twenty-three missions to support that overall objective. For this report:

- The term *mission* was defined as "A task that supports the overall IW campaign." The team then generated the capabilities needed to support each of those missions.[26] The result was a list of ninety-two capabilities, many of which supported more than one mission. However, not every capability was included, only those that the study team saw as new to IW or as being applied differently within the context of IW.[27]
- The term *capability* was defined as "The ability to take certain actions, or generate specific effects, in support of a mission."

The report uses a three-layer hierarchy: capabilities support the missions that, in turn, support the overall IW campaign. (*See* **Figure IV–1** on the next page.)

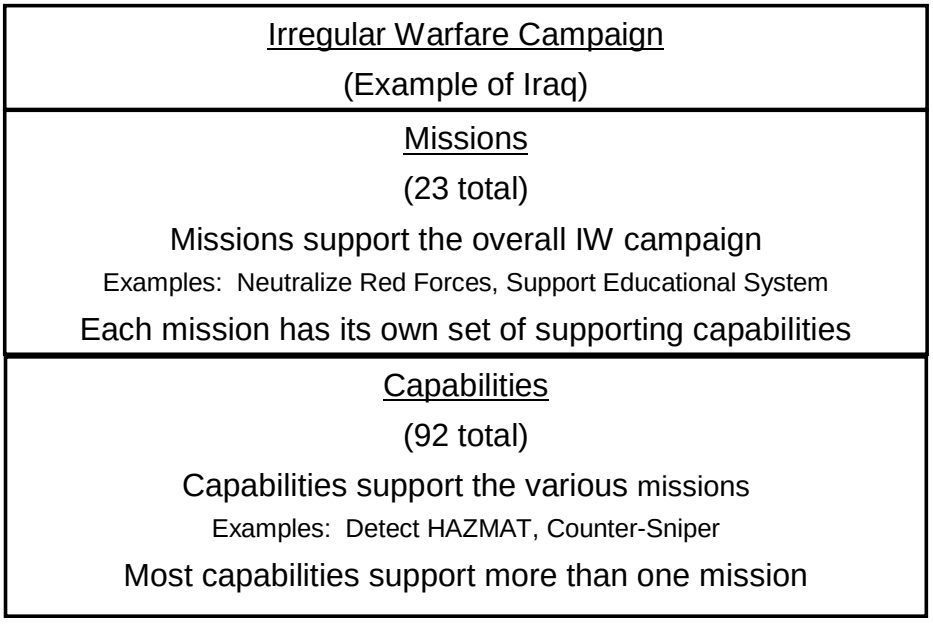
Many different sources influenced the team's generation of missions and capabilities for this report. Two that stand out are the US State Department's *Post-*

Internal Defense," "Unconventional Warfare"). With this usage as evidence, the JFCOM study concluded that the term *irregular warfare* was too ill-defined for doctrine development. US Department of Defense, Joint Forces Command, Joint Warfighting Center, *Irregular Warfare Special Study*, 4 August 2006.

26 The previously mentioned Joint Warfighting Center–JFCOM study also took those defined terms that related to IW and compiled a list of related UJTL (Universal Joint Task List) tasks. The team compared that list with the capabilities generated in this study. While the language and scope of the UJTL often differed, the team found no UJTL tasks that needed to be added to this report's list of capabilities.

27 For example, we do not list a general capability for inter-theater logistical support to military forces, but we do list specific capabilities for supplying forces in isolated urban locations and planning for logistics in a long-duration IW campaign.

Conflict Reconstruction Essential Tasks (April 2005) and a February 2003 Army War College study, *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario.*[28] These two documents provided a starting point for defining the range of Blue team missions and the capabilities to support those missions. This study also drew some capabilities from an earlier 2002 study of capabilities needed for urban operations.[29] Also playing a role were many official and unofficial unclassified reports from past and current IW operations, an open-source literature review, and discussions with various military and non-military individuals, some with experience in Iraq.



HAZMAT – hazardous material

Figure IV–1. Three-Layer Hierarchy

---

[28] US Department of State, Office of the Coordinator for Reconstruction and Stabilization, *Post-Conflict Reconstruction Essential Task*s (April 2005).

[29] William J. Hurley et al., *Department of Defense Roadmap for Improving Capabilities for Joint Urban Operations*, IDA Paper P-3643, two volumes, (Institute for Defense Analyses, Alexandria, Virginia, March 2002), For Official Use Only.

1. Missions

The twenty-three missions identified in **Figure IV–2** below encompass the full range of activities in IW, not just those involving DoD. Performed by the HNG and other members of the Blue force, this list of missions goes well beyond those performed in RW. (The members of Blue include DoD, other US Government agencies, Coalition partners, international organizations, NGOs, and contractors.)

While drawing substantially from the Iraq conflict, this generic mission map applies across a range of IW scenarios. The pairing of Blue team members with the various missions will vary by scenario. The twenty-three missions are grouped based on their likely participants. The Combat and Support Missions group represents missions with a major role for military members of the Blue force, while the other four groups are more civilian in nature.

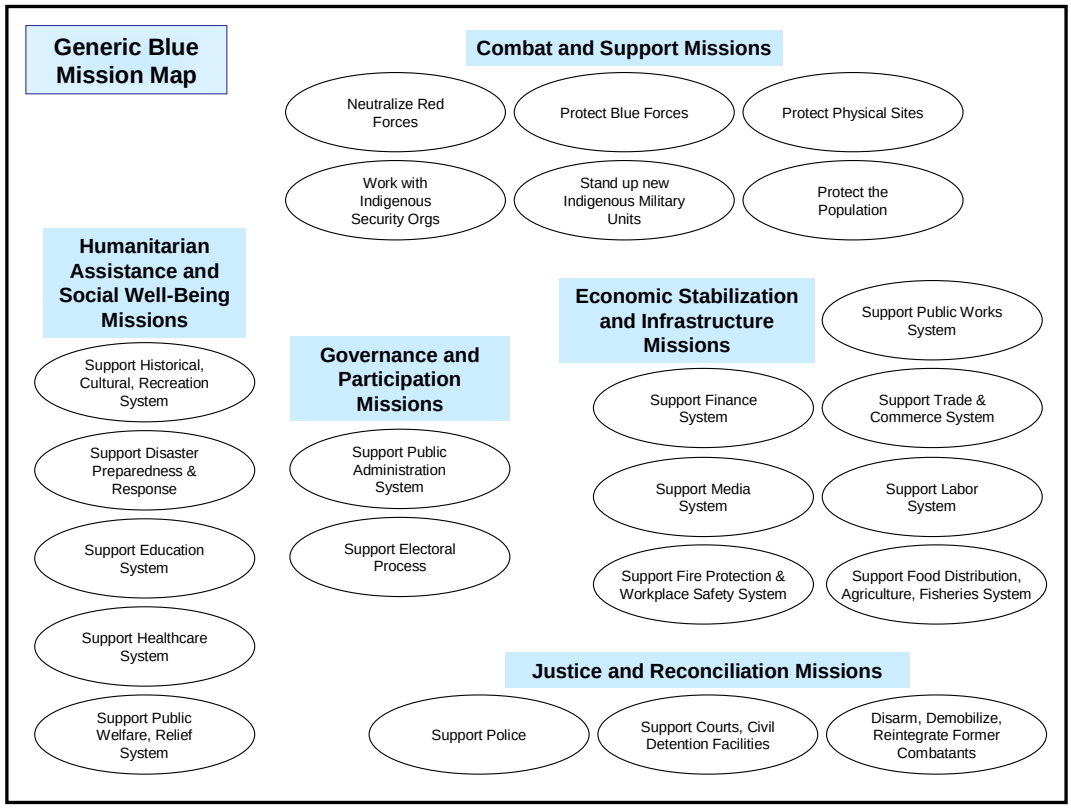


Figure IV–2. Missions That Support an IW Campaign

2. Capabilities

Many of the ninety-two capabilities support more than one mission. All the capabilities have letter and number designations which were assigned by the study team (*see* Appendix B for the complete list). While the number designations are only for differentiation, the letter designations (U–S–E) correspond to a construct introduced in Joint Publications 3-06, *Doctrine for Joint Urban Operations*.[30] Labeling the capability type by *Understand***,** *Shape*, or *Engage* aided the team in analyzing supply and demand patterns:

- **Understand:** A capability designed to enhance knowledge about the conflict participants or environment.
- **Shape:** A capability designed to generally alter the conflict participants or environment in Blue's favor.
- **Engage:** A capability for directly interacting with Red or the civilian population, kinetic or otherwise.

Examples:

U8 – Understand Civilian Movement Patterns

S18 – Counter IEDs

E2 – Mediate disagreements between groups, before, during, and after they turn violent

In any particular IW scenario, DoD will be well positioned to provide certain capabilities for the Blue force IW efforts, but the scale and scope of that contribution will be highly situation dependent. This report does not designate specific capabilities to DoD but the following criteria could be used for evaluating which capabilities DoD should cultivate internally. The capability could be either integral to DoD combat operations, essential for cooperation with others, and/or facilitates support to critical civil systems.

---

[30] Joint Staff, *Doctrine for Joint Urban Operations*, Joint Publication 3-06, 16 September 2002, pp. II-8 to II-13.

3. Capabilities in Iraq

Having identified the demand side of IW (the ninety-two capabilities), the team next looked at the supply side, assessing how well each demand was being satisfied in Iraq, looking for those in most need of substantial improvement. As capabilities are situation specific, each capability's assessment was relative to its performance in Iraq at the time of the study effort. A broad context was applied as to the source of the capabilities, not just from DoD but the US Government. The team's assessments were based on an open-source literature review and discussions with various subject-matter experts, including US military personnel with experience in Iraq. *The team identified thirty-four capabilities (of the ninety-two) as needing substantial improvement.*

B. Capability patterns: supply and demand

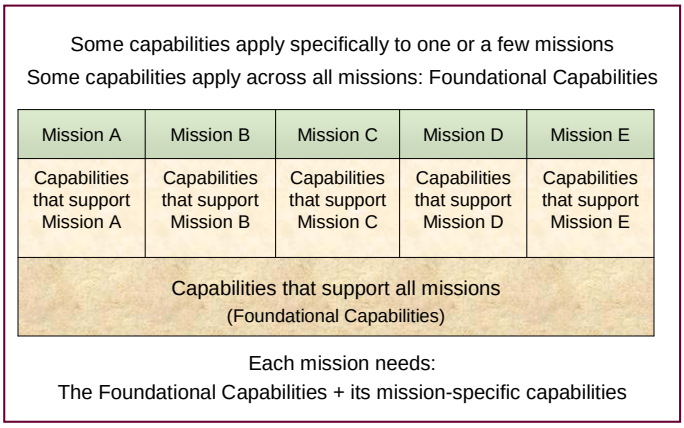


Figure IV–3. Capability Allocation to the Missions

In the generation of capabilities for each mission, it became clear to the study team that a subset of the capabilities were applicable to all of the missions. These capabilities were then put into a category the team called *Foundational Capabilities* (*see* **Figure IV–3**). Those capabilities that are not in the Foundational Capabilities category support one or more missions but they do not have the same broad utility across all the missions. The combination of the capabilities specific to a particular mission and the applicable Foundational Capabilities are the support to that particular mission.

1. Capabilities supporting all missions

Thirty-four of the ninety-two capabilities fit the category of Foundational Capabilities.[31] As the study team surveyed the list of Foundational Capabilities, several demand patterns became evident.[32]

Capability-demand patterns in the Foundational Capabilities

- **Understanding the complex IW environment.** Twenty-two of thirty-four Foundational Capabilities relate to understanding all the dimensions of the environment and its actors. The complexity of IW requires a greater amount of knowledge about a greater number of topics than what is needed for RW.
- **Influencing through information.** Fourteen of the capabilities relate to influencing various audiences through information. The increased importance of the *attitude space* in IW, especially the population's attitudes, drove this need.
- **Blue force coordination.** Nine capabilities relate to Blue force coordination. The number of Blue force members tended to be high in IW and they also tend to come from a greater diversity of backgrounds. These factors complicate coordination, which is essential because of the more diverse problem set.
- **Dealing with the population.** Eighteen capabilities relate to dealing with the population, which plays a unique role as both a key objective for Blue and as a key partner.

---

31 While there are thirty-four Foundational Capabilities and thirty-four capabilities in need of substantial improvement from the overall list of ninety-two, these are not one and the same. While both sets *coincidently* involve the *same number of capabilities*, they are *different sets*. The Foundational Capabilities are those that apply to all missions (a metric of demand), while those needing substantial improvement are those that are not currently well supplied in Iraq (a metric of supply). Any given capability can belong to one, both, or neither of these sets.

32 Note that some capabilities relate to more than pattern.

In assessing the performance of the Foundational Capabilities in Iraq, the study team found *a need for substantial improvement in fifteen of the Foundational Capabilities*. With the exception of the "Blue force coordination" demand pattern, the other three capability-demand patterns had at least one-third of their capabilities needing substantial improvement, denoting serious US Government weaknesses in three areas: (1) understanding the complex IW environment, (2) influencing with information, and (3) dealing with the population.

2. Combat and support missions

Six missions fall under the grouping of Combat and Support Missions:

- Neutralize Red Forces
- Protect Blue Forces
- Protect Physical Sites
- Work with Indigenous Security Organizations
- Stand up New Indigenous Military Units
- Protect the Population

Mission: Neutralize Red Forces

Often the most visible mission with the most media attention, the Neutralize Red Forces Mission should not be confused with the totality of an IW campaign. The key challenges for this mission are as follows:

- shaping the battlefield (often urban) in Blue's favor,
- working with a wide range of Blue partners,
- restricting Red access to terrain, and
- engaging Red in a discriminating fashion, one suitable for protecting proximate civilians and infrastructure.

It is notable that for this mission nineteen capabilities relate to "understand" or "shape" while only eight capabilities relate to "engage." Even in this most Red-centric of IW missions, more work is needed to "understand" and "shape" the battlespace than to actually "engage" within it.

The team assessed five of the twenty-five capabilities supporting this mission as needing substantial improvement. The core weakness in this mission is controlling Red access to terrain. If Blue cannot seal off large areas (e.g., outside its own bases) from Red, then Red will have access to the population and be able to control the "center of gravity," namely, the population. If a HNG cannot provide security from Red, its very legitimacy is undermined in the eyes of the population.

Mission: Protect Blue Forces

The bulk of the capabilities supporting this mission are Shape capabilities that protect Blue while operating in an urban environment and maintaining operations over long timeframes. IW elevates the frequency of close-range direct fire engagements and the number of IEDs encountered, which present new force-protection needs.

Note: Two missions are interdependent: Protect Blue Forces and Protect the Population. However, there is a danger that the population may perceive Blue placing a greater emphasis on protecting itself rather than the population. Relations could suffer and this ironically could hinder force-protection efforts as the critical civilian ISR (intelligence, surveillance, and reconnaissance) network became less productive.

Relative to the other missions assessed, Protect Blue Forces is well supported in Iraq. The study team assessed only one of its fourteen capabilities needing substantial improvement. *However, that one capability is key—Counter IEDs.*

Mission: Protect Physical Sites

A wide variety of military and civilian sites (e.g., military bases, power plants, and HNG buildings) will need Blue's protection against direct and indirect attacks. Civilian infrastructure nodes are an important part of this equation. As Red generally benefits from greater disorder in society and lower quality of life for the population, the civilian infrastructure is an obvious target. If Blue (and the HNG) cannot deliver basic support services, for whatever reason, relations between Blue and the population will suffer.

The capabilities for this mission generally address the following:

- controlling access to sites by limiting movement and identifying those who do have access,
- rapid-reaction capabilities for threatened facilities, and
- discriminate fire-support options.

The team assessed two of the nine capabilities as needing substantial improvement. The core weakness for this mission relates to denying Red access to facilities at specific points (e.g., a pumping station) and facilities spread across large areas (e.g., a pipeline). As reconstruction efforts and the economy in general are critical for overall success, shortfalls in this area hamper long-term solutions to instability.

Mission: Work with Indigenous Security Organizations

For DoD, indigenous security organizations are essential partners for dealing with Red and interacting with the population. These include military, police, and intelligence agency personnel, a large number of whom possess local knowledge and language skills.

Another reason for cooperation relates to Transition, one of the five distinguishing attributes of IW identified earlier in this volume. By working with indigenous security organizations, DoD and other Blue team members, can build up HNG organizations and prepare them for the day they can independently provide security. These HNG organizations certainly have their limitations. However, their unique capabilities and the need for Transition all make cooperation essential. The capabilities for this mission cluster around mapping indigenous security organizations and the tools for that cooperation (command, control, and communications; fire support; inclusion in planning and operations; logistical support).

The team's assessment of the supporting capabilities for this mission found just one (of nine) in need of substantial improvement. However, the problem in that capability—the inability for Blue to assess the state of police forces—is the most important capability in this mission. The police play a unique and critical role in IW; an inability to discern their sufficiency for that role has ramifications to the overall IW effort.

Mission: Stand up New Indigenous Military Units

Depending on the scenario, an HNG will often need to expand its force structure or at least certain types of units. Aside from addressing near-term threats, the expansion of the indigenous military can be key for Transition. The supporting capabilities for this mission cluster around (1) assessing the state of host-nation military forces and (2) standing up and supporting those forces.

The assessments for this mission were better than those for other missions: none of the eight capabilities needed substantial improvement. (Note: This does not include police units, only military ones.) Were a similar assessment performed in 2003 or 2004, the results would not have been so favorable. The advances made since then were certainly welcome but the time they took came at a cost. The delay in host-nation force generation benefited immature insurgency, allowing it time to grow and damage the confidence of the population in the HNG. In the future, this mission needs to be fully supported from day one.

Mission: Protect the Population

The security of the population has serious implications for Blue's ability to tap the civilian ISR network, reconstruction, and Transition. If the population does not feel reasonably safe, even the most sympathetic will not inform on Red, thereby denying Blue the *single most effective ISR asset in IW*. And if the population doubts the commitment of Blue to its security, it can also doubt Blue's commitment to overall victory or Blue's ability to achieve that victory. *Therefore, it is critical that the population consider the Blue force both serious and effective when it comes to the security of the population.* The insurgents in Iraq today understand this—and media exposure is integral to their campaign of violence. The capabilities for this mission generally address the following:

- mapping the threats to the population,
- shaping the environment to enhance the population's safety, and
- directly engaging those threats in a manner that does not imperil the population or infrastructure.

The team's assessment found that five of the seventeen supporting capabilities for the Protect the Population Mission were in need of substantial im-

provement. Given the critical role of this mission, this is a serious weakness. Much of the shortfall relates to *movement*—an inability to either restrict Red movement or else make the population safe while moving.

3. Missions of a civilian nature

Unlike the previous section on Combat and Support Missions, this section does not discuss each mission individually. The missions discussed here relate to supporting various civil systems, that is, the infrastructure and people that provide a variety of services to the population. The seventeen missions here have more in common with each other than do the missions in Combat and Support group; so this commonality allows them to be discussed in more general terms. As shown previously in **Figure IV-2** (page IV–4), these missions are organized into four groups or "clusters": [33]

- Humanitarian Assistance and Social Well-Being
- Governance and Participation
- Economic Stabilization and Infrastructure
- Justice and Reconciliation

The civil systems that enable a society to function must be maintained at some basic level while security concerns are dealt with. At their core, insurgencies are violent contests for the allegiance and cooperation of the population. Providing a decent quality of life (as defined by the population) through these civil systems is a critical component of the conflict, and is expected by the population.

Unfortunately, this is not a fair fight. While the HNG and its allies (e.g., US forces) are expected to provide services, the insurgents are not. While insurgents can generate goodwill by providing some services, they are not burdened with the expectation of support like the government. In part, this is because insur-

---

[33] This clustering of missions, as related to civil systems, is taken from *Post-Conflict Reconstruction Essential Task*s, US Department of State, Office of the Coordinator for Reconstruction and Stabilization (April 2005).

gents rarely control ground openly. Instead, they can disrupt the government's attempts to provide civil services while simultaneously criticizing the government for its failing to do so. In this light, it makes perfect sense for insurgents to sabotage civil systems. The more dysfunctional the current system and government appear, the more attractive the insurgents' promises of a better future will resonate with the population.

Predicting DoD's role in these missions is difficult. While DoD will often play a dominant role in combat operations, it will not often play a dominant role in the missions addressing civil systems. The extent of DoD's role in these missions is likely to take any of the following forms:

- Coordination and de-confliction of DoD operations with other Blue and the HNG.
- Security for key civil-system nodes and personnel.
- Temporary operation for some critical civil systems:
  - to prevent damage to that system,
  - to prevent damage to other interdependent systems, and
  - to avoid severe impacts on the population.

Reconstruction timelines tend to be very long, yet speed still plays a role, in large part driven by public expectations. While many in the population will grant a grace period to the Blue force and HNG as they work on restoring public services, if those public services remain dysfunctional for "too long" (by the public's definition), then relations with that population will suffer.

The team assessed fourteen of the twenty-six capabilities supporting these missions as needing substantial improvement. Key shortfalls were the inability to diagnose civil system problems, the inability to operate civil systems and provide security for key civil-system nodes and personnel, and a weakness in engaging the population. These assessments reflected an overall limitation in the US Government for nation-building efforts in hostile environments. DoD is highly capable at regular warfare but it lacks the capabilities to understand, operate, and rebuild civilian infrastructure on a large scale. Other US agencies are better suited to those actions, but these agencies lack deployable mass and the ability to operate in high-

threat environments. Improvements are needed both in and outside of DoD. In most IW scenarios, the HNG involved will have serious problems with its civil systems. If the US Government cannot help in these areas, or takes too long to help, the success of the whole IW campaign is at risk.

4. Objects of the capabilities

In addition to a breakdown by mission, the study team also analyzed the overall list of ninety-two capabilities based on six principal objects. These objects denote the *target* of the capability's effect, while Understand, Shape, and Engage refer to the type of capability (*see* **Table IV–1** below). If the table is populated by the ninety-two capabilities, some interesting patterns emerge. The top three main objects of the Understand capabilities are Population, Red, and HNG. (in order of the number of capabilities involved). More Engage capabilities relate to Population than Red. The greatest demand for Shape capabilities relate to Blue. Few Shape capabilities directly address Red; instead, most Shape capabilities are directed at the environment around Red.

Table IV–1. Capability Objects[34]

Capability Type	Principal Objects					
	Environment		Population	HNG	Red	Blue
	Strategic Setting	Physical Env.				
Understand						
Shape						
Engage						

[34] For this example, only two components of the environment ("Strategic Setting" and "Physical Environment") are made explicit.

Chapter V. Applications

This chapter illustrates how the process described previously in Chapter III can be used to analyze critical focus areas and then to identify program initiatives.[35] The distinguishing attributes of IW suggest a number of focus areas that are significantly more important to IW than they are to RW, and are good candidates for program initiatives. Examples are listed in **Figure V–1** below.

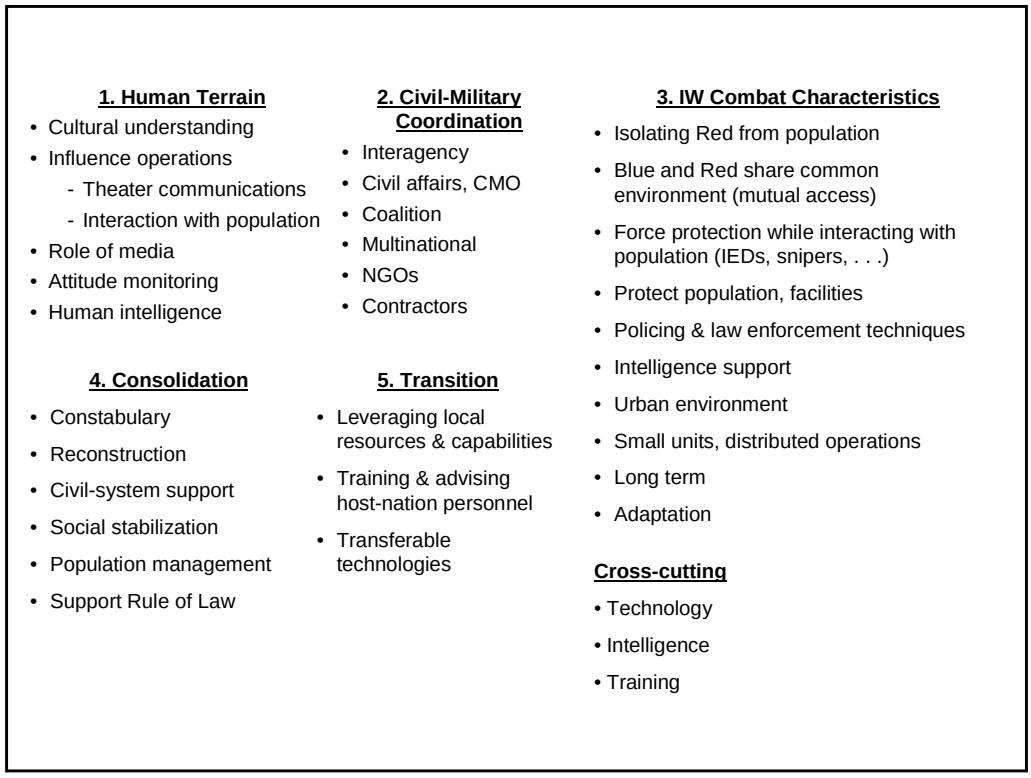


Figure V–1. Examples of Important Focus Areas for IW

---

35 *See* Chapter III, Section B. The types of initiatives are identified in terms of the DOTMLPF+ categories.

Table V–1 depicts the diverse set of examples addressed in this chapter.

Table V–1. Focus Areas for Program Initiatives

A. Transition
B. Influencing the Population
(1) Theater Communications
(2) Personal Interactions
C. Civilian and Military Organizations and Activities
D. Policing-Related Capabilities
(1) HNG Police That Support Rule of Law
(2) IW Using Policing Tools, Systems, and Approaches
E. Technology

A. Transition

Transition is the overarching objective of irregular warfare. It is the transfer of responsibility and authority for security, social well-being, and reconstruction to the HNG. For a successful transition, the HNG must be able to provide security and essential services for the population, and be accepted as legitimate by a significant part of the population.[36] To help the HNG achieve this, DoD must have the capabilities to plan with, train, advise, equip, and support the HNG; and to work effectively with other US agencies, Coalition partners, international organizations, NGOs, and contractors.

This chapter illustrates the use of the processes described in the previous chapters for identifying program initiatives aimed at improving DoD's capabilities for transition. The following sections identify and discuss the capabilities needed to enable the HNG to provide security, supply essential services, and establish its

---

[36] This report does not address some other aspects of a successful transition such as legitimacy in the eyes of regional neighbors and the international community, or being non-threatening to US national interests.

legitimacy. Each section then identifies program initiatives to improve that capability.

1. DoD capabilities to enable the HNG to provide security

The HNG security organization must be able to recruit, organize, train, equip, and supply indigenous forces, an effort which is analogous to the Title X responsibilities of the US Secretaries of the Army, Navy, and Air Force. Volume II of this report identifies twenty-seven DoD capabilities that would enable the HNG to provide security.[37] *The study team assessed six capabilities as needing substantial improvement.*

a. DoD capabilities needed

- **Understand:** US personnel must understand the relative strengths and weaknesses of the HNG and adversary forces to understand the resultant HNG security force requirements and the options for meeting those requirements that are consistent with indigenous resources (e.g., personnel skills, equipment, TTP, support capabilities).
- **Shape:** DoD must be able to accomplish the following:
  - form partnerships with the HNG security forces at all levels;
  - establish and expand training, advisor, and PME programs for the HNG security force personnel;
  - work with the HNG to develop and acquire material for host-nation forces that is consistent with the host-nation resources and capabilities;
  - work with the HNG to develop TTP that are consistent with the HNG capabilities;

---

[37] *See* Chapter IV in this volume; *see also* Volume II, Capabilities U:9–16, 18, 21–25, 34; US38; S:3, 7, 8, 23–25, 31, 32, 36, 37, 40.

- augment host-nation forces with US resources such as intelligence products and remote engagement; and
- prepare Blue personnel for the above roles.

These capabilities are categorized by type in **Table V–2** below.

Table V–2. Types of DoD Capabilities Needed to Transition Security Responsibilities to the HNG

Capability Type	Objects				
	Environment • Physical • Strategic • Information • Etc.	**Population**	**HNG**	**Red**	**Blue** • DoD • Interagency • Multinational • NGOs • Contractors
Understand			**X**	**X**	
Shape			**X**		**X**
Engage					

b. Examples of DoD initiatives to enable the HNG to provide security

For the two types of capabilities indicated by the matrix entries for "Shape HNG" and "Shape Blue" in **Table V–2** above, the types of initiatives are identified in terms of the DOTMLPF+ categories in **Table V–3** (next page).

Table V–3. Examples of Types of Initiatives for Improving Capabilities for Transitioning Security Responsibilities to the HNG

Capability Type	DOTMLPF+ Categories									
	Doc	Org	Train	Mat	Ldr	Pers	Fac	Pol	Eval	CD&E
U (Env)										
U Pop)										
U (HNG)										
U (Red)										
U (Blue)										
S (Env)										
S (Pop)										
S (HNG)	X	X	X	X					X	X
S (Red)										
S (Blue)		X	X	X						
E (Pop)										
E (HNG)										
E (Red)										

CD&E – Concept Development and Experimentation
Eval – evaluation (assessment)
Fac – facilities
Ldr – leadership and education
Pers – personnel
Pol – policy

c. Types of initiatives

(1) Initiatives for recruiting and training HNG security forces (by Services and joint training commands)

- Develop tools for vetting recruits. (Shape HNG[38] – Material, TTP[39])
- Establish and expand lessons-learned programs regarding current in-theater recruiting and training efforts. (Shape HNG – Doctrine, Organization)
- Develop multicultural training tools (Shape Blue – Material)
- Establish and expand "train the trainer" programs. (Shape Blue – Training)

(2) Initiatives for performance assessment of HNG security forces, TTP development, and material development (by Services, combatant commands, and agencies)

Two subtypes: ongoing operations and future contingencies.

- **For ongoing operations,** establish in-theater cooperative Blue–HNG "Battle Lab" that is focused on host-nation security needs and HNG resources (Shape HNG – Organization), to perform the following:
  - Assess field performance of host-nation security forces; produce lessons learned; develop training venues and TTP; and design, test, and acquire material. (Shape HNG – Doctrine, Training, TTP, Material, Assessment).
  - Establish liaisons and reach-back to parallel US organizations (training, TTP development, research and development (R&D), battle labs, …) (Shape HNG – Organization).

---

38 Indicates type of capability: Shape HNG forces.

39 Indicates type of initiative in terms of DOTMLPF+ category. TTP is included under "Doctrine."

- Explore how US capabilities (intelligence products, remote strike, and logistical support) can be used by the HNG without compromise. (Shape HNG – CD&E, Assessment).

- **For future contingencies**, create a CONUS-based "IW Transition Battle Lab" that is focused on host-nation security and HNG resources: (Shape HNG – Organization)
  - Link this battle lab with analogous battle labs and R&D facilities of Service, joint, and Coalition forces. (Shape Blue – Organization)
  - Develop training and TTP that are consistent with likely host-nation funds, skills, and operational environments. (Shape HNG – Doctrine, Training, TTP)
  - Develop "transferable" technologies for sensors, weapons, platforms, communications, information processing, force protection, and logistics. (Shape HNG – Material)
  - Develop concepts to enable host-nation forces to leverage US capabilities for intelligence products, remote strike, and logistical support. (Shape HNG – CD&E)
  - Develop technologies for controlling or neutralizing systems that may fall into adversary hands, such as "safe-ing chips." (Shape HNG – Material)

The types of initiatives described in these examples were illustrated previously in **Table V–3** (page V–5). **Table V–3** shows areas not addressed above. For example, "Population" is not addressed yet the capabilities to understand the allegiances of the population and to influence those allegiances will be critical to host-nation security. This illustrates the utility of the table as a *structured checklist* to suggest additional initiatives.

2. DoD capabilities to enable the HNG to provide essential services

"Essential services" include governance, social well-being, economic stability, and a justice system. Volume II of this report identifies twenty-five DoD

capabilities that are directly relevant to enabling the HNG to provide essential services.[40] *The study team assessed six of the twenty-five capabilities as needing substantial improvement.*

a. DoD capabilities needed

- **Understand:** DoD personnel must understand the nature of the essential services, and what is needed to provide them to host-nation standards and expectations. In turn, the roles and performance of the HNG in providing essential services must be understood by monitoring their performance, establishing performance standards, and gauging public satisfaction. It is also critical for DoD personnel to understand the roles others play in transitioning responsibility for essential services to organizations such as US non-DoD agencies, Coalition partners, multinational organizations, NGOs, and contractors.
- **Shape:** DoD personnel need to identify and employ indigenous technical and managerial workers with the necessary expertise. They also need to work with HNG personnel at all levels to leverage (and expand) their knowledge and insight, for example, by using "embeds" from DoD and other US and Coalition organizations inserted into the HNG service organizations.

These capabilities are categorized by type in **Table V–4** (next page).

---

[40] *See* Chapter IV; *see also* Volume II, Capabilities U:9, 18, 20, 22, 33, 34; US38; S:3, 8, 20, 21, 23–27, 29, 33, 37, 39, 40; E:1, 2, 13, 14.

Table V–4. Illustrative Types of DoD Capabilities Needed to Transition Responsibilities for Essential Services to the HNG

Capability Type	Environment: • Physical • Strategic • Information • Etc.	Population	HNG	Red	Blue: • DoD • Interagency • Multinational • NGOs • Contractors
Understand	X	X	X		X
Shape			X		X
Engage					

b. Examples of initiatives to enable the HNG to provide essential services

In this section, we focus on a single entry, Shape Blue, from **Table V–4** above and identify examples of program initiatives. The types of initiatives are depicted in **Table V–5** (next page). Two key challenges facing DoD are (1) establishing an interagency, multinational, and NGO community supporting Transition, and the role of DoD in this process; and (2) identifying the required resources. DoD, the US State Department, and other US agencies need to create an interagency standing organization to help HNGs develop the capabilities to provide essential services (Shape Blue – Training, Material, Research):

- This organization would be linked to multinational, non-governmental, and other relevant organizations.
- It would develop a process for formulating interagency strategy and campaign plans that incorporate the demands of Transition from the outset.
- It would develop policy recommendations regarding the roles of member agencies regarding stabilization and reconstruction (such as DoD responsibilities for “first-responder” missions) and use of DoD facilities and logistics resources.

Table V–5. Examples of Types of Initiatives for Improving Capabilities for Transitioning Responsibilities for Essential Services

Capability Type	Initiative Type									
	Doc	Org	Train	Mat	Ldr	Pers	Fac	Pol	Plan	Res
U (Env)										
U (Pop)										
U (HNG)										
U (Red)										
U (Blue)										
S (Env)										
S (Pop)										
S (HNG)										
S (Red)										
S (Blue)	X	X	X	X				X	X	X
E (Pop)										
E (HNG)										
E (Red)										

Fac – Facilities
Ldr – Leadership and Education
Pers – Personnel
Plan – Planning
Pol – Policy
Res – Research

In conjunction with the State Department, the Intelligence Community, NGOs, and other related organizations, DoD would conduct research focused on government-building; develop and expand training programs for government and non-government personnel in the skills needed; and develop multinational and multicultural communications and planning tools. These initiatives would support not only capabilities for post-conflict transition but also "pre-conflict" assistance to failing nations. The types of initiatives described in these examples are given in **Table V–5**.

3. DoD capabilities to enable the HNG to establish its legitimacy

Legitimacy of the HNG in the eyes of a significant part of the population is essential for a successful transition. Similar to planning a political campaign, the United States must have the capabilities to assist the HNG in its efforts to deserve and win this support. The key challenge is to achieve the level of US competency required to help shape a political process within a foreign country and culture, where the United States is perceived as a self-interested outsider if not an invader. Volume II of this report identifies nineteen capabilities directly relevant to the establishment of HNG legitimacy.[41] *The study team assessed nine capabilities as needing substantial improvement.*

a. DoD capabilities needed

Key capabilities are listed below.

- **Understand:** Blue must understand the following:
  - the audience (local, regional, and national power structures; opinion-makers);
  - what messages would be effective;

---

[41] *See* Chapter IV; *see also* Volume II, Capabilities U1-7, 9, 15, 16, 21, 22; US38; S1, 3, 20, 25; E1, 2.

- how best to deliver them through both actions and words (for example, cast in terms of local "narratives"); and
- how to gauge their effect.

Given the complexity of these questions and their dependence on local conditions, any outsider can only offer, at best, insights based on a general understanding of political processes.

- **Shape:** The key shaping capabilities are the capabilities to establish effective advisory roles with the HNG and positive relationships with locals at all levels to leverage their knowledge and insight.
- **Engage:** The key capabilities are the capabilities to formulate and deliver effective messages within a foreign culture, and interact with the population and the HNG.

These capabilities are categorized by type in **Table V–6** (below).

Table V–6. Illustrative Types of DoD Capabilities Needed to Support the Establishment of HNG Legitimacy

Capability Type	Object Type				
	Environment • Physical • Strategic • Information • Etc.	**Population**	**HNG**	**Red**	**Blue** • DoD • Interagency • Multinational • NGOs • Contractors
Understand		X	X		
Shape		X	X		
Engage		X	X		

b. Examples of initiatives to enable the HNG to establish legitimacy

In coordination with multinational and non-governmental partners, the National Security Council (NSC), State Department, DoD, and other US agencies

should create an organization focused on understanding the cultural and media foundations of political stability in failed or failing nations. This organization would house expertise on regions of potential concern and include the following:

- a central clearing house of information, documents, and contacts for each area;
- a permanent staff, visiting members, and "reservists" available as needed;
- outreach programs to area experts (host-nation nationals, government, business, academia);
- cooperative programs with the host nation; and
- contacts with organizations and individuals from all sectors of host-nation society.

This organization may be part of the same organization (the interagency standing organization) discussed in the previous section on providing essential services. Again, this organization would support not only capabilities for post-conflict transition but also "pre-conflict" assistance to failing nations (Understand Population and HNG – Organization; Shape Blue – Organization, Training, Leadership and Education, Personnel, Policy, Planning, Research). The types of initiatives described in this example are illustrated in **Table V–7** (below).

Table V–7. Examples of Types of Initiatives for Improving Capabilities for Establishing HNG Legitimacy

Capability Type	Initiative Type									
	Doc	Org	Train	Mat	Ldr	Pers	Fac	Pol	Plan	Res
U (Env)										
U (Pop)		X								
U (HNG)		X								
U										

Capability Type	Initiative Type									
	Doc	Org	Train	Mat	Ldr	Pers	Fac	Pol	Plan	Res
(Red)										
U (Blue)										
S (Env)										
S Pop)										
S (HNG)										
S (Red)										
S (Blue)		X	X		X	X		X	X	X
E (Pop)										
E (HNG)										
E (Red)										

Fac – Facilities
Ldr – Leadership and Education
Pers – Personnel
Plan – Planning
Pol – Policy
Res – Research

B. Influencing the population in IW theaters

The Coalition can influence the host-nation population by both its communications and its actions. Initiatives for improving the effectiveness of each are discussed in the next two sections, Theater Communications (TC) and Personal Interactions.

1. Theater Communications

a. Introduction

The host-nation population is subject to actions and communications from many sources: government and non-government, remote and local, and/or friendly and hostile. The focus here is on communications from the Coalition to the population in-theater, recognizing that these must compete with the communications from insurgents, neighboring countries in the region, and the commercial media, among others. These Coalition communications are labeled *Theater Communications* or TC.

The Coalition needs to be able to influence the host-nation population because the population is the operational-level "center of gravity" in IW. HNG legitimacy and stability depend on the population's support. The ability of a Coalition to stay in country as a legitimate force depends on the population's understanding of Coalition goals and its cooperation with (or at least toleration of) Coalition actions. The Coalition capability to isolate insurgents and to enforce order depends on intelligence from the population; and support of the population is vital for reconstruction and economic recovery.

The population is influenced by Coalition actions and communications. The old saying that "actions speak louder than words" is surely correct in this instance. A routine neighborhood-wide no-knock search one-home-at-a-time speaks loudly to the people directly affected. But only a few people observe first-hand any one action, and many more know only what is communicated to them by word of mouth or media. In this sense, w*hat is communicated* about the action is *what is widely understood* about the action, and so *is* the action for most people. Perceptions matter and communications shape them.

This section explains the concept of TC, reviews the challenges faced by current US actions in influencing the host-nation population through TC and the capabilities needed to do it effectively, and then describes initiatives to improve the effectiveness of US TC.

b. TC is analogous to strategic communications

Strategic communications is defined as "US Government efforts to understand and engage key audiences" to advance US interest and policies. It involves the use of "coordinated programs, plans, themes, messages, and products." The intent is for strategic communications to be "synchronized with the actions of all elements of national power."[42]

What this report calls *theater communications* or TC has a more narrow scope than strategic communications. Theater communications is limited to a country or theater of operations involved in IW. The focus for TC is the *host population*.

The key senior US officials in-theater—the joint force commander and the ambassadors—are ultimately responsible for everything that happens in-theater, including the communications. One challenge in doing TC well is *organizational*, namely, setting up an organization with authority from the various senior US officials in-theater to overcome traditional stovepipes to be able to accomplish the following:

- Integrate the use of distinct DoD functions and operations, including DoD public affairs, defense support to public diplomacy, information operations (e.g., electronic warfare, computer network operations, psychological operations, operations security), and CMO.
- Integrate the related DoD and non-DoD capabilities and efforts, e.g., public diplomacy (by the US country embassy and State Department), non-DoD public affairs, and civil operations.
- Coordinate with the US Government's strategic communications aimed at influencing audiences in the region.
- Coordinate with Coalition governments, the HNG, international organizations, and NGOs.

---

[42] US Department of Defense, Joint Staff, *Information Operations*, JP 3-13, 13 February 2006, p. I-10.

c. Capabilities needed for effective TC

US studies and documents on information operations and strategic communications generally have not had the host population in IW as their focus. Consequently, these same studies and documents have not given much attention to the capabilities needed for TC. For example, the focus of the *Information Operations Roadmap* from October 2003 and *Information Operations* (13 February 2006) is on the enemy, with the intent to degrade adversary decision-making while preserving our own, and to achieve information superiority over the enemy for the conduct of operations.[43]

Of four recent DSB Reports[44] concerned with these subjects, three focused at the global level (*Managed Information Dissemination, Strategic Communication, Transition to and from Hostilities)*. These reports viewed the Global War on Terrorism (GWOT) as the global-level challenge and strategic communications as a global activity in support of the GWOT.

Only the most recent DSB report, *Force Protection in Urban and Unconventional Environments* (March 2006), focuses squarely on influencing the population, and reflects the ongoing US efforts in Iraq to influence the people of Iraq.

> Commanders at all levels in the field are inventing "information operations" directed at the local populace and integrating these non-kinetic methods into their operations. However, they need more help in both message and media. U.S. soldiers and marines on the ground daily are conducting strategic communication. They represent the face of America to local populace. But, they need more cultural awareness and language skills.

---

[43] US Department of Defense, *Information Operations Roadmap,* 30 October 2003. US Department of Defense, Joint Staff, *Information Operations*, Joint Publication 3-13, 13 February 2006.

[44] Defense Science Board, *Managed Information Dissemination*, October 2001. Defense Science Board, *Strategic Communication*, September 2004. Defense Science Board, *Transition to and from Hostilities*, December 2004. Defense Science Board, *Force Protection in Urban and Unconventional Environments,* March 2006.

> However, current IO definitions, policy, and doctrine don't adequately address this kind of "influence operations." Instead, they focus on actions to affect adversary information and information systems while defending one's own. Psychological operations (PSYOPS) is an exception but is limited in quantity and skill set, and doesn't adequately reach the lower levels of the combat force who need their skills. Influence operations, public diplomacy, and public affairs demand coherent, consistent messages resting on the same philosophical, ideological, and political principles.[45]

Interviews in Iraq with US general officers in 2005 illustrate the serious shortfalls in US capabilities to communicate well with the Iraqi people.[46]

> "There is no formal approved definition of strategic communications. This leads to the creation of [Coalition] "tribes" and factions who all have their own way of doing things."
>
> "Commanders need to think about how to use non-lethal power such as IO [information operations] and PA [public affairs]…it's impossible to get them thinking outside their lanes."
>
> "Trying to get Iraqi ministers to all say the same thing (common themes or talking points) is impossible."
>
> "We are so damn bad at IO! The Iraqis are hungry to hear from us."
>
> "IO needs new talent. They are failing."
>
> "What is not working? Information operations."

These comments were consistent with the study team's assessment of capabilities in need of substantial improvements for effective *communications that focuses* on the host population. TC capabilities to understand, shape, and engage the population are described next.

---

45 Defense Science Board, *Force Protection in Urban and Unconventional Environments*, March 2006, p. viii.

46 James Lacey, JFCOM–JCOA, personal communication, 2005, based on his face-to-face interviews with US military in Iraq.

Understand. To understand target audiences in the host-nation population, and how to reach them, involves collecting, analyzing, and making available many kinds of information; for example:[47]

- Culture, attitudes, narratives, perceptions, and communication patterns (e-mail, cell phone, the "grapevine").
- "Wedge" issues that divide local actors and, most importantly, those actors with disproportionate influence.
- Role, effectiveness, and credibility of mass media, e.g., TV, radio, newspapers (Coalition's media, HNG's private media).
- Content and effectiveness of all messages from US sources, other Coalition members, HNG, insurgent groups.

Shape. To shape Blue operations requires planning and coordinating TC with the wide range of ongoing Coalition and HNG actions and communications, including the following:[48]

- Military and CMO by the Coalition and the HNG.
- Civilian operations by NGOs, international organizations, and civilian government agencies.
- The functions of public affairs, public diplomacy, and information operations, as well as related capabilities.

Engage. To engage target audiences selectively requires preparing tailored messages for various audiences and delivering them through the right means (e.g., the media; HNG personnel; Coalition personnel, either military or civilian).[49]

---

[47] This involves capabilities U1–5, U9, U14, U15, U17, U18, and U33. *See* Volume II of this report.

[48] This involves capabilities S1, S26, S33, and S39. *See* Volume II.

[49] This capability is E1. *See* Volume II of this report.

d. Initiatives to improve TC

The study team identified five initiatives that would improve TC:

- New doctrine, organization, and material critical to understanding how to improve TC.
- New doctrine to understand the impact of TC on attitudes of peoples.
- New doctrine, organization, and PME to shape TC operations.
- New doctrine and tools to shape the information environment.
- New training and selection to improve engagement.

These initiatives are discussed next.

(1) New doctrine, organization, and material critical to understanding how to improve TC

The Under Secretary of Defense for Intelligence should make TC-specific information readily available to users. This effort should be coordinated with the combatant commands; the Chairman, Joint Chiefs of Staff; and the Services. US Government organizations that now supply intelligence products should build on existing requirements in supplying additional TC-specific information to users, for example:

- Characterize culture, attitudes, perceptions, and communication patterns of host-nation people and groups (including the "wedge" issues).
- Characterize roles, effectiveness, and credibility of available media (government, commercial).
- Assess the effects of themes and messages (United States, HNG, insurgents).
- Identify the people and resources in HNG with TC experience.

This information needs to be readily available to the user. It should be housed in easy entry, all-source common-taxonomy databases. Automated tools are needed to support the manipulation and analysis of data. The processes need to get this information to the intelligence directorate (J2) of a joint staff or a TC operations cell that is in-theater. This TC-specific information is not the only in-

formation needed to prosecute an IW campaign; other information is already part of other intelligence requirements, for example:

- The doctrine in Joint Publications 3-13, *Information Operations*, calls for the physical, informational, and cognitive properties of the information environment.[50]
- Directive Number 3000.05, *SSTR Operations,* calls for the key ethnic, cultural, religious, tribal, economic, and political relationships of the human environment.[51]

(2) New doctrine to understand the impact of TC on the attitudes of the people

A major obstacle to understanding the impact of TC is the lack of experience-based doctrine, concepts, and capabilities for assessing the effects of communications, both ours and that of others. This assessment is a much more difficult problem than performing battle damage assessment after kinetic actions. A "best practices" handbook would be the practical way to gather learning experiences in Afghanistan and Iraq on how to do TC. The handbook should be updated with every rotation of forces until DoD feels confident enough to produce *experience-based joint doctrine*.

The US Joint Forces Command – Joint Center for Operational Analysis (JFCOM–JCOA) should produce the "best practices" handbook for assessing the effect of TC on population attitudes, starting with the new US Army–USMC doctrine in *Counterinsurgency*.[52] The next step is to involve people with recent experiences in Afghanistan and Iraq who, for example, faced the challenge of get-

---

50 US Department of Defense, Joint Staff, *Information Operations*, Joint Publication 3-13, 13 February 2006.

51 US Department of Defense, *Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations*, DoDD Directive Number 3000.05, (Washington, DC, 28 November 2005).

52 US Army and USMC, "Intelligence in Counterinsurgency," Chapter 3, in *Counterinsurgency*, December 2006.

ting local views on the coherence of Coalition actions and communications. These people had to figure out how to engage target audiences in two-way learning exchanges. They also had to find a way to track the influence of messages over time, either to reinforce existing positive attitudes or to re-engage to create positive attitudes.

(3) New doctrine, organization, and PME to shape TC operations

JFCOM–JCOA should develop joint doctrine for a TC operations cell and its TC cell chief, based on doctrine in Joint Publications 3-13, *Information Operations* (13 February 2006). Currently, no organization or function covers all segments of the indigenous population, and none coordinates all communications and related actions. The TC operations cell and its cell chief would be responsible for the following tasks:

- Prepare a plan and execute TC in coordination with all operations (military operations, CMOs, civil operations).
- Coordinate all TC functions and related capabilities. This includes all DoD functions for public affairs, defense support to public diplomacy, and information operations; non-DoD public affairs and public diplomacy; and the strategic communications from the United States, Coalition members, and the HNG.
- Work with the HNG to create a counterpart TC organization, including preparing a handbook for the TC operations cell and its cell chief to organize for and conduct TC.

Service programs for PME should prepare commanders and staffs for these roles. US JFCOM's Joint Warfighting Center[53] should conduct training for

---

53 The Joint Training Directorate and Joint Warfighting Center (J7/JWFC) in Suffolk, Virginia, "coordinates the U.S. military's overall joint training efforts to ensure it is the most advanced and powerful force in the world." Accessed 16 October 2007 at http://www.jfcom.mil/about/abt_j7.htm.

this role as the Center exercises and certifies the staffs of the Joint Task Force Headquarters.

(4) New doctrine and tools to shape the information environment

JFCOM–JCOA should develop joint doctrine and a handbook for how a TC operations cell should shape the information environment. The handbook should give the following guidance to the TC cell chief:

- Provide full understanding of Coalition policy and actions. This includes ways to increase access to regional media, to engage opinion-makers within the host-nation, and to assist reporters who are part of Defense and State Departments embed programs.
- Prepare for possible events affecting TC. This would include preparing branch and sequel plans for expected events and for possible wild-card events.
- Help military planners and operators ensure that insurgent actions following any Coalition action do not distort the facts on the ground.

The TC operations cell cannot passively respond to events. Rather, it must actively engage key audiences on Coalition policies and actions; it must anticipate events enough to manage the element of surprise; and it must support disrupting insurgent efforts at TC.

(5) New training and selection to improve engagement

The Services should improve the skill of US personnel who deliver the TC messages to the media. For a theater commander, this requires a plan for rapid pre-deployment training in TC. For command spokespersons and broadcasters, this requires candidate selection based on cultural knowledge, TC experience, language fluency, and extensive country-specific pre-deployment training.

2. Personal Interactions

a. Introduction

The character of the interactions between US forces and the host-nation population are important in IW because *the population is the operational-level center of gravity*. Population attitudes are greatly affected, both positively and negatively, by interactions with Coalition personnel—not only by *what is done* but also by *how it is done*. This sensitivity goes beyond the international Rules of Law or the official DoD Rules of Engagement; it includes matters of culture, respect, and honor.

By contrast, personal interactions with the population are much less important in RW. In RW, *enemy forces are usually the operational center of gravity*, though sometimes it is an *important terrain*, e.g., a capital city. Attitudes of people are generally not critical to finding and fighting the enemy, so interactions (negative or positive) have little effect on campaign success. In RW, interactions with the population are usually drowned out by dramatic events, e.g., large losses in military personnel, territorial gains and losses, and/or the gain or loss of key objectives like a capital city. Finally, the duration of RW in any one area is usually much shorter than IW: the locals have less time in RW to act on their feelings.

In IW, the population is influenced by its local interactions with Coalition forces and by the communications it receives about the Coalition forces. These interactions can clash or reinforce each other. For example, a single strong negative interaction can outweigh the effects of many positive interactions and communications. In this sense, actions (by the Coalition, government, or insurgent) that lead to negative effects can dominate the campaign to influence the population.

This section first reviews the problems faced by US forces interacting with the population in Iraq: criminal interactions, high collateral damage interactions, and routine operations. Then it describes the capabilities needed for effective interactions. Finally, it presents initiatives to reduce the likelihood of interactions having negative influences on the population and to increase the likelihood of interactions having positive influences.

b. Types of US force interactions with the people

Criminal interactions. Kinetic actions can lead to accusations of Coalition personnel committing crimes against local people. An example occurred in November 2005, when US forces were accused of killing twenty-four Iraqi civilians in Haditha. Accusations of criminal acts are rare, and actual criminal acts are even rarer. But accusations can lead to widespread indignation, and the effect can last for years in the minds of the local people. The US military has been diligent in seeking to prevent these kinds of illegal interactions, to prosecute the perpetrators, and to provide restitution when these interactions occur.

High collateral damage interactions. Another type of interaction involves kinetic actions with collateral damage. An example occurred in November 2004, during the week-long battle to control Fallujah, when civilians were hurt and property was damaged. Injury to humans and damage to property can get headlines for a while and can lead to widespread anger. How long the effects last depends on the reasonableness of the Coalition actions (in the eyes of the locals), the seriousness of the damage, and the efforts at compensation. The US military has been extremely sensitive to the need for minimizing collateral damage (and playing blood money at times). The US Rules of Engagement provided to units strongly encourage plans and operations that avoid unnecessary damage.

Routine operations. The most frequent interactions come from routine operations, e.g., logistics convoys, traffic control points, house-to-house searches, and humanitarian assistance. These daily non-kinetic events can have positive or negative influences on local people but rarely are these events in the news. The effect of each event, and how long it lasts, depends on the purpose of the specific interaction and how it is conducted. Improving US capabilities to do these interactions offers the best opportunity to increase significantly positive interactions with the population—but without hurting mission performance.

c. Capabilities for effective routine interactions

The improvements needed for effective interactions with the population are defined in terms of the capability type—understand, shape, and/or engage.

To *understand* target audiences, and how to interact with them, calls for information about the following:[54]

- The culture, religion, attitudes, perceptions, potential conflict, movements, and communication patterns of the host population.
- The characteristics and capabilities of the HNG security forces.
- Wedge issues among all societal actors and influential individuals.
- Effects of prior actions and interactions (United States, host nation, insurgents).

To *shape* Blue operations requires identifying, planning, and coordinating Coalition operations so they will have the most favorable influence on the people:[55]

- Military operations by the Coalition and HNG that demonstrate concern for the security of the people.
- CMO by Coalition members, contractors, and the HNG.
- Civilian operations by NGOs, international organizations, and civilian government agencies.
- Countering insurgent influence operations, e.g., to preserve the "ground truth" after an operation.

To *engage* people in routine interactions, and to engage insurgents, requires the use of the means that would have the most favorable influence on the various population groups:[56]

- Engaging the population with a positive message.

---

[54] This involves capabilities U1, U2, U4, U5, U6, U7, U8, U9, U15, U22, U24, U25, U27, U31, U34, and U36. *See* Appendix B of this volume; *see also* Volume II.

[55] This involves capabilities S1, S2, S4, S5, S6, S28, S35, and S40. *See* Appendix B of this volume; *see also* Volume II.

[56] This involves capability E 1. *See* Appendix B of this volume; *see also* Volume II.

- Engaging the insurgents in a way that conveys a positive message to locals.

d. Initiatives to improve routine interactions

Discussed in this section are three sets of DOTMLPF+ initiatives that would improve the understanding, shaping, and engaging in support of positive interactions.

(1) New doctrine to understand effects of interactions on the attitudes of the population

JFCOM–JCOA should produce a "best practices" handbook for assessing the effects of personal interactions on the population's attitudes. A start on this doctrine is provided in the US Army–USMC *Counterinsurgency*, specifically in Chapter 3.[57] Creating such a handbook is a practical way to build on this new doctrine as well as incorporating the US military and Coalition's experiences in Afghanistan and Iraq. The preparation of the new handbook should involve discussions with the people hired to play Iraqis by the National Training Center at Ft. Irwin, California. The "actors" have faced the challenge of interacting with US forces (as they are training), and could identify some ways that these forces could assess the effects of these interactions. It should explore these issues with US military and civilian personnel with recent experiences in Afghanistan and Iraq, so that the lessons-learned from in-theater operations can be incorporated into the handbook.

(2) New doctrine, training, PME, and personnel practices to shape interactions

The Army and Marine Corps should prepare a "best practices" handbook for interacting with the local population based on the US and Coalition experience in Afghanistan and Iraq. This handbook should enable units to plan and execute operations that perform the following tasks:

---

[57] US Army and US Marine Corps, "Intelligence in Counterinsurgency," Chapter 3, *Counterinsurgency*, December 2006.

- Incorporate lessons, good and bad, from prior actions in-theater.
- Appear proper from the perspective of local authorities and people.
- Use the Rule of Law guidelines and law enforcement techniques.
- Defeat efforts of insurgent groups to change the appearance to the media of any Coalition action, after that action had been completed.

The Army and Marine Corps should prepare programs for PME and unit training for these types of interactions. These programs should include education and training in new law enforcement skills for patrol tactics and procedures; and interviewing, interrogating, safeguarding, and managing informants.

The Army and Marine Corps should use the military's experiences at the National Training Center in Ft. Irwin, California, and in Afghanistan and Iraq to identify how the military personnel systems should screen people for their ability to work well with a foreign population. Service personnel systems do extensive screening today for other purposes; for example:

- People who can be trusted to work with and protect nuclear weapons.
- People who are likely to be good pilots.
- People who are suited for the special forces.

The screening for characteristics needed in IW should be multilayered:

- In recruitment and initial entry training, screen out those who are unsuitable.
- In advanced training and pre-deployment training, consider some aspects of interacting with foreign populations as the exclusive job of specialists. Identify personnel who should not be rated to interact with a local population (as State Department does with its candidate Foreign Service Officers).
- In selection and promotion, place and reward those who are demonstrably more effective in interacting with a foreign population than their classmates are.

- In deployment, encourage unit leaders to monitor the performance of personnel who interact with the people and identify who should be kept out of contact with locals (e.g., not brought in-theater).

(3) New training and information technology tools to improve engagement

The Army and Marine Corps should provide soldiers and marines with an information system connecting many databases to their personal and vehicle information technology (IT) tools. The improved *situational awareness* on vehicles, people, stores, and houses (like the awareness available to the police in any US city) would enable the troops to interact more confidently with the local population. Additional benefits would include the following:

- Improving the means and opportunities to learn the language and local customs.
- Providing more information about rules of behavior that would fit on a card.
- Enabling the troops to report intelligence in real time.
- Giving the troops the command's messages for the local population.

The Services should also provide local commanders and civil-affairs people with an IT system to map and understand local human networks. This would improve their ability to engage with the local human environment and help them pass this knowledge on to new people coming in-theater.

C. Unity of effort from civilian and military organizations

IW involves both military missions and civilian missions (stabilization, reconstruction, transition of control to the HNG). Coordination between military and civilian organizations and activities is critical, starting even before the United States becomes involved until the end of US involvement. This coordination is needed to develop organizational structures and processes for effective planning and unity of effort in execution. The organizations that DoD must work with include the US Department of State, other US Government agencies, Coalition

partners, the HNG, international organizations such as the United Nations, NGOs, and contractors.

This section first describes the value of diverse civil and military organizations in IW and the difficulty of getting them to work together to achieve unity of effort and coherent results. Then it summarizes the increased emphasis that the 2006 *QDR Report* gives to involving some non-DoD organizations, namely, US agencies, allies, and host-nation organizations. Finally, this section recommends the DOTMLPF+ initiatives that would better involve other organizations important in IW, specifically international organizations, NGOs, and contractors.

1. Partners are essential in IW

Having different kinds of partners in an IW increases the prospects for success for the following reasons:

- IW can demand many kinds of activities and expertise. These activities can be anything that a legitimate government could be expected to do, including governance along with economic and social reconstruction. They call for specialized skills not commonly found in US military units or not readily available from US agencies[58] but which are often available from allies, NGOs, international organizations, and contractors.
- The key to IW success is transitioning the responsibility for the activities from the United States to the HNG. Ideally, the United States would work in partnership with HNG organizations so that the latter could evolve from being a supporting partner, to being the supported partner, to being fully independent. But often HNG organizations cannot do this quickly. In some of these situations, as the first responder the United States could transition its responsibilities to an intermedi-

---

58 Some capabilities reside in agencies that have comparative advantages and skills but do not have the readily accessible and deployable capabilities that can be diverted from serving domestic constituencies.

ary—say, an ally, NGO, international organization, or contractor—that has the skills needed to take on these responsibilities and to partner with the HNG to enable it to transition to independence.

- The perceived legitimacy of any IW will depend on the international authority under which it is done (e.g., United Nations (UN) Security Council sanction) and who is involved. The more countries and organizations of all kinds are involved, the more that international support and support within the United States can be sustained over the long term.

2. Getting everyone to work together is hard

In IW, unity of command is impossible. Allies have recourse to their own chain of command. Host-government organizations have their own imperatives. International organizations always try to operate independently. There isn't always unity of US command: the geographic combatant commander leads all US military forces assigned to his command, but the ambassador (as head of the country team) leads all other US personnel. Clearly, those involved in an IW will not be operating under a single commander with the requisite authority to direct all participants to pursue a common purpose.

A reasonable goal in IW is unity of effort, that is, "coordination through cooperation and common interests."[59] But even this is hard to achieve because of the many "cultures" and "seams" among the people who have to be involved in important ways in IW:

- People from different countries and cultures (United States, Coalition partners).
- Military officials and civilians.
- People from the host nation and "outsiders."

---

[59] US Department of Defense, Joint Staff, *Joint Operations*, JP 3-0, 17 September 2006, p. A-2.

- People who work for governments and for non-government organizations.
- People in-theater and those back home in different parts of the same organization.

The new US Army–USMC *Counterinsurgency* field manual devotes an entire chapter (Chapter 2) to unity of effort.[60] It describes the important roles played by civilian organizations, the problems military commanders face in working with these organizations, and the principles for integrating the activities of military and civilian organizations. One set of comments from this chapter addresses the importance of, and challenges in, working with NGOs:

> "Some NGOs maintain strict independence from governments and belligerents and do not want to be seen directly associating with military forces."
>
> "Gaining the support of and coordinating operations with these NGOs can be difficult. Establishing basic awareness of these groups and their activities may be the most commanders can achieve."
>
> "NGOs play important roles in resolving insurgencies…many NGOs arrive before military forces and remain afterwards. They can support lasting stability." [61]

Another comment from *Counterinsurgency* confronts the interdependence of civilian and military organizations:

> "These civilian organizations bring expertise that complements that of military forces. At the same time, civilian capabilities cannot be employed effectively without the security that military forces provide. Effective COIN leaders understand the interdependent relationship of all participants, military and civilian. COIN

---

60 US Army and US Marine Corps, "Unity of Effort: Integrating Civilian and Military Activities," Chapter 2, in *Counterinsurgency*, December 2006.

61 US Army and US Marine Corps, *Counterinsurgency*, December 2006, p. 2-7.

> leaders orchestrate their efforts to achieve unity of effort and coherent results." [62]

Thus, the challenge is to give the joint force commander the capabilities needed to make possible *unity of effort* and *coherent results*. At a minimum, this means organizational arrangements, information sharing, and communication efforts that military commanders can use to ensure that the efforts do not interfere with each other. The goal is for these capabilities to help avoid duplication and prevent competition. Preferably, they would contribute to efficient tasking and prioritization of the Coalition's efforts.

3. DoD recognizes the need for many partners

Since 2001, US operational planning has emphasized joint concepts of operation rather than Service concepts of operation. It has also emphasized DoD being able to conduct these operations alone—as a Coalition of one—if necessary. The 2006 *QDR Report* expanded the earlier focus on US forces to now include US agencies, allies, and the host nation as part of the Blue forces. The *QDR Report* Preface[63] lays out the changes in emphasis to meet the new environment (italics added):

> From DoD solutions *to* interagency approaches. (This shift recognizes the role and contribution of US civilian agencies.)
>
> From separate military Service concepts of operation *to* joint and combined operations. (This shift recognizes the value of allies as Coalition members.)
>
> From the U.S. military performing tasks *to* a focus on building partner capabilities. (This shift recognizes the importance of HN [host-nation] capabilities.)

---

62 US Army and US Marine Corps, *Counterinsurgency*, December 2006, p. 2-2.

63 2006 *QDR Report*, p. vii.

To support these changes, the Introduction of the *QDR Report* calls for more investments to meet the demands of IW.[64] The intent is to enable DoD to operate effectively alongside other US agencies, allies, or host-nation partners.[65] These investments would focus on developing and maintaining appropriate language, cultural, and information technology skills.

But the *QDR Report* does not give the same emphasis to other organizations uniquely important in IW, as seen by their recent involvements in Iraq:

- **NGOs.** In 2006, hundreds of NGOs operated in Iraq.
- **International organizations.** In 2006, several UN agencies, the World Bank, and the International Monetary Fund were involved in planning or operations in Iraq.
- **Contractors.** In 2006, more than a hundred thousand contractor personnel were operating in Iraq.

Giving the same emphasis to these potential partners will call for changes in DoD's relationships with these organizations [italics added]:

- **NGOs.** From seeing them as organizations that show up unexpectedly and need to be de-conflicted *to* involving them in coordinated and inter-dependent operations.
- **International organizations.** From assuming after-the-fact relationships *to* planning before-the-fact partnerships.
- **Contractors.** From using individual agency contracting regulations *to* using a common set of regulations for all agencies supporting the US Government's IW efforts.

---

64 2006 *QDR Report*, p. 1.

65 2006 *QDR Report*, p. 5.

4. Initiatives toward greater unity of effort from all partners

The following set of DOTMLPF+ initiatives would enable greater unity of effort with NGOs, international organizations, and contractors.

- **Doctrine.** JFCOM–JCOA should exploit the new doctrine in the US Army–USMC *Counterinsurgency*, to prepare a handbook for joint force commanders to help them achieve unity of effort with all potential partners, including NGOs, international organizations, and contractors. The handbook should reflect lessons-learned about the best and worst practices in Afghanistan and Iraq.
- **Material.** Office of the Secretary of Defense Program Analysis and Evaluation (PA&E) should propose an expanded scope for the investment identified in the 2006 *QDR Report*'s Introduction to meet the demands of IW, so DoD could operate more effectively alongside NGOs, international organizations, and contractors.
- **Education.** Services should add to their PME an understanding of the new Army–USMC doctrine from *Counterinsurgency* and the JFCOM–JCOA handbook for achieving unity of effort with all partners in IW, when the handbook becomes available.
- **Exercises and simulations.** US combatant commanders should include the representatives of relevant NGOs, international organizations, and contractors in joint IW exercises. Services and Defense agencies should include all of these possible partners in any simulations they develop and conduct.

D. Policing-Related Capabilities Valuable for IW

Policing involves three separate and distinct activities and competencies: institutional development and training (e.g., curriculum development, information management); regular policing (e.g., street patrol, community-based policing); and specialized law enforcement (e.g., combating organized crime, border en-

forcement). This section describes the challenges related to shortfalls in these types of policing, and directions for initiatives to provide greatly improved forces for IW.

One challenge relates to US capability to build HNG police forces that support the Rule of Law. This involves institutional development and training, and is essential when helping to create, train, and oversee the host-nation police. The first part, Section 1 below, uses an August 2006 State Department assessment of the Rule of Law in Iraq to identify shortfalls in host-nation policing. Then initiatives are identified that would improve DoD capabilities to support State and Justice Departments in helping the host nation address its policing shortfalls.

Another challenge relates to US capability to conduct IW operations using policing tools, systems, and approaches drawn from regular policing and/or specialized law enforcement. This is critical when Coalition forces conduct operations against insurgents, or when they must act as police officials to "serve and protect" (e.g., in emergencies under martial law or in routine situations supporting indigenous police.) In this chapter, Section 2 (page V–40) identifies the policing tools, systems, and approaches that are routinely available to US law enforcement agencies and that would be valuable in these IW roles. It then identifies the initiatives to develop the forces that would use these tools, systems, and approaches.

1. Building HNG police that support the Rule of Law

Both HNG and societal support are needed to achieve the Rule of Law. One type of support is a justice system comprising the police, the courts and judiciary branch of government, the prison and detention system, and the systems that integrate them. (In Western countries, the Rule of Law is a joint responsibility of the executive and legislative branches of government.) Another type of support is the laws that regulate the behavior of the people, organizations, and govern-

ment.[66] A third type involves government and NGOs (including the legal profession) that supports an ethos of equal access to justice by all.

In an August 2006 cable to the American ambassador in Iraq, US Secretary of State Condoleeza Rice assessed the difficulties the Iraqis were having in achieving the Rule of Law.[67] Secretary Rice identified problems for each type of support needed under the Rule of Law.

- **Problems in the justice system:**
  - **Police:** "Security forces often operate with impunity and few officers have been held accountable for even gross human rights abuses."
  - **Judiciary branch:** "The judiciary…lacks adequate authority, capacity, and security to try cases efficiently and fairly."
  - **Prison/corrections/detention:** "Detention and prison facilities are consumed by an influx of new detainees, while the detainee release rate remains low."
  - **Integrating systems:** "Historic distrust between Rule of Law actors (especially judges and police)…makes progress halting at best."
- **Problems in the laws:** "The criminal law framework does not adequately address contemporary crimes such as organized and transnational crime, terrorism…"
- **Problems in the ethos:** "Corruption remains rampant and nascent anti-corruption institutions are perceived as politicized and sectarian."

---

66 In Western countries, these laws are generally the responsibilities of the executive and legislature branches of government. In an Islamic country, *sharia* would be the responsibility of the religious establishment.

67 US Department of State, State [cable] 140016, "Rule of Law Demarche," cable to US Ambassador in Iraq, 26 August 2006.

Secretary Rice recommended actions by the Iraqi government for Iraqi security forces, detainees, the Iraqi judiciary, the legal framework, and combating corruption. The recommendations most related to police were the following:

> "Demonstrate that…allegations of wrongdoing are fully investigated, illegal conduct is prosecuted, and human rights violators are held accountable…"
>
> "Ministry of Interior (MoI) should execute arrest warrants for officials implicated in violations of Iraqi law…Government of Iraq (GoI) should also direct Iraqi Security Forces (ISF) personnel to cooperate and share information with the judiciary in the investigation and prosecution of crimes."
>
> "Concrete steps must be taken to eradicate militia influence within the ISF."
>
> "US will support the MoI to develop internal controls capable of investigating, monitoring, and sanctioning police personnel accused of illegal conduct (including human rights abuses); and we will continue to train police to protect the human rights of the citizens they serve."

As of this date, the Iraqi government has not acted fully on any of these recommendations. The United States will have to find ways to encourage their implementation while recognizing the limits of US influence in this war.

The challenge in any IW is to identify initiatives that would enable US forces to help the HNG address such shortfalls while respecting the lead roles of the US Departments of State and Justice in training host-nation police. Three DOTMLPF+ initiatives would prepare US forces to better understand, shape, and engage a host-nation police force so that police forces would be committed to the Rule of Law:

- **Initiative:** USD (Intelligence) should provide Rule of Law specific information on selected countries for planning and conducting IW.
- **Initiative:** DoD should emphasize conformity to the Rule of Law in its support to the US Departments of State and Justice roles in helping to recruit, train, and organize host-nation police.

- **Initiative:** US Army should extend the US Blue Force Tracking System to cover host-nation police vehicles and personnel.

Each initiative is described briefly in the following sections.

a. USD (Intelligence) should provide Rule of Law specific information on selected countries for planning and conducting IW

This initiative will involve mapping the key personnel relationships within the country's justice system, characterizing (1) the capabilities and status of the various police forces and (2) the attitudes and beliefs of different groups to the Rule of Law, specifically toward the following:

- The importance attached to human rights violations, corruption, and illegal conduct in the government.
- The role of police forces in addressing these issues.
- The role seen for sectarian, tribal, and religious groups in addressing these issues.

b. DoD should emphasize conformity to the Rule of Law in its support to the US Departments of State and Justice roles in helping to recruit, train, and organize host-nation police

The initiatives would use the following capabilities:

- **US Army.** The US Army should prepare an information system to enable its military police units to vet recruits for law enforcement agencies, to eliminate criminals and other inappropriate people. This system should contain and/or have access to biometric data collection, identification cards, and scanners; inter-connected databases linking the courts, prisons, military detention centers, and the police; and a training program for HNG personnel using the vetting information system.
- **Joint Staff.** The Joint Staff should develop joint doctrine for organizing host-nation police forces to provide monitoring of police conduct,

a handbook for implementing this doctrine, and metrics for gauging police performance and commitment to the Rule of Law (since the number of police trained and equipped is clearly not an adequate measure of police support to the Rule of Law).

- **Joint Staff.** The Joint Staff should develop joint doctrine to identify supporting roles in upholding the Rule of Law; roles which could be performed by international law enforcement organizations (e.g., international constabulary force, *carabinieri*, UN civilian police programs, civilian police advisory programs of the Organization for Security and Cooperation in Europe, and European Gendarmerie Force).

c. US Army should extend the US Blue Force Tracking System to cover host-nation police vehicles and personnel

The US Army should extend the Blue Force Tracking System to enable it to track, and provide evidence on, the continuous location of police vehicles, weapons, and personnel. On-the-job monitoring provided by this system would help to deter and detect illegal actions by police, and could provide the basis for better response to support police threatened by insurgents and criminals). The Blue Force Tracking System would use individual electronic tags tied to in-theater communications and shared databases to track police vehicles, weapons, and personnel.

2. Conducting IW using policing tools, systems, and approaches

The new Army–USMC doctrine in *Counterinsurgency* recognizes the differences between warfighting and policing, and the importance of policing tools, systems, and approaches in IW. (The quotations are taken from *Counterinsurgency*.[68])

---

[68] US Army and US Marine Corps, *Counterinsurgency*, December 2006.

First, the doctrine recognizes that both warfighting and policing are needed by units countering insurgents:

> "In COIN operations, the environment frequently and rapidly shifts from warfighting to policing and [then] back again."
>
> "There is a clear difference between warfighting and policing. COIN operations require that every unit be adept at both and capable of moving rapidly between one and the other, depending on the circumstances."

This doctrine sees a clear difference between warfighting and policing but does not say how to make every unit rapidly adaptable to both. Rapid transition from one to the other will be extremely difficult when IW warfighting and policing involve different kinds of capabilities. Fortunately, the same tools, systems, and approaches used in policing can be very helpful in IW warfighting.

Second, the doctrine recognizes that policing can contribute uniquely to intelligence:

> "The primary front-line COIN force is often the police—not the military. Few military units can match a good police unit in developing an accurate human intelligence picture of their area of operations."

One way that military units can become much better at developing an accurate human intelligence picture in the local area is to exploit the tools, systems, and approaches that the police use to develop intelligence.

Third, the doctrine recognizes that under some circumstances, policing can be a better match to the mission than warfighting.

> "To build a host-nation government, the interim military government should transition to host-nation authority as soon as possible…In these conditions, COIN operations more closely resemble police work than combat operations."

The recognition that operations in IW more closely resemble police work rather than combat operations makes a compelling case for military units in IW to be prepared to use the tools, systems, and approaches that are available to police.

DoD has little policing-related capabilities. In Volume II of this report, the study team assessed the fourteen capabilities that most directly relate to law enforcement:

- nine related to *understand* (U8, U9, U22, U34, U36, U37, U39, U40, and U41);
- one related to *shape* (S28); and
- four related to *engage* (E4, E5, E11, and E13).

Ten of these fourteen capabilities were assessed as needing significant improvement. The results of these assessments are not surprising: these fourteen capabilities are not very important in RW, and so they are not part of the standard tool-kit for US forces.

Consider the following tools, systems, and approaches currently used throughout the United States by civilian police.[69] All can be seen to be of value in countering insurgents or performing a "serve and protect" role in IW.

- **Tools for evidence collection and protection; tools for specialized crime investigation.** These tools are particularly important when the justice system has transitioned to the HNG.
- **Systems for rapid access to remote information** from central databases on all vehicles (through tracking license plates) and drivers (through tracking driver's licenses), and from police in other locations on all "people of interest."
- **Approaches that can make use of local people as a source of information.** This requires an ability to approach locals in a long-term, respectful relationship, and to develop personal rapport and a nuanced understanding of the people.

---

69 *See also* US Department of Defense, Defense Intelligence Agency, and Irregular Warfare Support Program, *Development of a Civil-Police Capability for the DoD in Counterinsurgency War-fighting*, 30 January 2006, For Official Use Only.

- **Pervasive and persistent ground presence with a large enough number of people** (e.g., as of this date, the New York Police Department has a force of 37,000 people to maintain security).

The tools, systems, and approaches described here are available to all US police, yet no force in Iraq has all of them. For example:

- Iraqi police continue to lack an ethos of "serve and protect," a system for rapid access to remote information, or the needed policing tools.
- US special operations forces and military police units have only limited manpower. They lack the systems and tools for rapid access to remote information. Neither are they trained to serve and protect host-nation civilians.
- Italian *carabinieri* and Canadian military police do have the ethos of "serve and protect" but have only limited manpower, and lack a system for rapid access to information and the policing tools needed.
- US ground forces in Iraq have the manpower but lack just about everything else.

Consider the DOTMLPF+ changes that would have to be made to rectify this situation. Many options are available if only small numbers of forces (up to about 10,000 soldiers) with policing capabilities are seen as needed. In this case, the changes could be made in specialized forces that already have some of the requisite capabilities.

- One option would be a DoD initiative to expand the tools, systems, and training of US special operations forces; these units already have some of the specialized cultural training that would be needed.
- A second option would be a US proposal for a NATO initiative building on the Global Peace Operations initiative, to improve the tools, systems, and training of allied special operations forces and of units like the Italian *carabinieri* and Canadian military police. These units already have some of the specialized police training needed.
- A third option would be a US Army National Guard initiative to re-mission, re-equip, and re-train existing Army National Guard military

police units to this role. Many people serving in these units are involved in public safety in their civilian jobs.

If a large force is seen as needed for IW with these kinds of policing capabilities, then the changes would have to be made to US ground forces. The initiatives discussed next illustrate the steps that could be taken to provide forces with the police-capabilities needed for IW.

a. Initiative for shaping specialized forces

OSD (PA&E) and Joint Staff should study the costs, benefits, and risks of options for specialized forces with enhanced policing capabilities for IW, e.g., US and NATO special operations forces, military police units, and US Army National Guard military police units.

b. Initiative for shaping US general-purpose forces

The Army and USMC should build on their *Counterinsurgency*, and develop an IW Master Plan that would provide US general-purpose forces with diverse policing tools, systems, and approaches. The IW Master Plan should perform the following:

- Identify and acquire the needed police tools for specialized crime investigation, evidence collection and protection, use of informants, and rapid access to remote information on vehicles, drivers, and “people of interest.”
- Plan for embedded police personnel (reservists or civilians) in ground-force units to advise the chain of command, reach back to civilian law enforcement expertise, and re-enforce the “serve and protect” ethos by on-the-job training and monitoring.
- Plan for the cultural and language understanding, along with the training and PME, which would make possible both (1) the effective use of the new policing tools, systems, and approaches; and (2) the rapid transition of ground forces from the Rules of Engagement for IW combat operations to the Rule of Law ethos of “serve and protect.”

- Develop new metrics to assess the performance of ground forces in (1) using policing tools, systems, and approaches against insurgents, and (2) operating in a "serve and protect" role.

E. Technology

It is sometimes asserted that technology plays a greatly reduced role in IW compared to RW because IW is close-up conflict against a low-tech enemy embedded in a population. While it may be true that technology *designed for RW* may have considerably reduced effectiveness in IW, technology remains a key US advantage. However, new technologies focused on IW capabilities must be developed.

This section uses the five distinguishing attributes of IW (Human Terrain, Civil-Military Coordination, IW Combat Characteristics, Consolidation, and Transition) to identify directions for initiatives in technology. The primary question is, "Given the need to improve DoD's IW capabilities, what directions in technology should DoD pursue?"[70] A comprehensive review of ongoing DoD efforts is not attempted. Rather, this section illustrates the application of the distinguishing attributes of IW to help identify directions that, in many cases, reaffirm the value of existing programs.

Table V–8 (next page) depicts a general framework for categorizing IW capabilities in terms of (1) the driving IW distinguishing attribute (e.g., Human Terrain) and (2) the objective of the capability (e.g., Understand the Population). Each cell of the matrix designates a type of IW capability and (potentially) an associated set of technology initiatives for improving that type of capability. The sections following the table discuss examples of technology initiatives suggested by each of the distinguishing attributes.

---

[70] "Technology" is used in a broad sense here and includes hardware, software, and basic research, along with the development of new technologies and the application of existing technologies to IW needs.

Table V–8. Framework for Categorizing IW Capabilities in Terms of the Distinguishing Attributes and the Objectives of the Capabilities

[Objectives]	Distinguishing Attributes				
	Human Terrain	Civil-Military	IW Combat Actions	Consolidation	Transition
Environment (Physical, Strategic, Informational, Technological…)					
Understand					
Shape					
Population					
Understand					
Shape					
Engage					
HNG					
Understand					
Shape					
Red					
Understand					
Shape					
Engage					
Blue					
Understand					
Shape					

1. Human Terrain

As discussed previously in Chapter II, the central capabilities for Human Terrain are understanding and shaping the attitudes of the population to gain its support for Blue HNG. Technology can play a key role in many related areas, including the following:

- Acquiring, processing, and displaying information about the population (i.e., mapping).
- Shaping the information environment.
- Communicating and interacting with the population (Engaging).
- Training Blue personnel to interact effectively with the population.
- Understanding, shaping, and leveraging human networks within the population.[71]

a. Population mapping (Understand Population)

Technologies are critical for mapping the population:

- Developing, storing, and mining indigenous data sources.
- Identifying individuals either close up or remotely (e.g., biometrics).
- Identifying activities such as mobility (e.g., vehicular and personal traffic patterns), social or business transactions, communications, and the usage of utilities (e.g., power, water.).
- Supporting human intelligence (communication, surveillance, and recording devices).

---

[71] A recent Defense Science Board study also stresses the importance of technology initiatives to improve DoD capabilities for Human Terrain; *see* US Department of Defense, Office of the Under Secretary of Defense (AT&L), *Defense Science Board 2006 Summer Study on 21st Century Strategic Technology Vectors*, February 2007.

Key challenges to population mapping are the multicultural nature of the information, the need to share it rapidly across multi-organizational boundaries, and the ability to fuse the input from disparate sources.

b. Managing the information environment (Shape Environment)

Technologies that support information operations focus on controlling the information in an IW environment by assuring the integrity of friendly information systems and putting Red information systems at risk. Examples of these technologies include monitoring, encryption and decryption, jamming, and hacking.

c. Communicating and interacting (Engage Population)

Communicating and interacting with the local population are central to IW. On the individual level, improved translation devices for street conversation are a key need. On the group and community levels, tools and models similar to those used in advertising or political campaigns are needed. These tools include methods of determining or targeting the audience, designing and testing the message, determining the means of communication, and determining the effects using polling techniques or other measures of effectiveness.

d. Training (Shape Blue)

IW is manpower intensive and poses a significant challenge to the training community. Improved tools for language instruction and “cultural immersion” are needed. Virtual, interactive tools may provide effective training environments in both of these areas, for example.

e. Human networks (Understand and Shape Population; Understand and Shape Red)

Human networks are “structures” on the human terrain. Society is formed from complex, intersecting sets of such networks including families, ethnic groups, local social networks, business relationships, religious organizations, criminal gangs, and terrorist cells. Gaining “human terrain” depends on capabilities to understand, influence (shape), leverage, or disrupt these human structures.

The observables of human networks include their members, locations, activities, communications, and transactions. Technologies for observation, data management, and interpretation are key.

- Analysis of a network employs techniques that use partial information regarding the activities and transactions of its members. Improved tools and models for relational or transactional analysis are needed.
- Penetration is a key means of understanding, influencing, and attacking a network. Improved tools for interrogation, vetting, and lie detection are needed, particularly for multi-cultural environments.
- The population itself can be a "smart sensor web" in dealing with adversary networks. Improved tools for leveraging the population's support include anonymous tip lines, covert sensors, communication devices, and data processing techniques to integrate disparate input and filter out false reports.
- Understanding and shaping the structures of human networks bring the tools of social science to bear on issues such as the motivational basis for a network, (e.g., ideology, family, power, money, or status); the individual member's perspective (e.g., perceived benefits and risks); the cohesive force of a network (e.g., trust or fear); potential weaknesses, vulnerabilities, and fault lines in a network's structure; and relationships between networks and the populace at large.
- Finally, a significantly improved understanding of the dynamics of networks is needed not only with regard to internal forces (e.g., wedge issues and power struggles) but also how the network responds to external stimuli (e.g., influence campaign) and how it interacts with other networks (e.g., alternative networks established to lure members and recruits away from a hostile network; for example, a neighborhood youth club in the case of US street gangs.) *This is a rich area for empirical studies and the development of modeling and simulation tools.*

In summary, *understanding, shaping, and engaging human networks are at the heart of irregular warfare and reflect its great complexity*. Improving these

capabilities provide challenging, high-payoff directions for initiatives in concept development and technology.

2. Civilian and Military Organizations and Activities

IW requires much more varied and tighter relationships between military and civilian organizations than does RW. Technology initiatives can aid multi-agency connectivity and provide cost-effective material in support of interagency missions.

a. Aid multi-agency connectivity (Shape Blue)

Improved understanding of organizational dynamics in establishing effective partnerships is needed, particularly in multinational and multicultural environments. Authorities, functions, and required internal communications will drive organizational activities and the technical tools needed to serve the organization. For example, multi-agency planning and operations require multi-access, multi-level-secure data, communications, and planning aids.

b. Expand support capabilities for military “first-responder” and civilian humanitarian assistance operations (Shape Population)

Improved, low-cost, rapidly transportable systems are needed to support the local population. These systems include facilities for food, water, housing, sewer, and healthcare; power generation; and information services. Innovations in food technology, water purification, waste treatment, and telemedicine can play key roles. These would also support humanitarian assistance in peacetime disaster relief, abroad and at home.

3. IW Combat Actions

In general, combat actions in IW differ significantly from those in RW. Some key areas where such differences occur are listed below. Implications for the types of capabilities needed and related technology development are discussed in the following sections.

a. Identification of Red and isolation of Red from the population

In IW, Blue and Red share the same space, and this presents both threats and opportunities: threats because Blue is more vulnerable to close-up attacks, and opportunities because Red must function in close proximity to Blue. To identify and isolate Red from the background population, Blue must understand and shape the human terrain to Blue's advantage, and engage Red within the constraints imposed by uncertainties in identification and the need to avoid collateral casualties and damage. These conditions make IW operations more like law-enforcement activities than traditional combat operations. Some directions for technology development and examples of specific systems follow.

Understand the human terrain

- Identify and track personnel: e.g., biometrics; ID cards; tagging (either for checkpoint ID or remote scanning), locator "bracelets."
- Identify and track vehicles:
  - Persistent surveillance systems.
  - Tagging either for checkpoint identification (e.g., "E-Z Pass" radio frequency tags, surveillance cameras), or remote scanning (e.g., vehicle-top, multi-spectral "license plates" viewed by overhead sensors).
  - Locating by remote systems (e.g., OnStar, LoJack).
- Tagging Red's supply system (e.g., weapons and weapon components).
- Monitor transactions (e.g., credit and debit cards, commercial, financial, utilities).
- Monitor communications (externals and internals).
- Process information to track, record, recognize patterns, and alert operators.
- Leverage the host nation's indigenous systems (e.g., telephone networks, closed-circuit TV).

- Develop information systems that enable the proper authorities to monitor society to maintain security while also protecting against unauthorized access to information.

Shape the human terrain

- Control traffic (personnel, vehicles) using natural or artificial chokepoints, barriers, signals, remote "permissive-use" mechanisms, or nonlethal stopping mechanisms to restrict movement.
- Create checkpoints that are effective, efficient, and unobtrusive.
- Leverage the population for information by establishing, gaining support for, and equipping programs such as neighborhood watch associations, tip lines, and rumor monitoring.

Engage Red

Provide Blue with systems that support law-enforcement capabilities that are focused on the following:

- Developing relationships with the local population (e.g., translation devices, cultural training aids).
- Anti-corruption vetting and safeguards, internal affairs (e.g., lie detectors).
- Rapidly accessible, available on-the-street databases on detainees, insurgents, and criminals (e.g., biometrics, interrogation results, human intelligence).
- Sensors for surveillance, stakeouts, wires, bugs, taps, and tip-lines.
- Forensic tools, crime-labs.
- Communications (e.g., robust tactical links in urban environments).
- Access to databases and reach-back expertise using personal digital assistants.

- "Non-lethal" weapons to enable the use of "measured effects" to reduce collateral casualties and damage while engaging personnel or vehicles.

b. Denial of Red access to resources

Because Red and Blue share a common space, Blue has opportunities to exploit access to Red's material, information systems, and recruits. Relevant technologies would support border-control systems; identifying, tagging, or neutralizing material in Red's supply chain; information operations aimed at Red communications; and influence operations aimed at potential recruits.

c. Defensive operations and control of areas

In IW, Red typically has the initiative, using concealment within the population and surprise in conducting attacks. Meanwhile, Blue has to protect its forces and a broad array of civilian targets while simultaneously conducting "normal" civilian-focused activities. The numbers greatly favor Red—a small number of insurgents can threaten a wide array of targets, requiring large numbers of Blue defenders. Technology can help by providing the following:

- wide-area, persistent surveillance and rapid-response capabilities;
- point protection of personnel, vehicles, and facilities;
- remote neutralization of explosive devices;
- robotics to reduce the exposure of personnel in hazardous situations;
- barriers and sentry systems for establishing secure areas; and
- surveillance to enable backtracking of perpetrators.

Current S&T initiatives are vigorously exploring all of these areas.

In addition to defending against conventional explosives, technology development must also address defending against cyber attack and chemical, biological, radiological, and nuclear threats. All phases of a defense must be considered including prediction, detection, neutralization, and remediation.

d. Constrained offensive operations

A key challenge facing the Blue forces is prosecuting Red forces while minimizing collateral casualties, damage, and the alienation of the population. Robotics can enable Blue forces to engage Red in situations that would otherwise require more extreme kinetic approaches. The capability to employ "measured effects" using "non-lethal" methods[72] to stop vehicles, control or disperse crowds, clear facilities, and control utilities and communications can significantly reduce collateral casualties and damage.

e. Small units and distributed operations

IW emphasizes small units (company and below) and distributed operations. This puts a premium on soldier technologies (protection, weapons, communications, mobility, support) and small-unit intelligence organizations resembling "police precinct-level" organizations with reach-back for data, forensics support, "city-wide" intelligence, and special investigations.

Distributed operations require effective communications, networking, and logistic support for small-unit operations. These include hand-held real-time systems for soldiers and marines on patrol with police-like reach-back to data on biometrics, records, and vehicles; quick-reaction support capabilities for engagement, reinforcement, or medical evacuation; and exploitation of the vertical dimension for communications, surveillance, engagement, and support. A key technical (and tactical) challenge is the survivability of air platforms supporting small units in an urban IW environment.

f. The primacy of local intelligence

In IW, most actionable intelligence is generated locally and exploited locally. Local intelligence is critical to identifying Red; isolating Red from the population; anticipating and preempting Red attacks; precisely locating Red targets; and supporting small-unit operations—that is, all of the IW combat actions discussed so far.

---

[72] Such methods may include mechanical, electromagnetic, acoustic, or chemical techniques.

However, legacy intelligence systems have been designed and organized to support decisions at the highest levels of the force. In IW, this type of system must be turned upside down, and new tools provided to support the acquisition, analysis, and dissemination of local intelligence by units at the local level.

g. Long timeframe

IW conflicts are generally wars of attrition. This implies a long timeframe and increased emphasis on support functions, continuity despite turnover, and maintaining equipment. Technical improvements can address all of these areas. For example, improved reach-back and "virtual right-seat rides" before and after unit turnover could help improve turnover continuity of personnel. Enhanced R&D initiatives can identify and address weak links in the durability of systems.

h. Adaptive capabilities and forces

In IW, Red generally employs less sophisticated weapons and small-unit TTP, which are easily changed in the face of Blue successes, so IW places a premium on Blue adaptability. Technological contributions for improving Blue's adaptability include facilitating a rapid lessons-learned distribution system, improving the versatility of fielded equipment, and improving data-gathering during operations by introducing automated recording systems that capture the locations, communications, electromagnetic environment, and actions (like "black-box" recorders on aircraft). These data, coupled with post-event narratives, could lead to a more rapid recognition of changes in Red weapons and TTP, and so speed up the employment of Blue countermeasures. Such systems would record "non-event" operations, thereby providing a baseline for assessing under what circumstances Red would be likely to attack.

i. Operations analysis

Because of the long timeframe of IW and the rapid adaptability of IW combatants, improved methods of operations analysis are needed to tighten Blue's "observe–orient–decide–act" loop by quickly recognizing changes in Red TTP on the basis of field data, and then assessing alternative Blue countermeasures. This requires innovative approaches to data collection in the field and new analytical techniques appropriate for IW operations.

j. Urban environment

Because human terrain plays the central role in IW, the physical terrain on which IW is waged tends to be urban, that is, areas where people, structures, and infrastructure are dominant features. *Therefore, IW combat operations and urban combat operations share many common features.* However, like IW, urban warfare was also neglected by military planning in the Cold War era.

In 2002, the Institute for Defense Analyses study team reviewed DoD capabilities for urban operations within the context of major combat operations.[73] Many technology initiatives identified in the 2002 IDA study pertain to IW, and a number of these are summarized in **Table V–9** (below). Key directions for basic R&D include the following:

- survivable platforms for the exploitation of the vertical dimension in urban terrain;
- information technology that works in urban areas;
- miniaturization of sensors to facilitate stealth and improve portability in the urban environment;
- robotics to reduce casualties;
- non-lethal effects to reduce collateral casualties and damage; and
- improved protection for personnel and vehicles.

Table V–9. Some Directions for Technology Initiatives for Urban Operations

Understand Physical Environment:
• Mapping tools – 3-D, subterranean, interiors, infrastructure, activity patterns – Rapid data-gathering, mining, processing, visualization, distribution

[73] Hurley et al., *Department of Defense Roadmap for Improving Capabilities for Joint Urban Operations.*

Understand Red:

- Sensors
  - Stealthy, short range, networked, autonomous, persistent, through-wall, below ground, tags, meters (for utilities)
  - Human, electromagnetic, acoustic, chemical, mechanical
  - Surveillance platforms (air, ground; manned, unmanned) for carrying and emplacing sensors; methods of exploiting building penetrations
  - Information transmission, processing, fusion

Shape Blue:

- Communications
  - Secure, high-bandwidth, wireless networks, reliable in urban areas
  - Systems to control or exploit existing information infrastructure
  - Translation devices
- Mobility
  - Protected vehicles able to maneuver in close urban terrain
  - Robotics
  - Dismounted mobility
  - Survivable air platforms
- Support
  - Unmanned support systems; precision delivery; medical evacuation

Shape Red:

- Mobility
  - Border control, barriers
- Support
  - Access to weapons, communications, utilities, logistics

Shape Population:

- Humanitarian assistance, reconstruction
  - Support systems: food, water, shelter, medical
  - Reconstruction: housing, utilities, sewer, trash, transport
  - Policing systems and tools

Engage Red:
• 3-D targeting; variable trajectories; loitering platforms; penetrating warheads • Measured kinetic effects; thermobaric weapons • Non-lethal effects (mechanical, electromagnetic, acoustic, chemical) • Autonomous sentry systems; barriers

4. Consolidation

Consolidation emphasizes the maintenance of security in an area and the initiation of reconstruction activities in partnership with the local population and HNG. As seen in Iraq, Consolidation requires a sustained presence, placing a burden on Coalition force levels and a premium on leveraging local capabilities. Technologies that support these activities include the following:

- Unmanned security systems that can reduce manpower requirements for surveillance and response (the latter either lethal or non-lethal).
- Systems that support population management.
- Systems and tools, such as translation devices, that help leverage the capabilities of the local population and local resources.
- Systems that support DoD's role as "first-responder" in providing the following:
  - management and administration;
  - transportation, utilities, logistics, and supply;
  - healthcare;
  - governance, justice, the Rule of Law, and police;
  - construction, repair, and maintenance;
  - finance;
  - media; and
  - training.

5. Transition

Directions for technology initiatives that support the transfer of authority to the HNG include the following:

- Tools for multicultural communications and planning, including recruiting, vetting, and training.
- Tools for training the HNG and the indigenous population to provide security and essential services.
- Affordable technologies that can be transferred to the HNG (e.g., sensors, weapons, platforms, communications, information processing, force protection, and reconstruction tools) and that are consistent with host-nation skill levels and operational environments.
- Systems and processes that enable the host nation to leverage Coalition capabilities without compromising those capabilities, such as interfaces to Coalition intelligence information, remote strike assets, and logistics platforms.
- Technologies for remotely controlling or neutralizing systems that may fall into enemy hands (for example, a “safe-ing chip” on weapon systems provided to the HNG).

This page is intentionally blank.

Chapter VI. Implementing Improved IW Capabilities

The previous chapter described directions for initiatives that would improve US capabilities for IW in a number of areas. This chapter addresses the implementation of such initiatives. Section A identifies possible impediments to implementing IW initiatives in DoD. Section B suggests the next steps that senior DoD leadership might take to push the implementation of IW initiatives within DoD and Congress.

A. Impediments to implementation

It will take a lot of effort—and some luck—to get major IW initiatives implemented in DoD. The Services, with support from Defense agencies and JFCOM, are responsible for organizing, training, and equipping the forces that joint force commanders will use to conduct future IW. The Services have their own priorities, and IW has not been a high priority in the post-Cold War period. Giving more attention to IW initiatives means a shift in DoD focus:

- getting DoD to focus less (and spend less) in the Future Years Defense Program on air and naval forces; and focus and spend more on the ground forces that carry most of the burden of IW; *and/or*
- getting the Army and Marine Corps—and the supporting Defense agencies—to focus less (and spend less) on capabilities for RW; and focus and spend more on improving capabilities for IW.

Either shift will be difficult for Service organizations to accept and implement. Further, the DoD process for implementing any initiative is largely based on consensus at each step along the way. This gives a virtual veto (or at least the power to delay) to many people and organizations. A sustained effort of a long duration will be needed by the advocates of improved IW capabilities to get initiatives im-

plemented. Given the current DoD processes for funding and implementing program initiatives, it is useful to identify the possible impediments from the past that could prevent progress on new IW capabilities. The following sections describe six possible impediments and look at the potential importance of each one.

1. Executive Agent

DoD has often used Executive Agents for areas of emerging importance. For example, since the mid-1980s, ballistic missile defense has been directed by a general officer who heads a separate organization, currently the Missile Defense Agency. In 2003, the Secretary of Defense named JFCOM as Executive Agent for joint urban operations, in response to a Congressional report[74] directing the Secretary to name such an Executive Agent. More recently, the Joint Improvised Explosive Devices Defeat Organization (JIEDDO) was set up to focus all DoD actions in support of combatant commanders to defeat IEDs as weapons of strategic influence. However, IW is not a separate mission, a different terrain, or a specific threat. It is a kind of warfare different from RW, and it puts different demands on the Services, US Special Operations Command, and non-DoD organizations.

This report does not *recommend an Executive Agent for IW or the efforts to improve IW. With so many players and diverse capabilities involved, IW should not be "given" to any one organization.*

---

2. Consensus

Consensus on the importance of IW during the Cold War ended with the collapse of South Vietnam in 1975. It would be unrealistic to expect that consensus could have been restored decades later by the results of joint experiments that pointed to major DoD weaknesses or by the recommendations from studies by Defense Science Boards or DoD think tanks. But the wars in Afghanistan and Iraq

---

74 US House of Representatives, *Report of the Committee on Armed Services House of Representatives on H.R. 4205*, Report 106-616, May 2000, p. 342.

have forced a greater awareness throughout DoD of the limitations of current IW capabilities.

This report sees a consensus now on the importance of IW. The challenges in Afghanistan and Iraq provide the basis for the judgments in the 2006 QDR Report *that call for future warriors to "be as proficient in irregular operations, including counterinsurgency and stability operations, as they are today in high-intensity combat"* [75] *(though few QDR initiatives supported this shift in priority).*

---

3. Comprehensive actionable plan

A comprehensive actionable plan, with specific ideas for good IW initiatives, can serve many purposes. One purpose would be to convince skeptics that IW improvements are possible. Another would be to focus attention on specific IW initiatives that should be given priority and then rally the support of those who would benefit from such initiatives, e.g., Service organizations, combatant commands, industry. Finally, a comprehensive actionable plan would provide a proposal for senior DoD officials to study and approve. No such plan exists today, and concern over the lack of such a plan is reflected in a recent DSB study (*Transition to and from Hostilities*) and in the *QDR IW Execution Roadmap.*[76]

This report recognizes that getting a comprehensive actionable plan is essential, and provides the basis for creating one through the use of the following:

- *a framework for identifying the IW capabilities to be improved, directions to pursue, and initiatives to take; and*

---

[75] 2006 *QDR Report*, p. 42.

[76] Defense Science Board, *Transition to and from Hostilities*, December 2004. The *Quadrennial Defense Review Irregular Warfare Execution Roadmap* (15 December 2006) is intended to ensure that the Services and defense agencies pursue the QDR decisions on IW. This roadmap, however, did not reflect or represent a comprehensive actionable plan for IW.

- *a process for tasking a DoD team to create a comprehensive actionable IW Master Plan for approval by the Secretary of Defense, with specific funding and schedules.*

4. Leadership support

Senior civilian and military leadership support is essential for any major IW initiative. Prior to 9/11, little consensus existed on the importance of IW issues, and there was little support for addressing shortfalls in IW capabilities. The wars in Iraq and Afghanistan have led DoD senior leadership to take a number of initiatives related to IW, e.g., to direct development of an IW Roadmap, establish an IW Executive Committee, set up a specialized organization (i.e., JIEDDO) to deal with IEDs, issue guidance in 2005 to place stability operations on par with RW.[77] What is still missing is a comprehensive actionable plan with guidance on programs, funding, and priorities.

This report proposes that senior DoD leadership take the following steps:[78]

- *Direct the IW Executive Committee to prepare for the Secretary's approval a comprehensive actionable DoD IW Master Plan (with specific Service and defense agency funding and schedules) and to work with agencies outside DoD to develop an IW Master Plan for the US Government.*
- *Provide guidance to specific DoD organizations to increase their sense of urgency and the priority given to IW for existing funding.*
- *Provide guidance to specific DoD organizations to increase organizational focus on planning for IW.*

---

77 2006 *QDR Report*, p. 86.

78 Each step is discussed further in Section B.

5. Staff-level advocacy

Staff-level advocacy focused on IW is needed throughout DoD (in the Services, combatant commands, OSD, Joint Staff, and Defense agencies) to sustain attention to IW issues and initiatives. Staff-driven activities can build consensus on the importance of exploring new IW concepts and capabilities, addressing IW issues, developing new IW simulations and experiments, and advancing new IW initiatives.

This report recognizes the key role played by staff-level advocacy. Section B.3 (page VI–5) identifies the organizational changes needed to increase attention and oversight to IW planning. Congressional pressure and action can lead to big changes in DoD. Sometimes this has been the concerted effort of a few reformers, e.g., the push for DoD "jointness" from Senators Barry Goldwater (R-AZ) and Sam Nunn (D-GA) and Congressman Bill Nichols (D-AL).

At other times, the pressure comes from outrage over evident gaps in US capabilities in an ongoing war. For example, individual items of equipment have gotten more funding because of the US casualties from insurgent use of IEDs in Iraq, e.g., up-armoring vehicles, body armor. And sometimes it comes from individuals such as Congressman Ike Skelton (D-MO), chairman of the House Armed Services Committee, who has argued for an increase in the size of the Army since the mid-1990s. But no one in Congress is currently championing major IW improvements.

Although Congress is not a source of pressure for major IW improvements, it rarely turns down major DoD initiatives unless they carry a lot of political baggage. Therefore, Congress would likely support Administration proposals to improve IW capabilities in DoD and non-DoD agencies, especially if applicable to the war in Afghanistan, which has broad bipartisan support.

B. Next steps for senior DoD leaders

This section suggests three steps that senior DoD leaders could take to encourage the implementation of improved IW capabilities:

- Direct preparation of a comprehensive actionable IW Master Plan.
- Increase urgency and priority to IW.
- Increase organizational focus on IW.

Each step is described briefly in the following sections.

1. Direct preparation of a comprehensive actionable IW Master Plan

The Secretary of Defense should direct the IW Executive Committee to prepare, for the Secretary's decision and approval (within six months of the tasking) an IW Master Plan that recognizes that IW capabilities are not a lesser-included part of RW capabilities. Many DOTMLPF+ initiatives to include in the IW Master Plan have already been discussed in Chapter V. Other initiatives may come from Service and joint lessons learned from Iraq and Afghanistan, and other relevant analyses. When signed by the Secretary, the IW Master Plan would identify to the Services and Defense agencies those DOTMLPF+ initiatives and funding that have received approval, and would direct those organizations to plan the programs to implement these initiatives.

Annually, the IW Executive Committee would report to the Secretary of Defense on the progress of programs implementing the IW Master Plan and the recommended revisions to update the Master Plan.

The IW Master Plan should address funding for IW programs. Prior to the 2006 QDR, new IW capabilities did not get high priority—their implementation depended on their contributions to RW capabilities at that time. However, with guidance from the 2006 QDR, funding of proposed IW improvements should now reflect their contributions to IW. This raises three issues—source, control, and level of funding—that should be resolved as part of the preparation of the IW Master Plan.

- **Source:** Both House and Senate appropriating committees have become increasingly opposed to the use of supplemental funding for initiatives not immediately related to a war. Funding for IW should be in the regular budgets of Services and Defense agencies (with the inevitable competition for funds with other initiatives).

- **Control:** Funding could be controlled by the Services and Defense agencies, or by a new office for IW initiatives. The preparation of the IW Master Plan should address this issue.
- **Level:** The funding level could be left unspecified, and would depend on decisions on individual programs. Alternatively, guidance could be given for a funded level of IW initiatives. The IW Master Plan should make recommendations regarding this issue.

2. Increase urgency and priority to IW

DoD funds many organizations that seek to improve operational capabilities and that are also responsible for the following:

- developing and demonstrating new technologies,
- performing intelligence collection and analysis, and
- conducting joint concept development and experimentation (JCD&E), training, and PME.

The focus of these organizations depends on what has the most urgency and priority. Since the end of the Cold War, DoD has deployed high levels of capabilities for RW relative to the need for RW, and low levels of capabilities for IW relative to the need for IW. The cost for increasing the priority to improve IW capabilities should be funded by decreasing the priority to improve RW capabilities.

In the period before an IW Master Plan has been approved, the Secretary of Defense should increase (1) the urgency about IW in these organizations and (2) the priority these organizations should give to improving capabilities for IW. This would be accomplished by the Secretary providing the following guidance.

Technology Enablers

- USD (AT&L) should give priority to research and development programs focused on improving IW capabilities, including those capabilities that could be transferred to indigenous forces as DoD transitions out of an IW.

- JIEDDO and the supporting Service programs should expand their current programs beyond force protection to include protection of the population and government.
- The Defense Advanced Research Projects Agency should expand the scope of its current program to include those technologies needed for IW campaigns.

Intelligence Collection and Analysis

- USD (Intelligence) should set up a "Joint Center of IW Excellence" (similar to a Service Battle Laboratory) to carry out JCD&E, conduct Red Teaming on new IW capabilities, conduct "Green Teaming" [79] on transferable IW capabilities, and support joint lessons-learned in IW.
- The Defense Intelligence Urban Working Group should expand the scope of the current Intelligence Community exploration of data and models needed for urban operations, to include data and models needed for IW campaigns.

JCD&E, Training, and PME

- Services, combatant commands, and JFCOM should expand the exploration of IW contingencies in JCD&E and conduct more IW training exercises.
- Joint, Service, and interagency professional education programs should prepare military and civilian leaders for IW.

3. Increase organizational focus on IW

Even before an IW Master Plan has been approved, the Secretary of Defense should start increasing oversight and attention to IW within DoD, and promoting its importance and urgency in other US agencies. The following steps should be taken:

---

[79] A team that represents the view of the HNG and its security forces.

- The IW Executive Committee should coordinate DoD efforts with the many organizations that contribute to IW (e.g., US agencies, NGOs, allies, international organizations, contractors). It should support the Deputy Secretary of Defense and the Vice Chairman, Joint Chiefs of Staff, in getting the Deputies Committee to create an interagency group to prepare a US Government-wide IW Master Plan, and to develop and document the process for interagency coordination in IW.
- OSD (PA&E) should use its IW Team to support drafting the DoD IW Master Plan, to identify issues for decision and alternative options, and to work with the Defense Modeling and Simulation Office to develop models and simulations for IW campaigns.
- OSD (AT&L) should identify a lead office for IW technologies and logistics that would identify and encourage technological investments in IW capabilities by the Services and the Defense agencies.
- Services and Joint Staff J8 [80] should set up a lead office for IW capabilities to help identify critical Service programs and activities to pursue, to work with combatant commands and Defense agencies on requirements and capabilities for IW campaigns, and to support the DoD process for developing requirements for IW.
- Combatant commands should set up a point of contact (POC) within their commands for IW planning. The POC would take the lead in reviewing the operational plans of the combatant commands for conducting IW campaigns and would identify capability gaps that need to be fixed.

---

[80] Joint Staff J8, Force Structure, Resources, and Assessments Directorate.

This page is intentionally blank.

Appendices

This page is intentionally blank.

Appendix A.
Mapping the Human Terrain

Contents

Illustrations

In Chapter III of this volume, the study team from the Institute for Defense Analyses distinguished two general types of irregular warfare (IW) operational concepts: **Red-centric** and **population-centric**. This appendix explores a population-centric operational concept focused on the attitudes of the population. The focus is on describing desired effects rather than describing *how* those effects would be generated. While not a fully developed operational concept, the team feels it is a useful beginning toward mapping the Human Terrain.

Creating an Attitude Map

At its core, IW is a battle over the population's attitudes.[1] Insurgents need the population for logistical support, as a recruitment base, and most importantly, to preserve their anonymity. The counterinsurgent force needs the population to find the insurgents and support the host-nation government (HNG). This need by Blue is in stark contrast to regular warfare—where the only need Blue normally has of the population is for them to stay out of the way.

However, in IW the population is a "center of gravity" for Blue. Red's stealthy nature is the core of its strength, as it lacks the military power to openly confront Blue. A population that actively cooperates with Blue strikes at the heart of Red's survivability. Absent that help from the population, Blue will find relatively few Red combatants on its own, with most contact initiated by the insurgents. Red will know the key intelligence role of the population and act aggressively to influence them. If Red convinces the population of the justness of its cause, or intimidates it into inaction, Red will have taken a major step toward victory.

That critical intelligence role played by the population, and the linkage of that role to popular attitudes, elevates the importance of shaping the population's

---

[1] According to a 1966 US Army study on Vietnam, "Present US military actions are inconsistent with that fundamental of counterinsurgency doctrine which establishes winning popular allegiance as the ultimate goal." US Army, Office of the Deputy Chief of Staff for Military Operations, A Program for the Pacification and Long-Term Development of South Vietnam (PROVN), (Defense Technical Information Center, Ft. Belvoir, VA, March 1966), p. 53.

attitudes.[2] The first step to shaping popular attitudes is to know what they are.[3] A useful method for this would be to create an attitude map for the population using two questions about Blue (including the host-nation government (HNG)) and Red. Depending on how each individual would answer each question, this map forms a 2x2 matrix (*see* **Figure A–1**) based on two questions:[4] Who is more important to your physical security? Who better fits your social/political/economic preferences?

Question One: Who is more important to your physical security?

Question One relates to a person's risk assessment, both short and long term. Whom does a particular citizen fear? Whom do they view as more powerful in their world? If the insurgents can present themselves as a serious threat to a citizen, then the insurgents win on this question. Blue wins if it convinces the population that the risk from insurgent violence, or any other source of violence (aside from Blue), has been reduced to a reasonable level, low enough that Blue is seen as offering a substantial degree of protection. How people view the progress of the conflict also affects their answers to this question. If Blue is currently winning, but a person thinks Red will eventually win, the risk of supporting Blue

---

[2] After exploring three counterinsurgency case studies (Greece, Philippines, Vietnam) D. Michael Shafer wrote, "More important, however, the case studies indicate the need for new, more discerning analytic tools with which to assess intragovernmental constraints on reform (or action) and government-population and insurgent-population relations." D. Michael Shafer, *Deadly Paradigms: The Failure of U.S. Counterinsurgency Policy*, (Princeton, NJ: Princeton University Press, 1988), p. 281.

[3] When Army Special Forces arrived in the southern Philippines in 2002, they first conducted population surveys. Robert D. Kaplan, *Imperial Grunts: The American Military on the Ground*, (New York: Random House, 2005), p. 166. "The VC [Viet Cong] intelligence system has developed an extremely effective scheme for the classification of native South Vietnamese. It serves as an instrument of increasing and personalizing communist pressure on the individual villager." US Army, *PROVN*, p. 35.

[4] The authors' thinking on this subject benefited greatly from briefings by, and discussions with, Janine Davidson, Mark Smith, and Peter Brooks at SAIC/Hicks & Associates in 2005 and 2006. They were the source of the basic two-question matrix. Their analysis on the "micro-foundations" of insurgency looked at how the decisions of individuals in the population scale up to affect the overall insurgency-counterinsurgency campaign.

could be seen as too great. This first question could be thought of as the "mind" portion of the commonly used phrase "winning the hearts and minds."

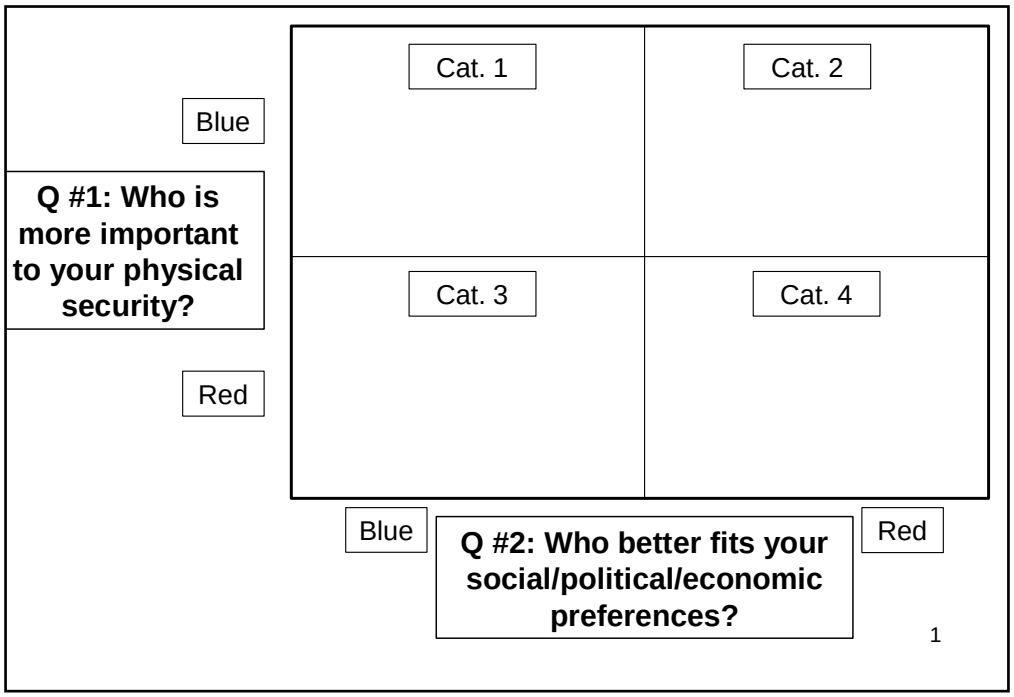


Figure A–1. Mapping Popular Attitudes

Being safe is not as important as feeling safe—the population's *perception* being the metric that most matters. In exploring attitudes, measurement can use actual injury and death statistics, but they should be second in importance to survey data on the population's perceptions, or how the population acts. A population's behavior can reveal much about their threat perceptions.

Question Two: Who better fits your social/political/ economic preferences?

Question Two relates to how citizens match their social, political, and economic preferences with Blue and Red (i.e., their "hearts"). This is a more complex question because those preferences are the product of many inputs, and the relative weight of those inputs will vary from individual to individual. These inputs can be clustered into four types: identity, performance, economic prospects, and ideology. Each type is discussed in detail in the following sections.

- **Identity:** This can include a mix of religion, tribe, ethnicity, family, national origin, sex, or economic class.[5] Elements of the population may dislike their own government because the government is not "legitimate" in their eyes, based on their identity. The same can apply to the insurgents, viewed as righteous defenders of the population, or despised "outsiders."
- **Performance:** A desire for the insurgents to prevail could derive from a history of poor performance by the government. Being in charge means having to deliver everything from security to basic services in a variety of ways. Insurgents often get a pass in this area, at least initially in the insurgency—unless they used to be in charge. They can promise much but deliver little until they win.[6] Poor government performance could also come in the form of abuse and oppression of the population.
- **Economic prospects:** A citizen may wish one side success based on personal financial interests. The other side may be viewed as corrupt, inept in fully exploiting natural resources, poor at creating overall or specific economic opportunity, or lacking concern for the well-being of some or all of the population.
- **Ideology:** Ideology can be a powerful driver of preference, uniting individuals from a diversity of backgrounds.

The answer to Question Two ("Who better fits your social/political/economic preferences?") will be a blending of all the above, with the weighting of each input dependent on the specific person. For example, one person might base all of

---

[5] "…it can be argued that the insurgency's virulence also stems from a successful fusion of nationalist and religious sentiment among the Sunni Arabs of Iraq. This is a critical factor that is missed. We often view religion and nationalism as polar opposites." Ahmed S. Hashim, *Insurgency and Counter-Insurgency in Iraq*, (Ithaca, NY: Cornell University Press, 2006), p. 120.

[6] The 1966 PROVN study had this to say about public expectation: "The VC do not have to deliver until they win. We have to deliver in order to win." US Army, PROVN, p. 2.

his or her answer on ethnicity, while another might base 50 percent on past performance and 50 percent on political ideology.

In sum, there are two important questions to ask of the population: (1) who is more important to your physical security, and (2) who better fits your social/political/economic preferences. The answers to those two questions can then be used to map popular attitudes, using a simplified 2 x 2 matrix (*see* **Figure A–1**). While there is still a great deal of diversity among the people who would fit each category, these categories do contain enough commonality to be a useful guide to Blue actions relative to those people.[7]

Attitude Categories

Each of the four categories seen in represents attitudes and not necessarily geographic areas. While segments of the population with similar attitudes will often be clustered together geographically, that is not what the map explicitly depicts. In general terms, the populations of each category can be described as follows:

- **Category One:** These individuals believe their risk of harm at the hands of the insurgents is reasonably low, and they prefer Blue win.
- **Category Two:** These individuals believe Blue dominates their physical environment, but they prefer a Red victory.
- **Category Three:** These individuals feel to some degree at the mercy of the insurgents, but they want Blue to win.

---

[7] In the later years of US operations in Vietnam, US forces used the Hamlet Evaluation System to chart the progress of pacification. Based on a detailed list of questions for US advisors working in and around a given hamlet, each hamlet was rated *A, B, C, D, E,* or *VC*. *A, B,* and *C* were used to denote relatively secure areas; *D* and *E* were contested; and VC controlled by the Viet Cong. Lewis Sorley, *A Better War: The Unexamined Victories and Final Tragedy of America's Last Years in Vietnam*, (New York: Harcourt, 1999), pp. 70–71.

- **Category Four:** These individuals do not feel Blue physically controls their environment, nor do they want Blue to win.[8]

However, knowing where people fall in the attitude map is of limited utility if one does not know *why*. The term "fence-sitter" is often used when describing apparently passive members of the population. This lack of overt support for either side is sometimes attributed to a lack of character or some cultural fault[9]—and then some single solution is offered to get them off the fence. Such an approach is overly simplistic and ignores the diversity of reasons for that overt passivity:

- The people in Categories 2 and 3 on the surface may act similarly, but the rationales behind their actions are radically different—thus, requiring radically different actions to change those behaviors.
- For those in Category 2, increasing the Blue security effort does nothing to change their minds because that was not the problem in the first place. Merely putting more "illegitimate" US troops on the street only intensifies the dislike from a population that views US troops as outsiders.
- Conversely, improving the infrastructure serving a Category 3 population doesn't help, because Blue's lack of control of that area means the infrastructure is unsafe and so are the people it's designed to serve. To intelligently reshape popular attitudes requires a detailed knowledge of those attitudes and the reasons behind them.

---

[8] An example of a Category Four population in the South American country of Columbia would be in Arauca Province. Robert Kaplan described residents there as loyal for three generations to the insurgents. Kaplan, *Imperial Grunts*, p. 78.

[9] An example of this bias can be seen in the otherwise well-constructed 1966 US Army *PROVN* study: "Because of a reluctance to stand on principles, the Vietnamese are quite vulnerable to manipulation within the framework of an appropriate social reward and punishment system." [p. 43] "…the Vietnamese peasant or poet, petty politician or premier—whatever may be his intellectual yearning—essentially is an undisciplined individual whose only real sense of loyalty or responsibility is to himself and to his family." US Army, *PROVN*, [p. 1-39].

A Guide for Blue Action

By mapping the population into these four categories, it can be triaged to better guide the allocation of Blue security and reconstruction assets. While the homogeneity of attitudes will certainly vary in a given geographic area, some guidelines can be described for Blue for those areas with relatively common attitudes. The guidelines below address both what should and should not be done—an important consideration given that there will never be enough resources to do everything everywhere.

Category One

These individuals have a desire to assist Blue and feel safe enough to do so openly. This results in a tremendous boost to Blue ISR[10], harnessing the single most powerful sensor net in IW, the population.[11] This greatly decreases the Blue security assets needed to control these areas. Insurgents cannot operate consistently in this environment. Reconstruction is still needed for these areas lest the population feel taken for granted, but it can be done so more efficiently as less of each project's funding will be needed for security.

Given the efficiencies for both security and reconstruction, Category One populations should be preserved like the valuable investments they are.[12] Getting a population to Category One status is far more expensive then keeping them there.

---

[10] ISR – intelligence, surveillance, reconnaissance.

[11] "No amount of technical equipment, secret agents, organizational genius or funds can substitute for the intelligence provided by the people." US Army, *PROVN*, p. 5-48. US forces in recent operations in the Philippines viewed medical assistance missions to the population as force protection missions from the intelligence they tended to bring in from the population. Kaplan, *Imperial Grunts*, p. 154.

[12] "US-GVN, as a foremost priority, should exploit those areas in which the security environment permits the most effective application of both short and long-term programs." US Army, PROVN, p. 4–76. [GVN, Government of Vietnam]

Category Two

These individuals are aware of Blue's physical control of their area, but do not willingly assist Blue, though to some degree they can be forced to (e.g., denial of services, reduced economic assistance, detention, confiscation of assets). They will also provide some modest level of covert support to Red. Absent the help from the population, and the covert assistance it gives Red, Blue will need to assign a heavy security presence to these areas to maintain physical control.

However, the covert support of the population will likely allow some enduring Red presence in the area. If a strong security presence is maintained, and substantial resources are devoted to improving the quality of life, the population's preference for Red (Question Two) may be changeable over time, depending on why they prefer Red. If the population's dislike of the host government is based largely on the government's failure to provide services, then improving those services could change such a population to a Category One over time.[13] Nevertheless, if that dislike relates more to *identity*, then it will not—more electricity doesn't make an invader more accepted.[14] In some cases, the preference of the population for Red will only be alterable in the long term.

Category Three

These individuals want to help Blue but are too fearful of Red to do so openly. To the degree they can covertly, they will offer modest assistance to Blue. By virtue of its access to this population, Red will be able to force some cooperation from them. For both this category and Category Four, Red doesn't have to "own" this area twenty-four hours a day, but merely have the ability to

---

[13] "Information on the enemy which has been volunteered to GVN [Government of Vietnam] by its citizens is by far the most valuable indicator of RC [Rural Construction] progress." US Army, PROVN), p. 71.

[14] In reference to US IW operations in the Philippines in the early 1900s: "While in some parts of the archipelago the US military was able to exploit ethnic divisions, in other parts it was foolish to try. In some parts a purely military strategy was called for; in others a civil affairs and humanitarian component was an absolute necessity." Kaplan, *Imperial Grunts*, p. 139.

come and go at will. Twenty-three hours a day of strong Blue security presence can be cancelled out by one hour a day of Red roaming the neighborhood.[15]

Infrastructure investments in these areas will be far less effective, as Blue does not control the area enough to protect or control the infrastructure. The goodwill this generates with members of the population is minimal as they have greater concerns.[16] A new school is of little value in a neighborhood too dangerous for children to go to school.[17] *Category Three is the most unstable attitude category.* If Blue does not act to take back physical control of this area (i.e., move it to Category One), a sense of abandonment may set in and the population could lose their affinity for Blue. A "Join the Winning Team" dynamic may set in, pushing the population towards Red (i.e., changing the population's answer to Question Two). At some point, the population will likely attribute its abandonment to either Blue's inability or apathy, neither of which would bode well for Blue. Even if the population does not lose its affinity for Blue, the pervasive risk from Red will likely reduce the covert support Blue receives from the population over time.

---

[15] In September, 2004, US forces swept through Tall Afar in northwestern Iraq, clearing out a substantial number of insurgents. But US forces largely left at the end of the operation, leaving behind only a small contingent to patrol a large area around the city. Within a few months, the insurgents returned and punished those who had worked with American forces. "They quickly reasserted control over the city through intimidation—kidnappings and beheadings—and a highly effective campaign aimed at persuading Tall Afar's majority Sunni Turkmen that the US operation was directed at them." US troops returned in force a year later to re-sweep the city. Jonathan Finer, "5,000 U.S. and Iraqi Troops Sweep Into City of Tall Afar," *Washington Post*, 3 September 2005, p. A25.

[16] The 1966 US Army *PROVN* study called for a similar redirection of reconstruction assets away from insecure areas. US Army, *PROVN*, pp. 61–62.

[17] "The people we hope to bind together with their government at the lowest levels must be afforded a secured physical environment, or all else is meaningless, and no program will succeed." [p. 69] "…the US should not support the continuance of GVN schools in VC-dominated areas." [p. 98] US Army, PROVN.

Category Four

These individuals both want to help Red and feel free to do so. This area would be a safe haven for Red, where there is less need for them to operate covertly.[18] This portion of the population could be a candidate for isolation, a useful tool for conserving security and reconstruction resources for other higher payoff investments. Fewer boots on the ground are needed if there is no attempt to control every street but rather just the roads out of town. The money spent on a power plant in a secure area will generate far more goodwill then the power plant that is destroyed shortly after completion in an unsecured area. To take back such an area would require a heavy allocation of Blue security assets, followed by a heavy commitment of reconstruction resources if the goal was to change attitudes (i.e., move a Category Four population to Category One).[19]

As with Category Two populations, some attitudes may not be changeable in the short term. In those cases, other segments of the population are better choices for resource allocation. If the isolation option is chosen, the area in question should not be totally ignored. Instead, the focus should be on standoff strike and short-duration raids, targeted on identifiable Red concentrations and Red capabilities for striking outside of that zone.

A key variable in the Blue course of action is the choice of *maintaining* versus *changing attitudes*. In the case of Category One, Blue only wants to maintain, but with the other three categories the option is to pursue either. Reconstruction efforts should be focused on those areas where the physical environment is controlled by Blue, thus affording protection for and control of the newly built infrastructure (Categories One and Two).[20]

---

[18] A historical example would be Fallujah from April to November 2004.

[19] The 1966 US Army PROVN study argued for a dual track approach to areas like this. It stated that efforts at taking back physical control should be paired with development efforts—or the military efforts will largely be wasted. US Army, PROVN, p. E23.

[20] The *PROVN* study stated that priority should be given to changing contested areas over to government control before VC-controlled areas are made contested. US Army, PROVN, p. E23.

The answer people give to Question One ("Who is more important to your physical security?") is often more based on the present while the answer to Question Two has roots further back in history. Thus, changing a Category Three population to a Category One can often be done faster than doing the same to a Category Two population—and offering a more rapid payoff. Blue's desire to change the attitudes of populations in Categories Two and Four should be guided by careful analysis as to the malleability of those attitudes. A misdiagnosis in this area can waste tremendous resources. Spending $75 million to construct a city-wide sewer system in a city that hates Blue for being infidels buys little, if any, goodwill.

An overall measure of how difficult an IW campaign is going to be could be derived from assessing the percentage of population falling into each category. The greater the percentage of the population falling into Category Two or Four, and to a lesser extent Category Three, the more difficult the campaign will be. While other factors will certainly affect the overall difficulty, the attitude of the population is the central factor of campaign difficulty. Extensive negative attitudes among the population towards the government would also be a key indicator as to the strength of that government. An unpopular government requires more force to stay in power, and there are domestic and international political constraints on how much support the US Government can give to such a regime.

The previous attitude map (*see* page A–5) is a generic design that could be used at the national, provincial, or even the city or village level. Just as nation-wide operations would be aided by greater visibility of a population's attitudes, so would operations on a smaller scale. The intelligence collection and processing issues will vary by scale, but the utility as a guide for operations would exist at each level.

Category Two Explored

The apparent simplicity of the attitude map can be deceptive. As previously mentioned, the "why" behind the answers to these two questions can be quite complex. As an example, the following four figures drill down into Category Two—a population that believes Blue dominates their physical security, but views Red as better matching its social/political/economic interests.

- **Figure A–2:** Explores why individuals would answer "Blue" to Question One.
- **Figure A–3:** Explores why individuals would answer "Red" to Question Two.
- **Figure A–4:** Discusses how Blue can maintain an individual's answer to Question One.
- **Figure A–5:** Discusses how Blue could change an individual's answer to Question Two.

The level of detail in these slides just begins to describe the complexity of the challenge in this area.

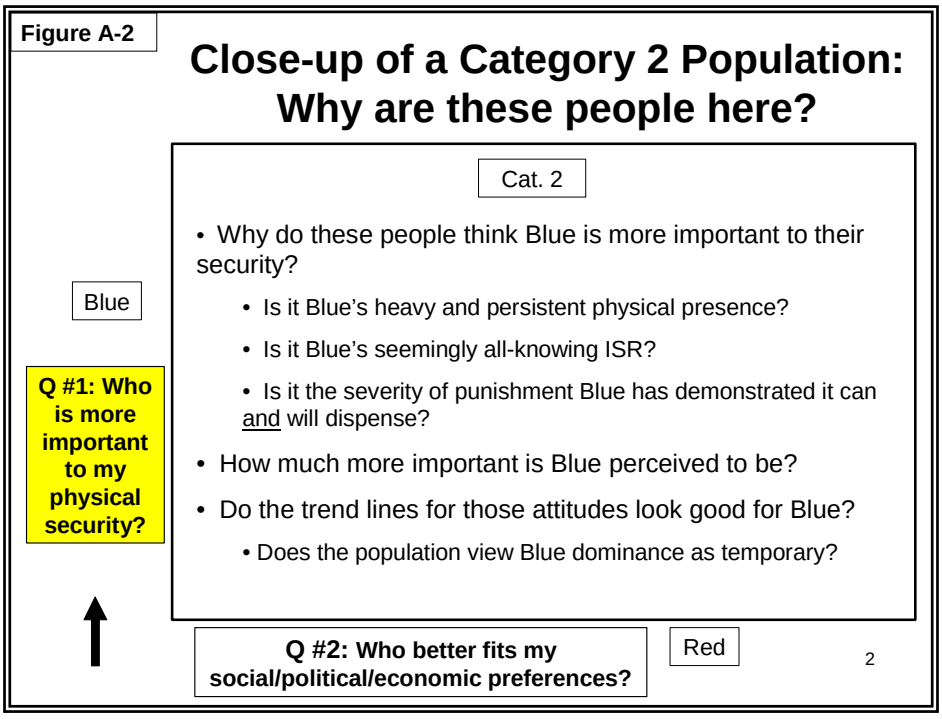


Figure A–2. Close-up of a Category 2 Population: Why are these people here?

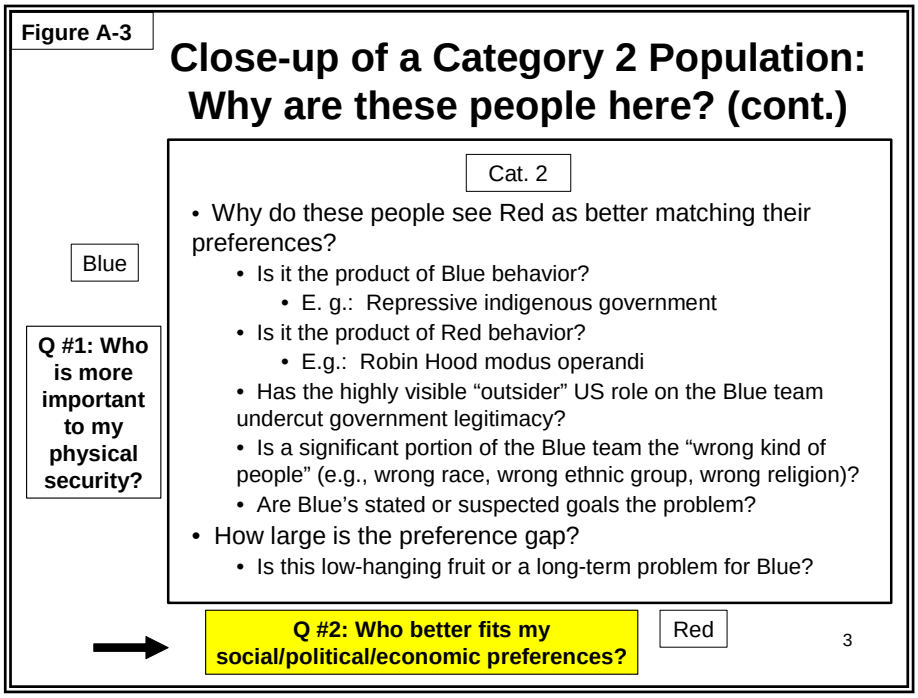


Figure A–3. Close-up of a Category 2 Population: Why are these people here? (cont.)

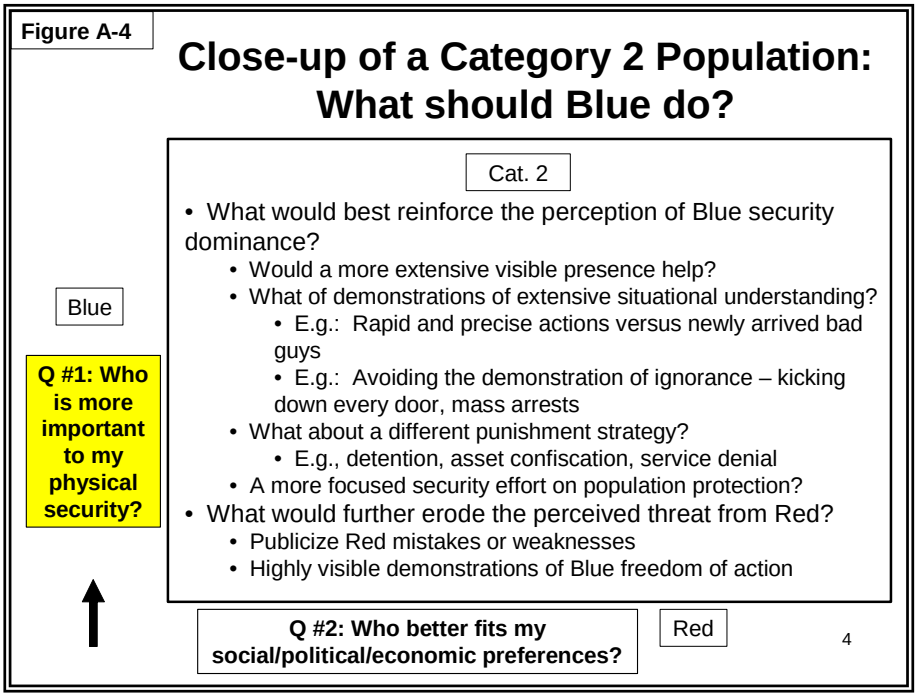


Figure A–4. Close-up of a Category 2 Population: What should Blue do?

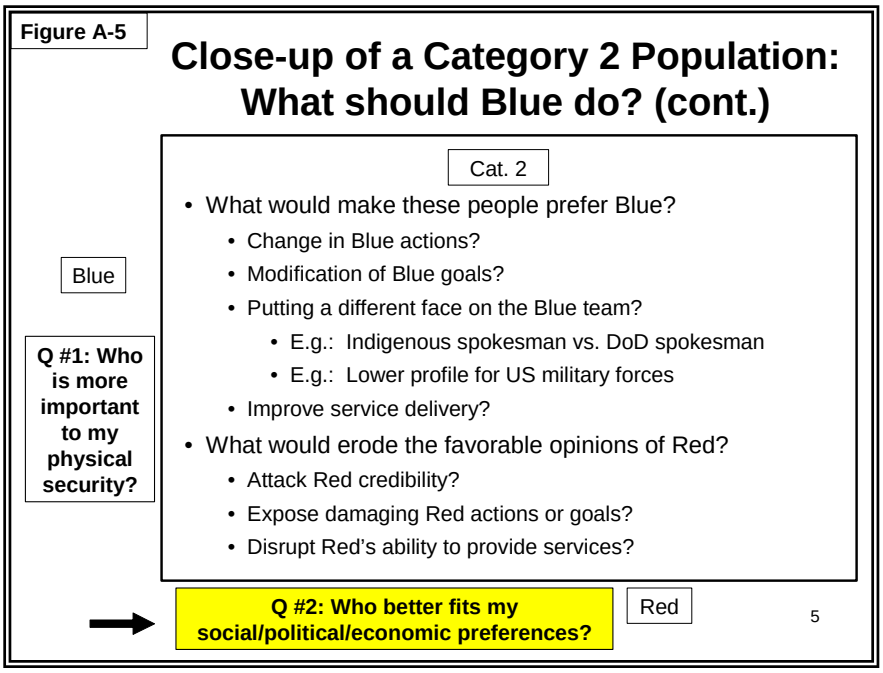


Figure A–5. Close-up of a Category 2 Population: What should Blue do? (cont.)

Shaping the attitudes of the population in Blue's favor is crucial for success in IW. Unlike regular warfare, the assistance of the population is key to Blue's military success over the insurgents. This elevates the importance of understanding popular attitudes and shaping them through influence operations.[21] Dealings with the population must reflect its complexity and must also acknowledge that some aspects of popular attitudes can be "un-winable" for Blue. For more detail on related capabilities, *see* Volume II's Chapter IV, Section A, on the Foundational Capabilities.

---

[21] "The problems of the Sunnis working legitimately within the political arena have been exacerbated by their wishful thinking on a key issue. Many, including almost all of those with whom I talked, deny they are part of a minority and endorse a goal of returning to dominance." Ahmed S. Hashim, *Insurgency and Counter-Insurgency in Iraq*, p. 74. "In the Balkans, Afghanistan, and Iraq, it also proved difficult to measure the effectiveness of the information campaign and to make definitive judgments because there were no agreed measures of performance or effectiveness to support planning and assessment." "History suggests that about five years is the minimum time needed to cultivate an enduring transition to democracy." Michael Baranick, "Learning from History," *Transforming for Stabilization and Reconstruction Operations*, Hans Binnendijk and Stuart E. Johnson, eds., (Washington: National Defense University Press, 2004), p. 13.

Appendix B.
IW Missions and Supporting Capabilities

This page is intentionally blank.

Contents

Illustrations

B.1 Introduction

This appendix provides an expanded version of Chapter IV, with a listing of all the associated capabilities, and an additional chart. Volume II of this report further expands this appendix with extensive descriptions of each capability.

B.2 Mission-Capability Process

The team did not use the Joint Staff's Joint Capabilities Integration and Development System (JCIDS) to generate either the IW missions or their supporting capabilities. The JCIDS process uses a wide range of inputs, some of which did not exist relative to IW at the time this study was conducted. Given the ill-defined and complex nature of IW, a custom-built approach better suited the needs of the study.[1] (*See* Appendix C, which describes JCIDS as well as the differences between a JCIDS capability-based assessment and the process used in this study.)

In looking at Iraq as a challenging example of an IW campaign, the study team asked what were the missions that supported the overall campaign objective of *preserving and strengthening a HNG* to the point it can stand on its own. The study team then generated a list of twenty-three missions to support that overall objective. For this report, the term *mission* is defined as "A task that supports the overall IW campaign." The team then generated the capabilities needed to support each of those missions.[2] The result was a list of ninety-two capabilities, many of

---

[1] An August 2006 study by the Joint Warfighting Center at the US Joint Forces Command (JFCOM) found the term "irregular warfare" had no widely accepted definition and often was used as a general term to denote a range of other more narrowly defined terms (e.g., "Foreign Internal Defense," "Unconventional Warfare"). With this usage as evidence, the JFCOM study concluded that the term "irregular warfare" was too ill defined for doctrine development. US Department of Defense, Joint Forces Command, Joint Warfighting Center, *Irregular Warfare Special Study*, 4 August 2006.

[2] The previously mentioned Joint Warfighting Center–JFCOM study also took those defined terms that relate to IW and compiled a list of related UJTL (Universal Joint Task List) tasks. The team compared that list with the capabilities generated in this study. While the language and scope of the UJTL often differed, the team found no UJTL tasks that needed to be added to

(Continued)

which support more than one mission. However, not every capability was included, only those that the study team saw as new to IW or as being applied differently within the context of IW.[3] For this report, the term *capability* is defined as "The ability to take certain actions, or generate specific effects, in support of a mission." In summary, the report uses a three-layer hierarchy in which missions support the overall IW campaign, and missions in turn are supported by capabilities (*see* **Figure B–1** on the next page).

Many different sources influenced the team's generation of missions and capabilities for this report. Two that stand out are (1) the US State Department's *Post-Conflict Reconstruction Essential Tasks* (April 2005), and (2) a February 2003 Army War College study, *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario.*[4] These two documents provided a starting point for defining the range of Blue team missions and the capabilities to support those missions. This study also drew some capabilities from an earlier 2002 study of capabilities needed for urban operations.[5] Also playing a role were many official and unofficial unclassified reports from past and current IW operations, an open-source literature review, and discussions with various military and non-military individuals, some with experience in Iraq.

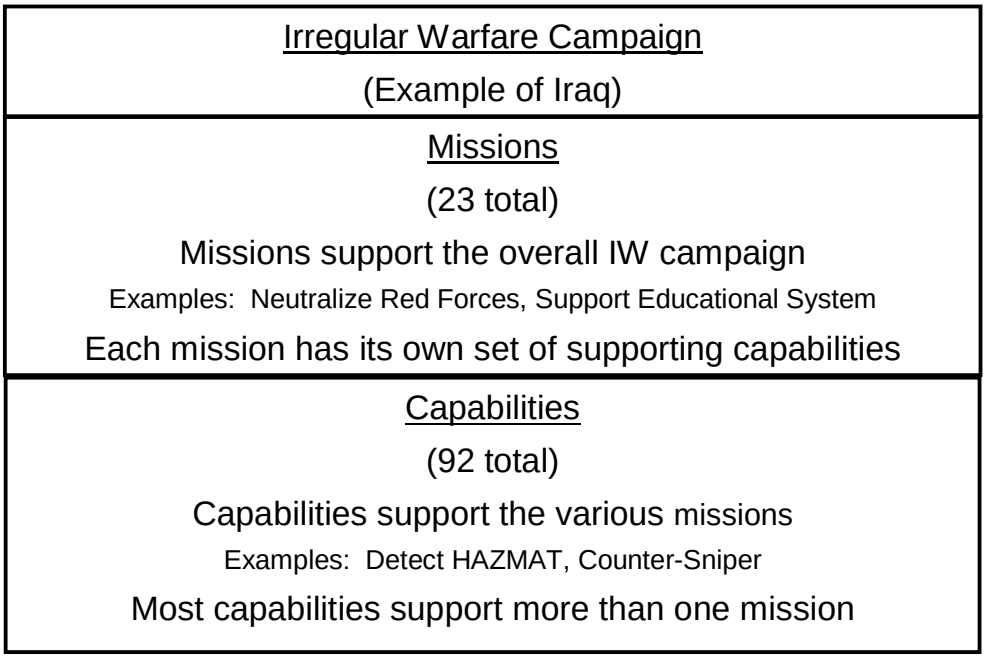
---

this report's list of capabilities. Joint Warfighting Center, *Irregular Warfare Special Study*, 4 August 2006.

3 For example, we do not list a general capability for inter-theater logistical support to military forces, but we do list specific capabilities for supplying forces in isolated urban locations and planning for logistics in a long-duration IW campaign.

4 US State Department, Office of the Coordinator for Reconstruction and Stabilization, *Post-Conflict Reconstruction Essential Task*s (April 2005). Conrad C. Crane and W. Andrew Terrill, *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario*, (Carlisle, PA: Strategic Studies Institute, US Army War College, February 2003).

5 Hurley, William J. et al., *Department of Defense Roadmap for Improving Capabilities for Joint Urban Operations*, IDA Paper P-3643, two volumes, Institute for Defense Analyses, Alexandria, Virginia, March 2002, For Official Use Only. Contact the Joint Urban Operations Office at US Joint Forces Command for an update on these programs: http://www.jfcom.mil/about/fact_juo.htm.



HAZMAT – hazardous material

Figure B–1. Three-Layer Hierarchy

B.2.1 Missions

The twenty-three missions depicted in **Figure B–2** (next page) encompass the full range of activities in IW, not just those involving DoD. That list of missions, performed by the HNG and all other members of the Blue force, goes well beyond those performed in regular warfare. (These other members of Blue are defined as DoD, other US Government agencies, Coalition partners, international organizations, NGOs, and contractors.)

While drawing substantially from the Iraq conflict, the team intended this generic mission map to apply across a range of IW scenarios. The missions were grouped based on their likely participants. The Combat and Support Missions group represents missions with a major role for military members of the Blue force, while the other four are more of a civilian nature.

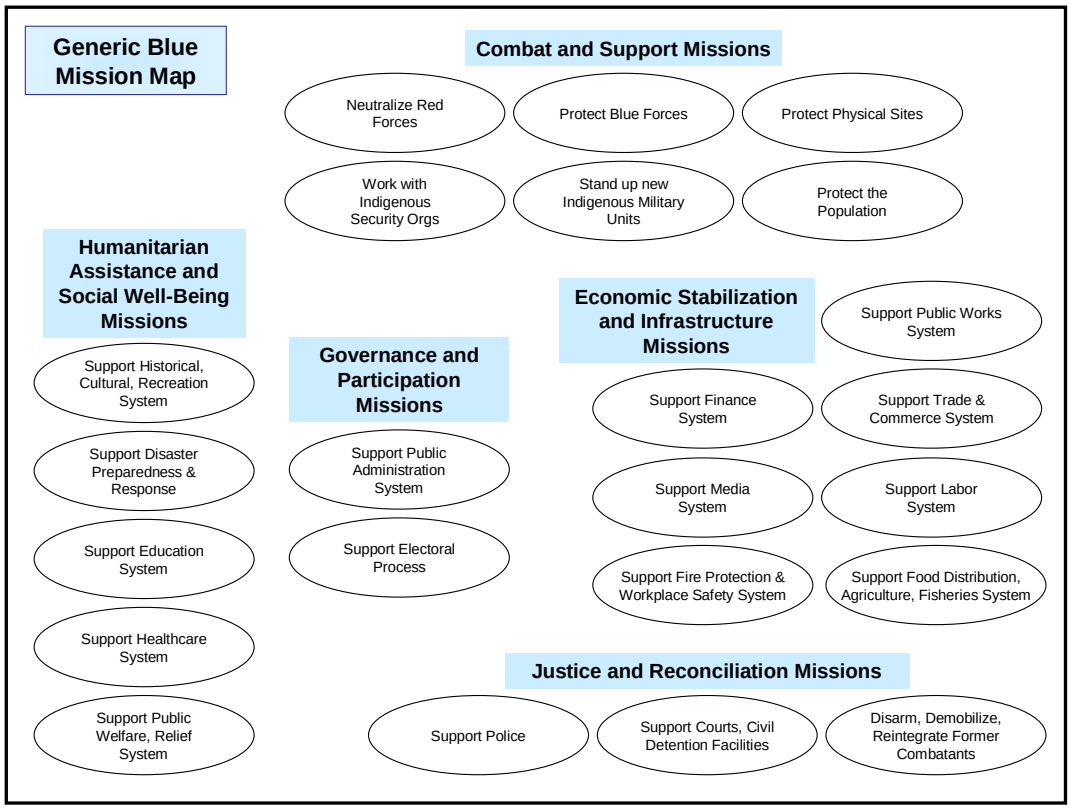


Figure B–2. Missions That Support an IW Campaign

The pairing of Blue team members with the various missions will vary by scenario. The chart shown in **Figure IV-2** in the main body of Volume I illustrates the twenty-three missions grouped into five groups. The first group, Combat and Support, is the military-centric portion of IW while the other four relate to various civil systems.

B.2.2 Capabilities

A total of ninety-two capabilities were generated by the study team to support the various missions, many of the capabilities supporting more than one mission. All the capabilities have letter and number designations. While the number designations are only for differentiation, the letter designations correspond to a construct introduced in Joint Publications 3-06, *Doctrine for Joint Urban Opera-*

tions.[6] Labeling the capabilities by Understand, Shape, or Engage aided the team in analyzing supply and demand patterns:

- **Understand:** A capability designed to enhance knowledge about the conflict participants or environment.
- **Shape:** A capability designed to generally alter the conflict participants or environment in Blue's favor.
- **Engage:** A capability for directly interacting with Red or the civilian population, kinetic or otherwise.

Examples:

U8 – Understand Civilian Movement Patterns

S18 – Counter IEDs

E2 – Mediate disagreements between groups, before, during, and after they turn violent

When a capability addressed more than one element of U–S–E, multiple letters were used (e.g., US42).

In any particular IW scenario, DoD will be well positioned to provide certain capabilities for the Blue force IW efforts, but the scale and scope of that contribution will be highly situation dependent. This report does not designate specific capabilities to DoD but the following criteria can be used for evaluating which capabilities DoD should cultivate internally:

- **Integral to DoD combat operations:** Some capabilities are integral to US IW combat operations and that degree of integration makes them desirable DoD capabilities. An example of this would be command and control in an urban environment.
- **Essential for cooperation with others:** Some capabilities are needed for DoD to effectively work with other participants. Because it is highly

---

[6] Joint Staff, Joint Publication 3-06, *Doctrine for Joint Urban Operations*, 16 September 2002, pp. II-8 to II-13.

unlikely DoD would be involved in an IW campaign devoid of other Blue force participants, this ability to work with others is essential. The ability to cooperate requires that coordination extend to the planning process and exercises. An example of this would be communication nets that can reach across organizational boundaries.

- **Support to critical civil systems:** Some civil systems are especially sensitive to even brief operating disruptions. As sometimes the first responder on the scene, DoD will need the capability to protect and operate some civil systems on an emergency basis for a limited time. An example of this could be an urban water system whose dysfunction over just a few days could have widespread health ramifications for the population.

B.2.3 Capability Assessment

Having identified the demand side of IW (the ninety-two capabilities), the team next looked at the supply side, assessing how well each demand was being satisfied in Iraq, looking for those in most need of substantial improvement. As capabilities are situation specific, each capability's assessment was relative to its performance in Iraq at the time of the study effort. A broad context was applied as to the source of the capabilities, not just from DoD but the US Government—in short, the team assessed how well the US Government was demonstrating a given capability in Iraq today. The team's assessments were based on an open-source literature review and discussions with various subject matter experts, including US military personnel with experience in Iraq. The team identified thirty-four capabilities (of the ninety-two) as needing substantial improvement. The following label was used to identify those capabilities:

A capability in need of substantial improvement

B.3 Capability Patterns: Supply and Demand

In the generation of capabilities for each mission it became clear to the study team that a subset of the capabilities are applicable to all of the missions. These capabilities were then put into a category we called Foundational Capabilities. The capabilities not in this category support one or more missions, but they do not have the same broad utility across all the missions. The combination of the capabilities specific to a particular mission—and the Foundational Capabilities—are what support that mission (*see* **Figure B–3** below).

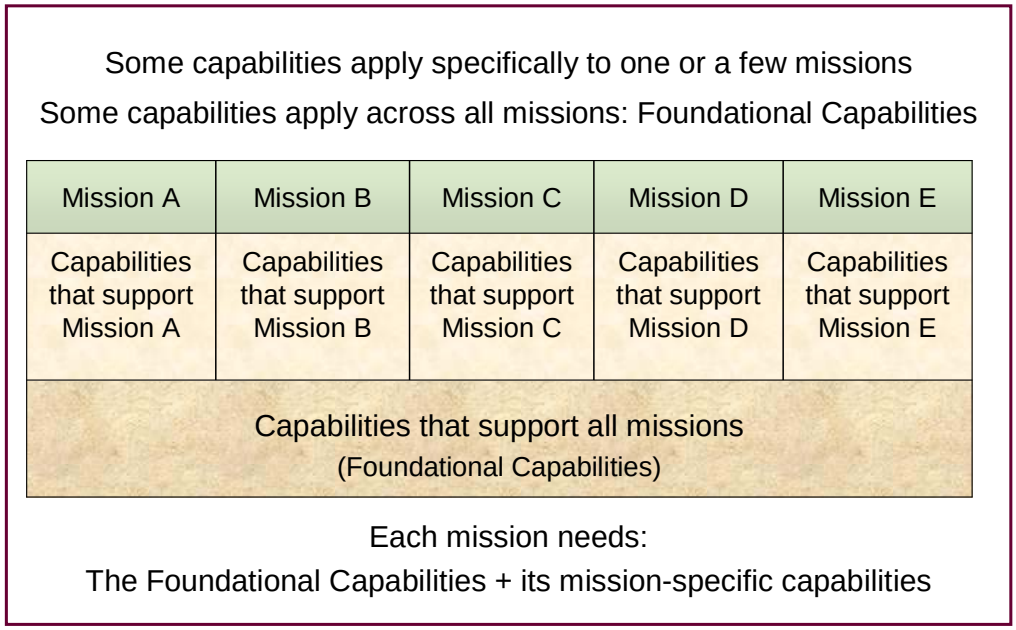


Figure B–3. Capability Allocation to the Missions

B.3.1 Capabilities Supporting All Missions

Thirty-four of the ninety-two capabilities fit the category of Foundational Capabilities.[7] As the study team surveyed the list of Foundational Capabilities sev-

---

[7] While there are thirty-four Foundational Capabilities and thirty-four capabilities in need of substantial improvement from the overall list of ninety-two, these are not one and the same. While both sets coincidently involve the same number of capabilities, which could be confusing, they

(Continued)

eral demand patterns became evident. These patterns are overlapping in nature, so some capabilities relate to more than one pattern.[8]

- **Understanding the complex IW environment.** Two-thirds of the Foundational Capabilities (twenty-two of thirty-four) relate to understanding all the dimensions of the environment and its actors. The complexity of IW require a greater amount of knowledge about a greater number of topics than is needed for RW.
- **Influencing through information.**[9] Just over one-third of the capabilities (fourteen of thirty-four) relate to influencing various audiences through information. The increased importance of the attitude space in IW, especially the population's attitudes, drives this need. (U1–U7, U9, U14–U15, U17, U22, S1, E1)
- **Blue force coordination**. About one-quarter of the capabilities (nine of thirty-four) relate to Blue force coordination. The number of Blue force members tends to be high in IW and they also tend to come from a greater diversity of backgrounds. These factors complicate coordination, which is essential because of the more diverse problem set. [10] (U20–U22, S1, S4–S6, S21, S40)

---

are different sets. The Foundational Capabilities are those that apply to all missions (*a metric of demand*), while those needing substantial improvement are those that are not currently well supplied in Iraq (*a metric of supply*). Any given capability can belong to one, both, or neither of these sets.

8 While the U–S–E labels do play a role in these patterns, the patterns are not limited to this scheme. For example, the third pattern ("Blue force coordination") includes both capabilities for understanding members of the Blue force and shaping them.

9 Terms like *Strategic Communications*, *Psychological Operations*, *Public Affairs*, and *Information Operations* all address portions of influencing via information, but no one term covers the total activity space. For this portion of the report, we use the term *Influence Operations*.

10 "Again, it is invaluable, if not critical, for each party to know what the others are planning on doing and to identify any issues that need to be resolved before execution." Michele Flournoy, "Interagency Strategy and Planning for Post-Conflict Reconstruction," Robert C. Orr, ed., in *Winning the Peace*, (Washington, DC, The CSIS Press, 2004), p. 111.

- **Dealing with the population.** About half of the capabilities (eighteen of thirty-four) relate to dealing with the population. They play a unique role as both a key objective for Blue and a key partner. (U1–U9, U15, U27, U39, S2, S21, E1–E2, E5, E14)

B.3.1.1 Foundational Capabilities List

[U1] Discern wedge issues that could set the population against the insurgents

[U2] Discern divergences between population perceptions and reality and how to affect those perceptions

A capability in need of substantial improvement

A key problem with US efforts to reconcile the various sectarian groups in Iraq relates to demographic misperceptions. The US political tract effort in Iraq, as described by in *National Strategy for Victory in Iraq*, lays out a democratic structure where the rights and interests of the majority and various minorities are balanced and protected.[11] Unfortunately, such a democratic structure is undermined by a lack of agreement between the groups on even who is in the minority. For example, it is a widespread belief within the Sunni community that they are in fact the majority.[12]

[U3] Discern what information delivery vehicles work best for each target audience and message

A capability in need of substantial improvement

---

[11] National Security Council, *National Strategy for Victory in Iraq*, November 2005, pp. 14–18.

[12] "The problems of the Sunnis working legitimately within the political arena have been exacerbated by their wishful thinking on a key issue. Many, including almost all of those with whom I talked, deny they are part of a minority and endorse a goal of returning to dominance." Ahmed S. Hashim, *Insurgency and Counter-Insurgency in Iraq*, (Ithaca, NY: Cornell University Press, 2006), p. 74.

Understanding the communications and trust patterns in non-Western societies has proved a major challenge in Iraq. This has been further compounded by the recent embrace of modern communications technologies within those societies (e.g., cell phones, email).[13]

[U4] Monitor the reactions to the US influence efforts, and rapidly adjust as needed (BDA)

A capability in need of substantial improvement

Reading reactions to Influence Operations has proved very difficult.

[U5] Monitor and evaluate insurgent information efforts

A capability in need of substantial improvement

While tracking the methods of communication used by Red has seen some success, the greater problem is measuring their effects. "Mirror imaging" is also a problem as the US mindset tends to discount the power of fear.[14]

[U6] Map and monitor likely fault lines of conflict between population groups

---

[13] According to several polls, the US-sponsored al Hurra satellite TV network, which began broadcasting in February 2004, has not been accepted as a worthwhile information source by Arab audiences. One poll found only 6 percent of Iraqis had watched al Hurra in the preceding week. Another poll in Cairo found only 8 percent of al Hurra's viewers thought that the al Hurra network was trustworthy, as compared to 67 percent for CNN and 86 percent for al-Jazeera. Anne Marie Baylouny, "Alhurra, the Free One: Assessing US Satellite Television in the Middle East," *Strategic Insights*, Vol. IV, Is. 11, November 2005, accessed 16 January 2007 at http://www.ccc.nps.navy.mil/si/2005/Nov/baylounyNov05.asp

[14] A National Security Council strategy document for Iraq (November 2005) stated the insurgents in Iraq had not mounted a successful campaign to capture the hearts and minds of the population. This misses two points: (1) that simply being Sunni is enough in many parts of Iraq, and (2) for a group willing to be brutal, fear is enough. Both of these factors, while not fitting the mold of how the United States wins hearts and minds, works well in Iraq. National Security Council, *National Strategy for Victory in Iraq*, November 2005, p. 10.

[U7] Map key individuals within the various groups that might be involved in conflict and influence options *vis-à-vis* those individuals

[U8] Understand civilian movement patterns

[U9] Understand the population's relationship with the government

[U10] Map the general entry patterns of foreign insurgents and their transnational movements

[U11] Map the foreign and domestic financial support network of the insurgents

[U12] Map insurgent force size and capabilities

A capability in need of substantial improvement

Even defining who is an insurgent, as opposed to an insurgent supporter in the population, has proven difficult in Iraq.[15] As many criminal acts look similar to insurgent acts, distinguishing by behavior has also been difficult. The demise of the insurgency has been prematurely pronounced on several occasions by senior US leaders.[16]

[U13] Map insurgent combat operations, movement patterns, and logistics

A capability in need of substantial improvement

---

[15] In August 2003, the commander of US forces in Iraq, Lt. Gen. Ricardo Sanchez, stated more troops would not help as intelligence was the key shortfall. Steven R. Hurst, "U.S. Commander: Force Size Is Adequate for Iraq," *Associated Press*, 28 August 2003, accessed 29 August 2003 at www.washingtonpost.com.

[16] Deputy Secretary of Defense Paul Wolfowitz in July 2003, "The direction is pretty clear. It is toward a more secure Iraq." Vice President Cheney in June 2005: "We're making major progress. Iraq is in the last throes, if you will, of the insurgency." Ahmed S. Hashim, *Insurgency and Counter-Insurgency in Iraq*, (Ithaca, NY: Cornell University Press, 2006), pp. 57–59.

The greatest weaknesses in Iraq in this area are (1) the sharing of intelligence on Red across unit, Service, agency, and allied boundaries, and (2) the attribution of actions to specific actors (which Red group, or Red versus criminals, or Red versus rogue HNG police and/or military).[17]

[U14] Map insurgent command structure, leadership, motivations, and goals

[U15] Discern the level and nature of insurgent-civilian interaction

A capability in need of substantial improvement

The understanding of the impact insurgent operations have on population behavior and attitudes has been a central gap in US Government capability in Iraq. The rough category of "fence-sitter" is often used to describe blocks of the population whose motivations vary widely and are poorly understood.[18]

---

[17] Only 40 percent of Iraq's pre-war weapons inventory had been destroyed or secured by April 2004. Steve Bowman, *Iraq: U.S. Military Operations*, Congressional Research Service, 18 May 2005, p. 7.

[18] Major General Peter Chiarelli, who has served in Iraq, co-authored an article on the requirements for "full-spectrum operations." He broke out the Iraqi population into three groups: *anti-Iraqi forces*, *supporters of Blue*, and *fence-sitters*. The first category covered insurgents and terrorists, the second active supporters of Blue, and the third all those that didn't actively support either Red and Blue. This breakdown misses some key elements of the population. First, it doesn't account for those who covertly support either Blue or Red. The environment in IW often results in civilians who would prefer one side prevail, but who are living under the control of the other side. Second, it doesn't break out the fence-sitters by motivation—a critical distinction that sharply changes how they should be handled by Blue. A portion of the population that appears neutral could be supporters of Red, or supporters of Blue, depending on whom they fear more. In sum, the article's break-down of the population lacks the granularity used in this study. (*See* Appendix A for further detail on popular attitudes.) Major General Peter W. Chiarelli, Major Patrick R. Michaelis, "Winning the Peace: The Requirements for Full-Spectrum Operations," *Military Review*, July-August 2005, pp. 1–14.

[U17] Map the insurgent community for internal fault lines and perceptions

[U20] Understand the capabilities of foreign members of Blue and the roles they wish to play

[U21] Understand the host government's plan for dealing with the insurgency

[U22] Map the powerful individuals and departments in the host government and their interests and motivations

[U27] Discriminate the insurgents from the civilian population

A capability in need of substantial improvement

To US forces, the mass of the Iraq population is opaque—individual identities are usually not known and rarely verifiable. There is greater visibility for those Iraqis who work for the Coalition, but that is a small portion of the overall population.

[U35] Map the physical terrain

[U39] Precisely discern an individual's identity

A capability in need of substantial improvement

The current efforts in Iraq to use biometrics to identify individuals fall well short of the need in both scale and coordination across organizational boundaries.[19]

---

[19] A report on Abu Ghraib found serious shortfalls with the ability of US detention facilities to track the identities of their detainees. James R. Schlesinger, Chairman, *Final Report of the Independent Panel to Review DoD Detention Operations*, August 2004, pp. 60–61. One journalist who spent about a year in Iraq was told by residents in one village that US forces had arrested all the men in an effort to find one man. The former Ba'ath Party official was known to the US forces by name only, so they had arrested all eighty-three men they found. Aaron Glantz, *How American Lost Iraq*, (New York: Penguin, 2005), pp. 137–142.

[S1] Coordinate "the message" with tactical and operational actions

A capability in need of substantial improvement

At least in the eyes of the Iraqis, many examples exist of "the message" diverging from tactical actions.

[S2] Provide security to vulnerable groups

A capability in need of substantial improvement

Too many vulnerable groups have no consistent protection. The recent violence-driven ethnic homogenization of Baghdad is but one recent example. Kirkuk's Arabs are another example, though a less severe one.

[S3] Include in planning issues important for transition

A capability in need of substantial improvement

The expansive list of enduring transition problems in Iraq demonstrates that even a superpower cannot perform ad hoc nation building.[20]

[S4] Coordinate ongoing operations with non-DoD as needed

[S5] Standardize rules and procedures for supporting civilian personnel in a combat zone who work for US Government agencies and supporting organizations

[S6] Include non-DoD organizations and personnel in DoD planning processes and exercises

A capability in need of substantial improvement

---

[20] The head of the Office of Reconstruction and Humanitarian Assistance (ORHA), Jay Garner, hadn't even heard of the State Department's Future of Iraq Project, nor seen its 2,500 pages of reports until two months before he arrived in Iraq (Feb. 21st and April 21st respectively). Rajiv Chandrasekaran, *Imperial Life in the Emerald City*, (New York: Knopf, 2006), pp. 36–37.

The widely reported planning stovepipes that led up to Operation Iraqi Freedom have not improved much.[21]

[S21] Standardize the contract generation process (commercial contractors, local workers and companies)

[S40] Communicate and work with the host nation government

[E1] Form a cogent message and deliver it

A capability in need of substantial improvement

This critical capability has been given ad hoc treatment, often by personnel with little expertise with Influence Operations, and who were hampered by a crude message delivery that doesn't account for the local information environment.[22]

[E2] Mediate disagreements between groups, before, during and after they turn violent

[E5] Anonymous tip tools to allow the population to safely pass information to members of the Blue team

A capability in need of substantial improvement

---

[21] The July 2006 report from the Special Inspector General for Iraq Reconstruction found the overall level of coordination between those involved in transitioning to the Iraqis, and specifically mentioned the Provincial Reconstruction Teams as facing "serious challenges" because of coordination shortfalls. Special Inspector General for Iraq Reconstruction, *July 2006 Quarterly and Semiannual Report*, pp. 5–6.

[22] According to several polls, the US-sponsored al Hurra satellite TV network, which began broadcasting in February 2004, has not been accepted as a worthwhile information source by Arab audiences. One poll found only 6 percent of Iraqis had watched Al Hurra in the preceding week. Another poll in Cairo found only 8 percent of Al Hurra's viewers thought it trustworthy, as compared to 67 percent for CNN and 86 percent for al-Jazeera. Anne Marie Baylouny, "Alhurra, the Free One: Assessing U.S. Satellite Television in the Middle East," *Strategic Insights*, Vol. IV, Is. 11, November 2005, accessed 16 January 2007, at http://www.ccc.nps.navy.mil/si/2005/Nov/baylouny Nov05.asp.

Language barriers, limited contact with US Government personnel, the poor state of the Iraqi communications infrastructure, and a lack of appreciation as to the need for protecting the identity of civilian information sources have all combined to limit the ability to collect accurate information from the population covertly.

[E14] Process to find, vet, hire, train and pay local experts and other workers

B.3.1.2 Assessment of Foundational Capabilities

Summary: Fifteen of thirty-four in need of substantial improvement.

The Foundational Capabilities illustrate serious weaknesses in the US Government's ability to conduct IW campaigns. These capabilities support most or all of the specific IW missions identified in this study; so if almost half (fifteen of thirty-four) are in need of substantial improvement, that indicates *key shortfalls*. The crucial ability to understand the IW environment is undercut by weakness in nine of twenty-two capabilities. The cluster of capabilities for supporting Influence Operations is even worse: seven of the fourteen capabilities are in need of substantial improvement. The picture is less bleak for those Foundational Capabilities for coordination across the Blue force, only two of the nine are in need of substantial improvement. The cluster of Foundational Capabilities for dealing with the population had the highest proportion of shortfall, with ten of eighteen needing substantial improvement.

The capabilities the study team has denoted as foundational, and their attendant assessments, illuminate serious US Government weaknesses in understanding the complex IW environment, influencing with information, and dealing with the population. *Performance shortfalls in these areas affect every IW mission listed in this study.*

B.3.2 Combat and Support Missions

Six missions fall under Combat and Support:

- Neutralize Red Forces
- Protect Blue Forces

- Protect Physical Sites
- Work with Indigenous Security Organizations
- Stand up New Indigenous Military Units
- Protect the Population

B.3.2.1 Mission: Neutralize Red Forces

Often the most visible mission with the most media attention, this mission should not be confused with the totality of an IW campaign. The key challenges are to shape the battlefield (often urban) in Blue's favor, working with a wide range of Blue partners, restricting Red access to terrain, and engaging Red in a discriminating fashion – one suitable for protecting proximate civilians and infrastructure. It is notable that for this mission nineteen capabilities relate to "Understand" or "Shape" while only eight capabilities relate to Engage. Even in this most Red-centric of IW missions, more work is needed to "understand" and "shape" the battlespace than to actually "engage" within it.

B.3.2.1.1 Neutralize Red Capabilities

[U23] Map all relevant details of all current or recently dissolved military forces, their ongoing performance, and the current and future need for such forces

[U24] Map the current state of all detention facilities, their ongoing performance, and the current and future need for them

[U26] Urban BDA for kinetic and nonkinetic effects

[UE31] Monitor and filter traffic at approved border-crossing locations and other locations with minimal impact on legitimate commerce and travel

[UE32] Monitor and stop cross-border traffic at unapproved locations

A capability in need of substantial improvement

Efforts to secure Iraq's borders today are well short of the manpower, equipment and infrastructure necessary.[23]

[U37] Locate weapon caches

[US42] Locate and secure/destroy any WMD or other weapon stocks not held securely by the host government

[S9] Urban C3

[S10] Intra-urban transport capability (land or air) for moving forces, supplies, and wounded to/from isolated locations in a city

[S11] High mobility for dismounted infantry over urban obstacles

[S12] Selectively disable utility, transportation, and communications infrastructure for the short-term with minimal damage

[S15] Include in planning the unique logistical demands of long-duration irregular warfare and urban operations

[S16] Disrupt insurgent C4ISR and logistics

A capability in need of substantial improvement

DoD has serious difficulty disrupting a foe's C4ISR[24] and logistical systems when those systems overlap with the civilian infrastructure, and there is a need to preserve that infrastructure.[25]

---

[23] "The 45 miles of border monitored out of Combat Outpost Heider and a series of Iraqi forts here are porous, especially at night, and U.S. authorities say it is simply impossible to know who and what are passing through." Josh White, "Along Iraq-Syria Border, a Struggle to Cover the Terrain," *Washington Post*, 1 November 2006, p. A12.

[24] C4ISR – command, control, communications, computers, intelligence, surveillance, reconnaissance.

[S17] Software and hardware tools for urban mission rehearsal and course of action assessment

[S18] Counter IEDs

A capability in need of substantial improvement

In spite of the considerable expense and effort, IEDs continue to be the primary insurgent tool for the attrition of US forces in Iraq.

[S19] Rotate personnel in a fashion that strikes a proper balance between troop morale and fatigue and the preservation of experience

[S32] Construct new detention facilities and organizations as needed[26]

[S34] Create barriers within the country to restrict insurgent movement and logistical support with minimal disruption to legitimate movement

A capability in need of substantial improvement

Today's barriers are labor intensive, poorly suited to filter out insurgents, and too expensive and disruptive to the population for comprehensive employment.

---

[25] Only 40 percent of Iraq's pre-war weapons inventory had been destroyed or secured by April 2004. Steve Bowman, *Iraq: U.S. Military Operations*, Congressional Research Service, 18 May 2005, p. 7. In the summer of 2004, when insurgent forces controlled Fallujah, journalist Nir Rosen was smuggled into Fallujah by insurgents even though it was supposedly sealed off by Coalition forces at that time. Rosen described obscure trails that US forces didn't know about, but that were well known in a town with a history for smuggling. Nir Rosen, *In the Belly of the Green Bird: The Triumph of the Martyrs in Iraq*, (New York: Free Press, 2006), pp. 149–150.

[26] "The fact that the detention operation mission for all of Iraq is now commanded by a 2-star general who reports directly to the operational commander, and that 1,900 MPs, more appropriately equipped for combat, now perform the mission once assigned to a single under-strength, poorly trained, inadequately equipped, and weakly-led brigade, indicate more robust options should have been considered sooner." Schlesinger, *Final Report*, p. 51.

They can be effectively employed in small areas, like around US bases, but they are less suitable for larger scale employment.[27]

[S36] Supply personnel, equipment, consumables, and funding to operate detention facilities while managing them

[E6] Provide fire support in the urban environment, with minimal collateral damage

[E7] Counter-sniper

[E8] Conduct combined-arms operations at the small unit level

[E9] Clear buildings rapidly, efficiently, and safely for both US forces and civilian inhabitants

[E10] Destroy point targets, with minimal collateral damage

[E11] Non-lethal tools for separating or keeping separate the insurgents from the civilian population

A capability in need of substantial improvement

DoD is still forced to respond with lethal force on many occasions when facing a mixed insurgent-civilian crowd, and non-lethal barriers haven't advanced much since World War I. Non-lethal weapons are not a part of most checkpoints in Iraq.

B.3.2.1.2 Assessment of Neutralize Red Forces Capabilities

Summary: Five of twenty-five capabilities in need of substantial improvement.

---

[27] Rosen, *In the Belly of the Green Bird*, pp. 149–150.

The capability picture for this mission is better than that for the Foundational Capabilities, with just five of the twenty-five capabilities assessed as needing *substantial improvement*. The core weakness in this mission is controlling Red access to terrain. Four of the five weaker capabilities relate at least in part to access control (UE32, S16, S34, E11). If Blue cannot seal off large areas (e.g., outside its own bases) from Red, then Red will have access to the population. With that access, Red can undermine many of Blue's non-military missions. Blue can build a school, but that lacks utility if Red can threaten anyone attending. In sum, Red access to the population strikes at the heart of success in IW—control of the population. If a HNG cannot provide security from Red, its very legitimacy is undermined in the eyes of the population.

Shortfalls in access control also affect Blue's ability to generate lasting effects. The beneficial effect generated by a surge in Blue assets (e.g., clear a village), cannot be preserved if Red cannot later be denied access. While US forces are capable of going anywhere they want anytime, the effects of that presence does not persist once US forces move on. Of course, this mission would also be undermined by the previously mentioned weaknesses in the Foundational Capabilities.

B.3.2.2 Mission: Protect Blue Forces

The bulk of the capabilities supporting this mission are Shape capabilities that protect Blue from Red while Blue is operating in an urban environment and maintaining operations over long timeframes. IW elevates the frequency of close-range direct fire engagements and the number of IEDs encountered, presenting new force protection needs. Additionally, there are Understand capabilities for tracking the particular threats associated with those factors.

There is a danger that if the population perceives a much greater emphasis on this mission than on their own protection, their relations with Blue will suffer. Pronouncements of a better future with a Blue victory will ring hollow if the day-to-day operations of Blue show a disregard for the population's safety. Damaged relations with the population then, in turn, will sharply diminish the support Blue forces receive from the civilian ISR network, *the single most powerful ISR asset in irregular warfare*. This in turn makes it harder to protect Blue forces. In short, success in IW requires a careful balance with other missions.

B.3.2.2.1 Protect Blue Forces Capabilities

[U25] Map the current EOD and demining capabilities, their ongoing effectiveness, and the current and future need for them

[U28] Detect HAZMAT

[US30] Track and maintain Blue troop morale during long duration campaigns

[US42] Locate and secure/destroy any WMD or other weapon stocks not held securely by the host government

[S9] Urban C3

[S10] Intra-urban transport capability (land or air) for moving forces, supplies, and wounded to/from isolated locations in a city

[S13] Medical capabilities to protect US personnel from disease, psychological stress, and hazardous materials

[S14] Protect dismounted personnel from small arms, fragmentation, and blast

[S15] Include in planning the unique logistical demands of long-duration irregular warfare and urban operations

[S18] Counter IEDs

A capability in need of substantial improvement

In spite of the considerable expense and effort, over four years, IEDs continue to be the primary insurgent tool for attriting US forces in Iraq.

[S19] Rotate personnel in a fashion that strikes a proper balance between troop morale and fatigue and the preservation of experience

[S22] Conduct EOD and demining and assist other Blue doing the same

[S23] Organize, train and equip new EOD and demining organizations as needed

[E7] Counter-sniper

B.3.2.2.2 Assessment of Protect Blue Forces Capabilities

Summary: One of fourteen capabilities in need of substantial improvement.

Compared to the other missions, the study team assessed this one as being well supported in Iraq. The team assessed only one of the fourteen capabilities in need of substantial improvement, however, that capability is key—Counter IEDs. The current capability to counter this primary attrition tool of Red is clearly insufficient.

B.3.2.3 Mission: Protect Physical Sites

A wide variety of military and civilian sites (e.g., military bases, power plants, and HNG buildings) will need protection by Blue, against direct and indirect attacks. Civilian infrastructure nodes are an important part of this equation. As Red generally benefits from greater disorder in society and lower quality of life for the population, the civilian infrastructure is an obvious target. If Blue (and the HNG) cannot deliver basic support services, for whatever reason, relations between Blue and the population will suffer. The capabilities for this mission generally address:

- controlling access to sites by limiting movement and identifying those who do have access,
- rapid-reaction capabilities for threatened facilities, and
- discriminate fire-support options.

B.3.2.3.1 Protect Physical Sites Capabilities

[UE31] Monitor and filter traffic at approved border-crossing locations and other locations, with minimal impact on legitimate commerce and travel

[US42] Locate and secure/destroy any WMD or other weapon stocks not held securely by the host government

[S10] Intra-urban transport capability (land or air) for moving forces, supplies, and wounded to/from isolated locations in a city

[S12] Selectively disable utility, transportation, and communications infrastructure for the short-term with minimal damage

[S34] Create barriers within the country to restrict insurgent movement and logistical support with minimal disruption to legitimate movement

A capability in need of substantial improvement

Today's barriers are labor intensive, poorly suited to filter out insurgents, and too expensive and disruptive to the population for comprehensive employment. They can be effectively employed in small areas, like around US bases, but they are less suitable for larger scale employment.[28]

[E6] Provide fire support in the urban environment, with minimal collateral damage

[E7] Counter-sniper

[E10] Destroy point targets, with minimal collateral damage

---

[28] Rosen, *In the Belly of the Green Bird*, pp. 149–150.

[E11] Non-lethal tools for separating or keeping separate the insurgents from the civilian population

A capability in need of substantial improvement

DoD is still forced to respond with lethal force on many occasions when facing a mixed insurgent-civilian crowd, and non-lethal barriers haven't advanced much since World War I. Non-lethal weapons are not a part of most checkpoints in Iraq.

B.3.2.3.2 Assessment of Protect Physical Sites Capabilities

Summary: Two of nine capabilities in need of substantial improvement

For this mission two of the nine capabilities were assessed as needing substantial improvement. The core weakness for this mission relates to denying Red access to both point and area facilities (e.g., power plants, pipelines). As reconstruction efforts and the economy in general are critical for overall success, shortfalls in this area hamper long-term solutions to instability. While insurgents in Iraq can attack targets with standoff weapons, they are more effective being able to directly access infrastructure and damage it at close range.[29]

Vetting of employees in Iraq has been a serious issue as has the efficiency of checkpoints. If a checkpoint is relatively effective at filtering out dangerous individuals, but that filtering process is so slow it keeps workers off the job, the result can be a net loss. These shortfalls are significant given the large number of civilian facilities that need to function for Iraq to function.

---

[29] While limited to only US forces, the following is instructive: As of April 2006, only 4 percent of US Killed In Action (KIAs) were the result of enemy rockets and mortars. Michael E. O'Hanlon and Nina Kamp, *Iraq Index: Tracking Variables of Reconstruction and Security in Post-Saddam Iraq*, Brookings Institution. http://www.brook.edu/ iraqindex Accessed 27 April 2006.

B.3.2.4 Mission: Work with Indigenous Security Organizations

For DoD, indigenous security organizations are essential partners for dealing with Red and interacting with the population. These include military, police, and intelligence agency personnel. These organizations often have large numbers of personnel that possess local knowledge and language skills.

Another reason for cooperation relates to Transition, one of the five distinguishing attributes of IW identified earlier in this volume. By working with indigenous security organizations, DoD and other Blue team members, can build up HNG organizations and prepare them for the day they can autonomously secure their nation. These HNG organizations certainly have their limitations. However, their unique capabilities, and the need for Transition, make cooperation essential. The capabilities for this mission cluster around mapping indigenous security organizations and the tools for that cooperation (command, control, and communications; fire support; inclusion in planning and operations; and logistical support).

B.3.2.4.1 Work with Indigenous Security Organizations Capabilities

[U23] Map all relevant details of all current or recently dissolved military forces, their ongoing performance, and the current and future need for such forces

[U24] Map the current state of all detention facilities, their ongoing performance, and the current and future need for them

[U25] Map the current EOD and demining capabilities, their ongoing effectiveness, and the current and future need for them

[U34] Map all relevant details of all current or recently dissolved police forces, their ongoing performance, and the current and future need for such organizations

A capability in need of substantial improvement

The subtleties of police-civilian interaction has largely eluded DoD, in part because police duties are outside of DoD's focus. While DoD does have military police (MPs), the tasks of those units differ significantly from civilian police.[30]

[S9] Urban C3

[S22] Conduct EOD and demining and assist other Blue doing the same

[S31] Support existing indigenous military forces with supplies, personnel, equipment and funding while managing them

[S36] Supply personnel, equipment, consumables, and funding to operate detention facilities while managing them[31]

[E6] Provide fire support in the urban environment with minimal collateral damage

---

[30] Some pre-invasion planning made by the US Department of Justice envisioned sending 5,000 international law enforcement advisors to Iraq after the fall of Saddam. But these plans were dismissed by the National Security Council, in part because a CIA report claimed Iraqi police already had extensive professional training under Saddam, and because DoD assumed Iraqi police would stay on the job after the fall of the regime. (Chandrasekaran, pp. 83–84). A 2006 DoD effort to measure the effectiveness of Iraqi police ran into several problems. The primary team of contractors used for this effort had only five days on the ground in Iraq, were not able to independently verify data from the Iraqis via on-site visits, couldn't establish professional relationships with US personnel in Iraq, and it received insufficient deployment support. *See* Irregular Warfare Support Program, *Quicklook Assessment of Iraqi Law Enforcement*, version 1.3, 25 September 2006, pp. 3, 30. For Official Use Only.

[31] "There was ample evidence in both Joint and Army "lessons learned" that planning for detention operations for Iraq required alternatives to standard doctrinal approaches. Reports from experiences in OPERATION ENDURING FREEDOM and at Guantanamo had already recognized the inadequacy of current doctrine for the detention mission and the need for augmentation of both MP and MI [military police, military intelligence] units with experienced confinement officers and interrogators." Schlesinger, *Final Report*, p. 48.

B.3.2.4.2 Assessment of Work with Indigenous Security Organizations Capabilities

Summary: One of nine capabilities in need of substantial improvement

The study team's assessment of the supporting capabilities for this mission found just one of the nine in need of substantial improvement. However, that capability to assess the state of police forces is perhaps the most damaging area for a shortfall. Police play a unique and critical role in IW; the inability to discern their sufficiency for that role has ramifications to the overall IW effort.

B.3.2.5 Mission: Stand up New Indigenous Military Units

Depending on the scenario, a host government will often need to expand its force structure or at least certain unit types. Aside from addressing near-term threats, the expansion of the indigenous military can be key for Transition. The first cluster of capabilities supporting this mission relates to understanding the state and performance of the indigenous military. That input is needed to illuminate shortfalls and guide new unit formation. A second cluster of capabilities relates to actually standing up and supporting these new units. Special operations forces (SOF) have had the mission of training indigenous forces. However, the need to stand up new forces can exceed the ability of SOF forces, especially when the process starts from scratch in a regime-change scenario. This may require some expansion of these capabilities across DoD's general-purpose forces.

B.3.2.5.1 Stand-up New Indigenous Military Units Capabilities

[U23] Map all relevant details of all current or recently dissolved military forces, their ongoing performance, and the current and future need for such forces

[U24] Map the current state of all detention facilities, their ongoing performance, and the current and future need for them

[U25] Map the current EOD and demining capabilities, their ongoing effectiveness, and the current and future need for them

[S7] Organize, train, and equip new indigenous military forces as needed

[S22] Conduct EOD and demining and assist other Blue doing the same

[S23] Organize, train and equip new EOD and demining organizations as needed

[S31] Support existing indigenous military forces with supplies, personnel, equipment and funding while managing them

[S32] Construct new detention facilities and organizations as needed

B.3.2.5.2 Assessment of Stand-up New Indigenous Military Units Capabilities

Summary: None of the eight capabilities in need of substantial improvement

The assessments for this mission were better than the other missions: not one of the eight capabilities was in need of substantial improvement. A similar assessment done in 2003 or 2004 would not have been so favorable. The advances made since then were certainly welcome but the time they took came at a cost. The delay in host-nation force generation was useful for an immature insurgency and damaging to the confidence of the population in the host government. In the future, this mission needs to be fully supported from Day One.[32]

---

[32] A division of labor issue exists with this mission. When the US Special Operations Command (SOCOM) was created in 1986, Congress made Foreign Internal Defense a "special operations activity." However, nothing has been done to absolve the Services of the function they were assigned in the Key West Agreement of 1948 to equip and train foreign military forces.

B.3.2.6 Mission: Protect the Population

The security of the population has serious implications for both tapping the civilian ISR network and Transition. If the population doesn't feel reasonably safe, even the sympathetic will not inform on Red, denying Blue the single most effective ISR asset in IW campaigns. Additionally, if the population doubts the commitment of Blue to its security, it can also doubt Blue's commitment to overall victory or Blue's ability to achieve that victory. Therefore, it is critical that the population considers the Blue force both serious and effective *vis-à-vis* the population's security.

The insurgents in Iraq today are well aware of this dynamic, as evidenced by their campaign of violence against the population. That campaign is not so much designed to kill particular Iraqis as it is to convince much of the population they are at risk. Media exposure of that violence is integral to their campaign to influence the population. The first cluster of capabilities supporting this mission relates to mapping the nature of the threats to the population—both the who and the what. A second cluster of capabilities shapes the environment to be less dangerous for the population. A third cluster of capabilities directly engages threats but in a manner that minimizes risk to both the population and the infrastructure on which the population depends. A large block of these capabilities addresses securing ground and keeping it secure for the long duration. The population lives in the threat environment twenty-four hours a day—and so must their protection.

B.3.2.6.1 Protect the Population Capabilities

[U25] Map the current EOD and demining capabilities, their ongoing effectiveness, and the current and future need for them

[U28] Detect HAZMAT

[UE31] Monitor and filter traffic at approved border-crossing locations and other locations with minimal impact on legitimate commerce and travel

[UE32] Monitor and stop cross-border traffic at unapproved locations

A capability in need of substantial improvement

Efforts to secure Iraq's borders today are well short of the manpower, equipment , and infrastructure necessary.[33]

[U37] Locate weapon caches

[US42] Locate and secure/destroy any WMD or other weapon stocks not held securely by the host government

[S12] Selectively disable utility, transportation, and communications infrastructure for the short-term with minimal damage

[S18] Counter IEDs

A capability in need of substantial improvement

In spite of the considerable expense and effort, over four years, IEDs continue to be the primary insurgent tool for attriting US forces in Iraq.

[S22] Conduct EOD and demining and assist other Blue doing the same

[S23] Organize, train and equip new EOD and demining organizations as needed

[S34] Create barriers within the country to restrict insurgent movement and logistical support with minimal disruption to legitimate movement

---

[33] "The 45 miles of border monitored out of Combat Outpost Heider and a series of Iraqi forts here are porous, especially at night, and U.S. authorities say it is simply impossible to know who and what are passing through." Josh White, "Along Iraq-Syria Border, a Struggle to Cover the Terrain," *Washington Post*, 1 November 2006, p. A12.

A capability in need of substantial improvement

Today's barriers are labor intensive, poorly suited to filter out insurgents, and too expensive and disruptive to the population for comprehensive employment. They can be effectively employed in small areas, like around US bases, but they are less suitable for larger-scale employment.[34]

[S35] Minimize the risk of civilian movement

A capability in need of substantial improvement

Civilian movement today in Iraq entails considerable risk, which has stifled commerce and generated considerable popular ill will toward US forces and the Iraqi government. A portion of that risk for Iraqi civilians comes from US military efforts to protect their own forces while moving.

[E6] Provide fire support in the urban environment with minimal collateral damage

[E7] Counter-sniper

[E9] Clear buildings rapidly, efficiently, and safely for both US forces and civilian inhabitants

[E10] Destroy point targets with minimal collateral damage

[E11] Non-lethal tools for separating or keeping separate the insurgents from the civilian population

A capability in need of substantial improvement

DoD is still forced to respond with lethal force on many occasions when facing a mixed insurgent-civilian crowd, and non-lethal barriers haven't advanced

---

[34] Rosen, *In the Belly of the Green Bird*, pp. 149–150.

much since World War I. Non-lethal weapons are not a part of most checkpoints in Iraq.

B.3.2.6.2 Assessment of Protect the Population Capabilities

Summary: Five of seventeen capabilities in need of substantial improvement

Of the six Combat and Support Missions, this mission receives the weakest capability support. This inability to protect the population has a ripple effect across the entire IW campaign. A vulnerable population is unlikely to view an HNG as legitimate if it cannot provide the most basic of services: *protection*. Neither is the population likely to cooperate in identifying insurgents, a contribution the population is uniquely qualified to make.

The result can be the majority of the population restrained by a pragmatic caution that often gets confused for apathy by Blue. “Fence-sitting” is the product of more than ideology. A segment of the population that strongly shares the values and goals of Blue, but lacks the physical security to act safely on those convictions, is usually inactive—or sometimes even cooperates with the insurgents. Courageous and principled opponents of Red do not survive long absent the effective protection of the host government or other members of Blue forces.

When people consider threats to their physical security, they weigh both *physical force* and *intelligence*. While a formal military force has considerable physical force options (e.g., tanks, artillery, aircraft), it has difficulty discerning who among the population is working with or against them. Actions taken by a counterinsurgent force that demonstrate this (e.g., mass arrests) can convince a citizen Blue forces do not know who the insurgents are. In contrast, insurgents often enhance their limited physical power by demonstrating a thorough knowledge of the population. Historically, insurgents have been very good at discriminating supporters from opponents in the population, and severely punishing the latter. The shortfalls in the Foundational Capabilities for the activity Understand seriously affect this mission.

B.3.3 Missions of a Civilian Nature

Unlike the previous section on Combat and Support missions, this section does not discuss each mission individually. The missions discussed here relate to supporting various civil systems, that is, the infrastructure and people that provide a variety of services to the population. The seventeen missions here have more in common with each other than do the missions in Combat and Support; so this commonality allows them to be discussed in more general terms. As shown previously in **Figure B–2** (page B–8), these missions are generally directed at four efforts: [35]

- Humanitarian Assistance and Social Well-Being
- Governance and Participation
- Economic Stabilization and Infrastructure
- Justice and Reconciliation

The civil systems that enable a society to function must be maintained at some basic level while security concerns are dealt with. At their core, insurgencies are violent contests for the allegiance and cooperation of the population. Providing a decent quality of life (as defined by the population) through these civil systems is a critical component of the conflict, and is expected by the population.

Unfortunately, this is not a fair fight. While the HNG and its allies (e.g., US forces) are expected to provide services, the insurgents are not. While insurgents can generate goodwill by providing some services, they are not burdened with the expectation of support like the government. In part, this is because insurgents rarely control ground openly. Instead, they can disrupt the government in its attempts to provide civil services while simultaneously criticizing the government for its failing to do so. In this light, it makes perfect sense for insurgents to sabotage civil systems. The more dysfunctional the current system and government appear,

---

[35] This organization of civil system missions is taken from *Post-Conflict Reconstruction Essential Task*s, US Department of State, Office of the Coordinator for Reconstruction and Stabilization, (April 2005).

the more attractive the insurgents' promises of a better future resonate with the population.

Predicting DoD's role in these missions is difficult. While DoD will often play a dominant role in combat operations, it will often not play a dominant role in the missions addressing civil systems. The extent of DoD's role in these missions is likely to take three forms:

- **Coordination and deconfliction:** DoD needs to account for civil systems in its planning and to coordinate with others working to support such systems. To a greater or lesser degree DoD operations will impact civil systems, and the essential nature of those systems to the overall IW campaign requires at least deconfliction.
- **Security for key nodes:** Every civil system has critical nodes or individuals that require constant protection.[36] Left unprotected these nodes could be damaged by looters or insurgents attempting to destabilize society. In the early stages of an operation, when no other Blue force member may be capable of providing that capability, DoD must be able to take that role. The need for DoD to provide security may be for only a portion of the critical nodes (those not already protected by others on the Blue force) and for the short term, until other Blue force members can be organized, but this ability to fill in the security gap would still be essential. Lasting damage could be done to various civil systems if left unprotected for even short periods of time. In some cases, the damage might be irreversible, for example, if a leading religious figure were assassinated or an historic monument destroyed by a car bomb.
- **Temporary operation for some systems:** Some civil systems are sensitive to shut downs of only hours or days, necessitating a first responder

---

[36] DoD policy is, "Nonetheless, U.S. military forces shall be prepared to perform all task necessary to establish or maintain order when civilians cannot do so." US Department of Defense, *Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations*, DODD No. 3000.05, 28 November 2005, p. 2.

like DoD have some emergency operation capability. A basic level of service, just enough to avoid the most serious costs of that system shutting down, would be the goal. There are several sources of that sensitivity to short disruption:

- **Damage within a system:** Some civil systems could be seriously damaged if the workers left for several days and no one took their place. Expensive equipment could "run itself to death" if no worker or computer control system existed to order a shutdown or perform routine maintenance. Looting of key equipment could cause lasting damage as well.
- **Damage to other interdependent systems:** In some cases, the shutdown of one system could cause serious damage to another interdependent system. For example, a shutdown of the electrical grid could cause extensive damage in the food distribution system as refrigerated foodstuffs spoil.
- **Severe impacts on the population:** The failure of a water system for a densely populated urban area for a few days could spark disease outbreaks and considerable loss of life. If the prison system ceases to function for even a few hours (e.g., the guards do not show up for work), then thousands of criminals might escape.

While overall reconstruction timelines tend to be very long, speed still plays a role, in large part driven by public expectations.[37] If a powerful and highly visible

---

[37] "The slow speed with which the U.S. government can act in the critical window of opportunity after the end of conflict is one of the greatest challenges facing post-conflict reconstruction today, second only to lack of coherence." Michele Flournoy, "Training and Education for Post-Conflict Reconstruction," Robert C Orr, ed., *Winning the Peace*, (Washington, The CSIS Press, 2004), p. 142. A portion of the public expectation equation may relate to changes in the economic system. If the nation in question just underwent a regime change, then the economic system may have also changed. The obligations and responsibilities of the population can then evolve into something very different. Previous customers of socialist systems often do not anticipate or understand their own responsibilities in a new capitalistic system. The replacement

(Continued)

new organization suddenly shows up in a country (e.g., DoD), as public services either collapse or remain at a poor level of performance, a causal relationship may be assumed by the population.[38] While many in the population will grant a period of adjustment to the Blue force, if public services remain dysfunctional for "too long" (by the public's definition), then relations with that population will suffer. In an early 2006 journal article, then-LTG David Petraeus, US Army, addressed perishable legitimacy:

> From the moment a force enters a country, its leaders must keep this in mind, striving to meet the expectations of the liberated in what becomes a race against the clock.[39]

In the study team's generation and allocation of capabilities to the seventeen civil system missions, a set of five common capabilities emerged that appear repeatedly in most or all of these missions. The terminology used for those "common" capabilities is generalized, to apply generically to all civil systems. Following the list of the "common" capabilities is a list of those that are less universally represented across the civil-system missions ("other" civil-system capabilities). In Volume II of this report, each civil-system mission is listed separately with its supporting capabilities.

B.3.3.1 Common Civil-System Capabilities

[U18] Identify critical civil system nodes needing extra security

---

of entitlements with opportunities can be a difficult adjustment requiring significant education efforts on the part of the Blue force.

38 According to a wargame conducted by the Marine Corps Warfighting Lab in January 2003, there appeared to be a window of opportunity of thirty to sixty days for forces arriving in the country. Actions taken in this initial period would have a major shaping effect for the long term. Center for Emerging Threats and Opportunities, *CETO Quick Look: Dealing with the Civilian Population in Post-Saddam Iraq*, Marine Corps Warfighting Laboratory, 6 February 2003. www.ceto.quantico.usmc.mil/studies/Post-SaddamIraq.pdf. Accessed 30 July 2006.

39 LTG David H. Petraeus, "Learning Counterinsurgency: Observations from Soldiering in Iraq," *Military Review*, (January–February 2006): p. 4.

[U33] Map the current state of each civil system, its ongoing performance, and the need for it

[S26] Expand/Improve each civil system as needed

[S33] Provide security to those critical nodes and individuals important for the functioning of each civil system

A capability in need of substantial improvement

Insurgents in Iraq have had great success in striking critical nodes in many different civil systems and attacking key individuals important for the functioning of Iraqi society.

[S39] Organize, train, equip, man, fund, manage and plan for each civil system

A capability in need of substantial improvement

In spite of the considerable expense and effort, the civil systems of Iraq have not been sufficiently reconstructed to act as a stabilizing factor.

B.3.3.2 Other Civil-System Capabilities

[U16] Monitor the transition of former military forces, security forces, militias, and police personnel to new careers

A capability in need of substantial improvement

While some success has been achieved in tracking former leaders, the majority of former enforcers of Saddam's police state have disappeared into the population.[40]

---

[40] In December 2005, the outgoing interior minister described working with a "newly compiled" list of 16,000 former military and intelligence officers from the Saddam era. It is of significant concern that such a list either did not exist before this date, or required substantial update at that point in time. A trained, organized, and hostile group of 16,000 can do tremendous damage to

(Continued)

[U19] Locate individuals associated with the former regime and monitor their behavior

A capability in need of substantial improvement

While some success has been had in locating some personnel from Saddam's regime, many of them have disappeared—only to reappear on wanted posters.

[U23] Map all relevant details of all current or recently dissolved military forces, their ongoing performance, and the current and future need for such forces

[U34] Map all relevant details of all current or recently dissolved police forces, their ongoing performance, and the current and future need for such organizations

A capability in need of substantial improvement

The subtleties of police-civilian interaction largely elude DoD, in part because police duties are outside of DoD's focus. While DoD does have MPs, the tasks of those units differ significantly from civilian police.[41]

[U36] Map the weapon inventories of private citizens and evaluate the level of weaponry needed for personal security

A capability in need of substantial improvement

Today, DoD is largely ignorant about how many weapons from Saddam's disintegrated military ended up in private hands, and what level of weapons (both quantity and type) the population needs to protect itself.

[U37] Locate weapon caches

---

stability and reconstruction if left undiscovered. Jonathan Finer, "Iraq Minister Cites Threat of Hussein Loyalist," *Washington Post*, 21 December 2005, p. A24.

[41] *See* Irregular Warfare Support Program, *Quicklook Assessment of Iraqi Law Enforcement*, pp. 3, 30, For Official Use Only.

[US38] Evaluate former regime personnel for roles in the new government

[U40] Map the patterns of crime

A capability in need of substantial improvement

In the absence of local police forces, US personnel deployed to Iraq have proved ill suited to understanding the patterns of criminal activity there. Language barriers, episodic and sparse presence in the neighborhoods, and the lack of law enforcement training and equipment have all contributed to this poor US performance.

[U41] Map the interaction between criminals and insurgents

A capability in need of substantial improvement

US personnel deployed to Iraq have had considerable difficulty understanding the relationship between criminals and insurgents. Like the U40 capability, language barriers, episodic and sparse presence in the neighborhoods, and the lack of law enforcement training and equipment have contributed to poor US performance. DoD intelligence efforts also tend to pay scant attention to criminal activity, treating it as the purview of local law enforcement organizations.[42] But the weakness or absence of these organizations in Iraq leaves this role unfilled.

[S8] Organize, train, and equip new police organizations as needed

[S20] Facilitate political party formation

[S24] Dismantle excess or untrustworthy military forces, security forces, militias, and police and collect their weapons

---

[42] In a November 2005 National Security Council document on strategy for Iraq, criminals were not considered a U.S. problem, "…but we judge that such elements can be handled by Iraqi forces alone…" National Security Council, *National Strategy for Victory in Iraq*, November 2005, p. 7.

[S25] Recruit influential individuals currently out of the government for government service

[S27] Support war crimes or national reconciliation tribunals as needed

[S28] Deter crime

A capability in need of substantial improvement

US forces in Iraq lack the language skills, local knowledge, relationship with the population, and persistent and expansive presence to deter crime. Aside from the physical limitations, there is a cultural barrier within DoD to using US forces for policing duties, a carry-over from legal limitations to such use on US territory.

[S29] Redirect and guide personnel from dismantled military forces, security forces, militias, and police through a process to place them in new occupations

A capability in need of substantial improvement

The dissolution of the Iraqi Army was not matched by efforts to support those soldiers or find them new employment. Rather, they were dumped into a stagnant economy, already overflowing with unemployed. Insurgent and criminal networks in Iraq were subsequently bolstered by a large talent pool of trained and motivated people.

[S37] Support existing police forces with supplies, personnel, equipment and funding while managing them

[E3] Apprehend and detain disruptive former regime personnel

A capability in need of substantial improvement

While in Iraq there has been considerable success in apprehending former regime's leadership, most of the rank and file disappeared back into the population—and into the ranks of the insurgency. These tens of thousands from the re-

gime's security apparatus, as trained purveyors of violence and intimidation, were well qualified to destabilize the new Iraq.[43]

[E4] Collect excess weapons from private citizens

A capability in need of substantial improvement

Most USG personnel lack the cultural savvy to either collect these weapons directly without offending the population or provide the proper incentives to get the population to turn them in.[44]

[E11] Non-lethal tools for separating or keeping separate the insurgents from the civilian population

A capability in need of substantial improvement

DoD is still forced to respond with lethal force on many occasions when facing a mixed insurgent-civilian crowd, and non-lethal barriers haven't advanced much since World War I. Non-lethal weapons are not a part of most checkpoints in Iraq.

[E13] Apprehend, process, and detain criminals via the courts and detention facilities

A capability in need of substantial improvement

---

[43] In December 2005, the outgoing interior minister described working with a "newly compiled" list of 16,000 former military and intelligence officers from the Saddam era. Jonathan Finer, "Iraq Minister Cites Threat of Hussein Loyalist," *Washington Post*, 21 December 2005, p. A24. It's of significant concern that such a list either didn't exist before this date or required substantial update at that point in time. A trained, organized, and hostile group of 16,000 can do tremendous damage to stability and reconstruction if left undiscovered.

[44] In reference to Iraq, "There is estimated to be between 0.75 million and 1 million tons of weapons and ammunition in largely unguarded ammunition storage points (ASPs) throughout the country." Ahmed S. Hashim, *Insurgency and counter-Insurgency in Iraq*, (Ithaca, NY: Cornell University Press, 2006), p. 163. Only 40 percent of Iraq's pre-war weapons inventory had been destroyed or secured by April 2004. Steve Bowman, *Iraq: U.S. Military Operations*, Congressional Research Service, 18 May 2005, p. 7.

Deployed US military personnel are not equipped or trained to replace Iraq's broken legal system at the local level, and there are few deployable personnel from US Government civilian agencies that would have the needed expertise.

B.3.3.3 Assessment of Civil-System Capabilities

Summary: Fourteen of twenty-six capabilities in need of substantial improvement

Across all of the capabilities supporting civil-system missions, the study team assessed fourteen of these twenty-six capabilities in need of substantial improvement. A key problem area was the inability to diagnose the problem space, with seven of eleven Understand capabilities in need of substantial improvement. Two other insufficient capabilities that which show up repeatedly were operating civil systems (S39) and providing security for key civil system nodes and personnel (S33). Long-term damage was done in Iraq when prominent Shia cleric Muhammad Baqir al-Hakim was killed by a car bomb in August 2003, and when the al-Askari Mosque was heavily damaged in a February 2006 bombing.[45] The study team also assessed all four of the Engage capabilities as in need of substantial improvement, a reflection of a weakness in engaging the population and other actors important for civil systems.

These assessments reflect an overall weakness in the US Government for nation-building efforts in hostile environments. DoD is highly capable at deploying to and operating in high-threat environments, and dealing with massed modern military forces. However, it lacks the capabilities to understand, operate, and rebuild civilian infrastructure on a large scale. Other US agencies are better suited to repair and operate civil systems, but these agencies lack deployable mass and the ability to operate in high-threat environments. In most IW scenarios, the HNG has serious problems with its civil systems. If the US Government cannot help with these problems, or takes too long to help, the success of the campaign is at risk or

---

[45] Al-Hakim was a key competitor of Muqtada Al-Sadr for the allegiance of the Shia masses. The attack on the al-Askari mosque sparked large-scale sectarian violence that cost thousands of lives and threatened the stability of Iraq.

the length of the campaign is notably increased. While other members of the Blue force may be able to provide assistance, scale is an issue. Extensive aid to a nation's civil systems is often beyond the resources of most individual Blue force members. These shortfalls in the US Government's ability to address those needs are a serious weakness.

B.4 Objects of the Capabilities

In addition to analyzing the DoD missions, the study team also analyzed the overall (ninety-two) capability list based on principal object: strategic setting, physical environment, population, HNG, Red, and Blue.[46] Cross-referencing the capabilities by these six objects, and Understand, Shape and Engage revealed some interesting demand patterns (*see* **Table B–1**, next page).

The first pattern is the large number of capabilities at the intersections of Understand the Population, HNG, and Red. While Red is an obvious target of understanding, this table actually shows more capabilities addressing the Population. A high proportion of the Foundational Capabilities (highlighted) is also in this intersection, further emphasizing their importance.

The large number of Understand capabilities focused on the HNG is a reflection of its critical partner role in IW. Aside from the number of capabilities involved, the number of capabilities in need of substantial improvement illuminates serious shortfalls. While only two of ten focused on the HNG were so assessed, ten of seventeen focused on Red were, and twelve of twenty focused on the Population were as well.

---

[46] Blue includes DoD and other US Government agencies, Coalition partners, international organizations, NGOs, and contractors.

Table B–1. IW Capabilities – Object Breakdown

	Strategic Setting	Physical Environment	Population	HNG	Red	Blue
Understand	**U3**, **U4**, **U5**, U10	U18, U26, U28, U35	U1, **U2**, **U3**, **U4**, U6, U7, U8, U9, **U15**, **U16**, U18, **U19**, **U27**, UE31, **UE32**, **U36**, US38, **U39**, **U40**, **U41**	U9, U18, U21, U22, U23, U33, **U34**, US38, **U39,** US42	**U3**, **U4**, **U5**, U10, U11, **U12**, **U13**, U14, **U15**, U17, U26, **U27**, UE31, **UE32**, U37, **U39**, **U41**	U20, U24, U25, **U39**, US30
Shape		S12	US38, **S2**, S20, S25, S27, **S28**, **S29**, **S35**	US38, US42, **S3**, S7, S8, S24, S25, S26, S31, **S33,** S37, **S39**, S40	**S16**, **S18**, **S34**	US30, **S1**, **S3**, S4, S5, **S6**, S9, S10, S11, S13, S14, S15, S17, **S18**, S19, S21, S22, S23, S32, S36
Engage	E1		UE31, **UE32**, **E1**, E2, **E3**, **E4**, **E5**, E6, E7, E9, E10, **E11**, **E13**, E14		UE31, **UE32**, **E1**, E6, E7, E8, E9, E10, **E11**	

Assessment: **X5** = In need of substantial improvement X5 = Foundational

Another pattern is the balance of Engage capabilities between the Population and Red. More Engage capabilities relate to the Population (fourteen) than to Red (nine). As Engage is defined broadly as direct interaction, this reflects our view that interaction with the population is more important than with Red. We also feel there is greater weakness in the Engage-Population capabilities, with seven of fourteen in need of substantial improvement, while three of nine of the Engage-Red capabilities are similarly assessed. This supports the view that engaging the population is critical yet generally not well executed in Iraq.

A large number of capabilities reside at the intersection of Shape and Blue.[47] The twenty capabilities related to shaping Blue indicate the considerable effort required in this area, as do the six that are also Foundational Capabilities. The array of missions associated with IW, and the large number of Blue force members contributing, requires extensive coordination across the Blue force. As teamwork will be the norm, the overall success of the Blue force will depend heavily on the effectiveness of that cooperation. *We assessed four of these twenty capabilities in need of substantial improvement.*

The second largest number of Shape capabilities (thirteen) relate to the HNG. No other member of the greater Blue force is more important. The HNG will usually possess the best knowledge of the battlespace, and the largest ground presence, of any Blue force member—two key elements of an IW campaign. *The study team assessed three of these thirteen capabilities in need of substantial improvement.*

A final pattern is the small number of Shape-Red capabilities (three). This reflects the team's view that in IW, Blue-Shape efforts are directed more at the human terrain and environment around Red than at Red itself.

---

[47] In part, this is driven by the definitions the authors use for U–S–E. While direct interaction between Blue and either the Population or Red is labeled *Engage*, direct interaction between members of Blue is labeled *Shape*. That, in turn, increases the number of capabilities in that area, while leaving the *Engage–Blue* category blank.

B.5 Summary

Across this mission and capability landscape, a subset of capabilities has emerged as useful for most or, in some cases, all of the IW missions. That foundational subset has clusters of capabilities for (1) understanding the conflict environment, (2) Influence Operations, (3) coordination across the Blue force, and (4) dealing with the population. For the US Government today in Iraq, there are serious shortfalls in three of those clusters. Because these clusters have utility across most or all IW missions, their shortfalls seriously hurt the overall conduct of an IW campaign.

Of the six Combat and Support Missions, the capabilities supporting three missions—Protect Blue Forces, Work with Indigenous Security Organizations, and Stand up New Indigenous Military Units—are in the best shape, though still with room for improvement. The missions of Neutralize Red Forces and Protect Physical Sites are somewhat less well supported, and the weakest set of capabilities support Protect the Population. Because of the central role the population plays in IW, this shortfall is cause for serious concern. A Blue force that cannot provide security to the population will get little assistance from the population, which makes overall success far less likely.

Significant shortfalls exist across all of the capabilities supporting the seventeen civil-system missions. These highlight not only DoD's limited capabilities for large-scale nation building activities but also the resource and deployment limitations of other US agencies. The implications of these shortfalls are serious as they undermine US Government attempts to address long-term sources of instability and tend to increase the duration of an IW campaign.

When capabilities are looked at by Understand, Shape, *and* Engage and their principal objects (e.g., Population, HNG, Red, Blue), the following patterns emerge:

- A large proportion of Understand capabilities relate to the Population.
- A large proportion of Understand capabilities are foundational to the overall IW effort.

- More Engage capabilities relate to the Population than Red.
- A major portion of Shape capabilities relate to Blue.

Figure B–4 on the next page is a listing of all the IW capabilities discussed in this report and organized by their type (U–S–E). The chart is provided as a reference source for the reader.

Figure B–4. Capability Quick Reference Chart

Understand

[U1] Discern population-insurgent wedge issues
[U2] Discern population perceptions
[U3] Discern best information delivery vehicles for each audience
[U4] Monitor reactions to the US Influence Operations (BDA)
[U5] Monitor/evaluate insurgent Influence Operations
[U6] Map/monitor population fault lines
[U7] Map key individuals in groups and influence options
[U8] Understand civilian movement patterns
[U9] Understand population-host government relations
[U10] Map foreign insurgent entry patterns, transnational movements
[U11] Map insurgent foreign/domestic financial support networks
[U12] Map insurgent force size and capabilities
[U13] Map insurgent combat operations, movement patterns, logistics
[U14] Map insurgent command structure, leadership, motivations, goals
[U15] Discern insurgent-civilian interaction
[U16] Monitor transition of former indigenous military/security/militias/police personnel to new careers
[U17] Map the insurgent community fault lines/perceptions
[U18] Identify critical civil system nodes needing extra security
[U19] Locate former regime personnel and monitor their behavior
[U20] Understand the capabilities of Blue and the roles each wish to play
[U21] Understand the host government's IW plan
[U22] Map the powerful host government individuals/departments and their interests/motivations
[U23] Map current or recently dissolved indigenous military forces and need for them
[U24] Map detention facilities and need for them
[U25] Map EOD and de-mining organizations and their performance
[U26] Urban BDA for kinetic and nonkinetic effects
[U27] Discriminate insurgents from the population
[U28] Detect HAZMAT
[US30] Track/maintain Blue troop morale
[UE31] Monitor/filter cross-border traffic at approved locations and other checkpoints
[UE32] Monitor/stop cross-border traffic at unapproved locations
[U33] Map the state of each civil system and the need for it
[U34] Map current or recently dissolved police forces and the need for them
[U35] Map the physical terrain
[U36] Map private citizen weapon inventories and need
[U37] Locate weapon caches
[US38] Evaluate former regime personnel for new government roles
[U39] Precisely discern individual identities
[U40] Map the patterns of crime
[U41] Map criminal-insurgent interaction
[US42] Locate and secure/destroy WMD & other weapon stocks of the host government

Shape

[S1] Coordinate Influence Operations with other operations
[S2] Provide security to vulnerable groups

[S3] Include transition issues in planning
[S4] Coordinate DoD operations with non-DoD
[S5] Standardize rules/procedures for supporting civilians in combat
[S6] Include non-DoD in DoD planning/exercises
[S7] Organize/train/equip new indigenous military forces
[S8] Organize/train/equip new police
[S9] Urban C3
[S10] Intra-urban transport capability to/from isolated urban locations
[S11] High-urban mobility for dismounted infantry
[S12] Selectively disable infrastructure for the short term w/low damage
[S13] Protect personnel from disease,/psychological stress/hazardous materials
[S14] Protect dismounted personnel from small arms, fragmentation, and blast
[S15] Plan for long-duration log demands of urban/IW
[S16] Disrupt insurgent C^4ISR and logistics
[S17] Software/hardware tools for urban mission rehearsal and COA assessment
[S18] Counter IEDs
[S19] Rotate personnel to balance fatigue/experience
[S20] Facilitate political party formation
[S21] Standardized contract generation process
[S22] Conduct EOD/demining and assist others
[S23] Organize/train/equip new EOD and demining organizations
[S24] Dismantle indigenous military/security/militias/police and collect weapons
[S25] Recruit influential individuals for government service
[S26] Expand/improve each civil system as needed
[S27] Support war crimes/national reconciliation tribunals
[S28] Deter crime
[S29] Redirect dismantled indigenous military/security/militias/police personnel to new occupations
[S31] Support existing indigenous military forces
[S32] Construct new detention facilities and organizations
[S33] Provide security to critical civil system nodes
[S34] Create barriers within the country
[S35] Minimize the risk of civilian movement
[S36] Support detention facilities
[S37] Support police forces
[S39] Support each civil system
[S40] Communicate/work with host nation government

Engage

[E1] Form influence message and deliver it
[E2] Mediate disagreements between groups
[E3] Apprehend/detain disruptive former regime personnel
[E4] Collect excess weapons from citizens
[E5] Anonymous tip tools for the population
[E6] Urban fire support, with minimal collateral damage
[E7] Counter-sniper
[E8] Conduct combined-arms operations at the small unit level
[E9] Clear buildings rapidly/efficiently/safely
[E10] Destroy point targets, with minimal collateral damage
[E11] Non-lethal tools for separating or keeping separate insurgents-civilians
[E13] Apprehend/process/detain criminals
[E14] Process for directly hiring local

Appendix C.
Irregular Warfare and the Joint Capabilities Integration and Development System

This page is intentionally blank.

This appendix gives a brief description of the Joint Staff's Joint Capabilities Integration and Development System (JCIDS) process, and how and why the process used in this study to identify capability needs differs from the standard Department of Defense process, JCIDS.

JCIDS replaced the Requirements Generation System in 2003. A Chairman of the Joint Chiefs of Staff Instruction (CJCSI) establishes JCIDS policies and procedures, and any accompanying Chairman of the Joint Chiefs of Staff Manual (CJCSM) sets forth guidelines and procedures for its operation. The original directives have been revised repeatedly and are now in their fourth iteration.[1]

JCIDS uses joint concepts to identify and describe shortcomings and redundancies in warfighting capabilities; identify the timeframe in which the shortfall or redundancy exists; describe effective solutions; and identify potential approaches to resolve those shortcomings. The JCIDS process is initiated through the execution of a capabilities-based assessment (CBA), which identifies the capabilities required to successfully execute missions; the shortfalls in existing weapon systems to deliver those capabilities and the associated operational risks; and the possible solution space for the capability shortfalls.

A CBA may be based on a Joint Operating Concept (JOC) or a Joint Integrating Concept (JIC) approved by the Joint Requirements Oversight Council (JROC); a concept of operations (CONOPS) endorsed by a combatant command, Service, or defense agency; or an identified operational need.[2] CONOPS is fre-

---

[1] Chairman, Joint Chiefs of Staff, CJCSI 3170.01F, *Joint Capabilities Integration and Development System*, 1 May 2007, and CJCSM 3170.01C, *Operation of the Joint Capabilities Integration and Development System*, 1 May 2007.

[2] CJCSI 3170.01F says a CBA is based on an existing JOC or a JIC (p. 2) while CJCSM 3170.01C omits mention of JOCs and says a CBA may be based on a JIC (p. A-1). JOCs and JICs, along with Joint Functional Concepts (JFCs), are all part of the Joint Operations Concepts (JOpsC) family of future joint concepts. As defined in Joint Publication 1-02, a CONOPS is a verbal or graphic statement, in broad outline, of a commander's assumptions or intent in regard to an operation or series of operations (*Department of Defense Dictionary of*

(Continued)

quently embodied in campaign plans and operation plans; in the latter case, particularly when the plans cover a series of connected operations to be carried out simultaneously or in succession. CONOPS is designed to give an overall picture of the operation. CONOPS have a near-term connotation, while operations concepts (JOCs and JICs) are written eight to twenty years into the future.[3]

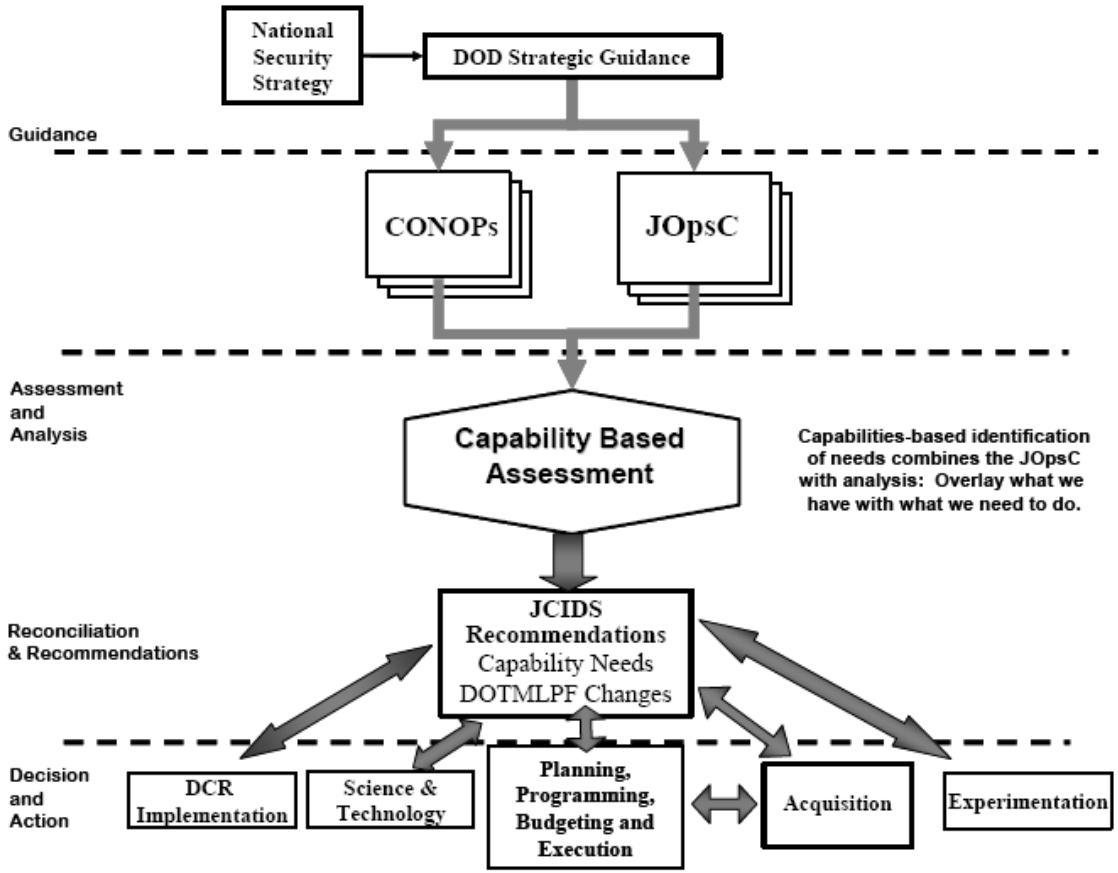
This distinction between near-term CONOPS and future concepts of the Joint Operations Concepts (JOpsC) family is important because the JOpsC are developed from top-level strategic guidance, providing a top-down baseline for identifying future capabilities. Consequently, future concepts of the JOpsC are not intended to provide immediate solutions but rather proposed solutions that can afford careful examination over a more extended period of time. A CONOPS, on the other hand, may indicate short-term capability needs. According to the JCIDS instruction, CONOPS allow the joint community to adjust or divest current capabilities by providing the operational context needed to justify or modify current programs.[4]

A JCIDS capability-based assessment flows from national-level strategic guidance through either a CONOPS for short-term needs or the JOpsC family of concepts, as shown in **Figure C–1** (next page). Earlier versions of the JCIDS directives describe the CBA process in terms of inputs and outputs. The functional area assessment (FAA) "uses the national strategies, the Family of Joint Future Concepts, Unified Command Plan assigned missions, CONOPS, joint tasks, the capabilities list (e.g., Universal Joint Task List), the anticipated range of broad capabilities that an adversary might employ and other sources as input." The FAA "identifies the scenarios against which the capabilities and attributes will be assessed. Scenario sources include, but are not limited to, the Defense Planning Scenarios (DPS) published by the Office of the Secretary of Defense (OSD)."

Military and Associated Terms (As Amended 12 July 2007), accessed 28 September 2007, http://www.dtic.mil/doctrine/jel/doddict/index.html).

[3] Chairman, Joint Chiefs of Staff, CJCSI 3010.02B, *Joint Operations Concepts Development Process*, instruction, 27 January 2006, p. A-5.

[4] CJCSI 3170.01F, instruction, pp. A-2 and A-3.



Source: CJCSI 3170.01F, Joint Capabilities Integration and Development System, 1 May 2007, Figure A-1, page A-3

Figure C–1. JCIDS Top-Down Capability Needs Identification Process

The FAA identifies the operational tasks, conditions, and standards needed to achieve military objectives, and produces a prioritized list of capabilities and tasks across all functional areas necessary to achieve the military objectives.[5]

The same instruction goes on to describe the Functional Needs Assessment (FNA): "Using the capabilities and tasks identified in the FAA as primary input, the FNA produces a list of capability gaps that require solutions and indicates the time frame in which those solutions are needed."[6]

A CBA conducted under JCIDS includes a third step, the Functional Solutions Analysis (FSA), described as "a joint assessment of potential DOTMLPF and policy approaches to solving, or at least mitigating, one or more of the capability gaps identified in the FNA."[7]

A complete CBA, to include solutions, was not the objective of this IW study. Rather, the task was to "identify capabilities needed to plan and conduct an effective campaign for irregular warfare (IW)."[8] Under JCIDS, getting to capability needs requires only an FAA and an FNA, not the follow-on FSA. An FNA of irregular warfare would require the following as inputs.

1. **National Strategies.** According to the current JCIDS manual,

   > The CBA process is rooted in a chain of strategic guidance documents. The National Security Strategy, the National Defense Strategy (NDS), and the National Military Strategy (NMS) provide the overarching description of the country's defense interests, objectives, and priorities. In addition, the Strategic Planning Guidance, the Contingency Planning Guidance, and

---

5 CJCSI 3170.01E, instruction, 11 May 2005, p. A-4.

6 CJCSI 3170.01E, instruction, 11 May 2005, p. A-5.

7 CJCSM 3170.01C, manual, 11 May 2007, p. A-13.

8 Institute for Defense Analyses, Task Order AJ-8-2743, Joint Advanced Warfighting Program, subtask 5, (Institute for Defense Analyses, Alexandria, VA).

the Quadrennial Defense Review Report contain further refinement of objectives and priorities, and help provide a framework for a CBA.[9]

2. **A Conceptual Basis.** This can be part of the JOpsC family of joint concepts for longer-term needs identification or a JROC-approved CONOPS for assessing nearer-term needs.

3. **A Scenario.** According to the JCIDS manual,

The mission area or military problem considered by the CBA must have operational context that is both relevant to the problem and the needs of the defense strategy. As a result, the FAA should use either formally tasked operational and contingency plans for near-term assessments or the Defense Planning Scenarios (DPS) published by OSD under the Analytic Agenda. Furthermore, the scenarios must be chosen in such a way that the full spectrum of operational situations relevant to the defense strategy will be examined.[10]

4. **Joint Tasks–Capabilities List.** According to the current JCIDS manual,

The military objectives of these scenarios provide a source for developing the list of capabilities to be examined. These capabilities, coupled with the scenarios, should be further refined in the Universal Joint Task List (UJTL) or Service or Defense agency task lists. At this point in the assessment, the emphasis should be on describing how the objectives would be achieved with the programmed force. The task representation, however, must also be able to account for the proposed concept or CONOPS, so some flexibility is required. The Joint Capability Areas (JCAs) are currently the preferred method the Department of Defense uses for reviewing and managing capabilities; for the associated tasks, several frameworks, such as the UJTL, are readily available.[11]

---

[9] Chairman, Joint Chiefs of Staff, CJCSM 3170.01C, *Operation of the Joint Capabilities Integration and Development System*, manual, 1 May 2007, p. A-1.

[10] CJCSM 3170.01C, manual, 1 May 2007, p. A-9.

[11] CJCSM 3170.01C, manual, 1 May 2007, p. A-9.

5. **Adversary Capabilities.** According to the JCIDS manual,

   DIA [Defense Intelligence Agency] will produce an Initial Threat Warning Assessment (ITWA) to support the CBA. The ITWA will identify adversarial capabilities that could specifically affect missions and functions being assessed in the CBA.[12]

When the IDA study team undertook this study, the following was the status of these prerequisite inputs:

1. **Strategic guidance:** There wasn't any (the term *irregular warfare* wasn't even defined).
2. **Concept:** There wasn't any (the IW JOC was approved by the CJCS in June 2007, but is still being staffed within OSD preparatory to approval by the Secretary of Defense).
3. **Scenario:** There was not and still is not a DPS addressing IW.
4. **Joint Task–Capabilities List:** There was none for IW *per se*, since the term did not even have an approved definition.
5. **Adversary Capabilities:** If there was an ITWA from DIA, it was never made available to the team.

The team therefore used the following to approximate the missing inputs:

1. **Strategic guidance:** The team took what was happening in Iraq as the basis for strategic guidance.
2. **Concept:** The team used the evolving strategy in Iraq as the concept for IW, and was influenced by the new Army Field Manual 3-24, *Counterinsurgency*.[13]

---

[12] CJCSM 3170.01C, manual, 1 May 2007, p. A-11.

[13] US Army and US Marine Corps, *Counterinsurgency,* Headquarters, Department of the Army Field Manual FM 3-24 and Headquarters, Marine Corps Combat Development Command Marine Corps Warfighting Publication MCWP 3-33.5, December 2006. The team also spent some time exploring an operational concept that was centered on the attitudes of the population. *See* Appendix A in this volume.

3. **Scenario:** The team used what was happening in Iraq as the scenario.
4. **Joint Task–Capabilities List:** The team developed its own set of twenty-three missions, and from them derived a list of ninety-two capabilities.
5. **Adversary Capabilities:** The team took what the insurgents in Iraq are doing as representative of the capabilities available to an IW adversary.

This page is intentionally blank.

Appendix D. Bibliography

Contents

Books, Journal Articles, Reports, Reference Sources

Baranick, Michael, "Learning from History," in *Transforming for Stabilization and Reconstruction Operations*, Hans Binnendijk and Stuart E. Johnson, eds., (Washington: National Defense University Press, 2004).

Baylouny, Anne Marie, "Alhurra, the Free One: Assessing US Satellite Television in the Middle East," *Strategic Insights* Vol. IV, Issue 11, November 2005, accessed 16 January 2007 at http://www.ccc.nps.navy.mil/si/2005/Nov/baylouny Nov05.asp.

Chandrasekaran Rajiv, *Imperial Life in the Emerald City*, (New York: Knopf, 2006).

Chiarelli, Peter W., Major General, and Major Patrick R. Michaelis, "Winning the Peace: The Requirements for Full-Spectrum Operations," *Military Review*, July–August 2005, pp. 1–14.

Crane, Conrad C. and W. Andrew Terrill, *Reconstructing Iraq: Insights, Challenges, and Missions for Military Forces in a Post-Conflict Scenario*, (Carlisle, PA: Strategic Studies Institute, US Army War College, February 2003).

Finer, Jonathan, "5,000 U.S. and Iraqi Troops Sweep Into City of Tall Afar," *Washington Post*, 3 September 2005, A25.

Finer, Jonathan, "Iraq Minister Cites Threat of Hussein Loyalist," *Washington Post*, 21 December 2005, A24.

Flournoy, Michele, "Interagency Strategy and Planning for Post-Conflict Reconstruction," in *Winning the Peace*, (Washington, DC, The CSIS Press, 2004).

Flournoy, Michele, "Training and Education for Post-Conflict Reconstruction," in *Winning the Peace*, Robert C. Orr, ed., (Washington, The CSIS Press, 2004).

Glantz Aaron, *How America Lost Iraq*, (New York: Penguin, 2005).

Glenn, R., C. Paul, and T. Helmus, *People Make the City—Joint Urban Operations Observations and Insights from Afghanistan and Iraq*, RAND Corporation, MG-428/1-JFCOM, April 2007, For Official Use Only.

Hashim, Ahmed S., *Insurgency and Counter-Insurgency in Iraq*, (Ithaca, NY: Cornell University Press, 2006).

Hurley, William J., Alec Wahlman, COL Thomas Sward, USMC, Duane Schattle, Joel B. Resnick, *Department of Defense Roadmap for Improving Capabilities for Joint Urban Operations*, IDA Paper P-3643, two volumes, Institute for Defense Analyses, Alexandria, Virginia, March 2002, For Official Use Only. Contact the Joint Urban Operations Office at US Joint Forces Command for an update on these programs: http://www.jfcom.mil/about/fact_juo.htm.

Hurst, Steven R., "U.S. Commander: Force Size Is Adequate for Iraq," *Associated Press*, 28 August 2003, accessed 29 August 2003 at www.washingtonpost. com.

Kaplan, Robert D., *Imperial Grunts: The American Military on the Ground*, (New York: Random House, 2005).

O'Hanlon, Michael E. and Nina Kamp, *Iraq Index: Tracking Variables of Reconstruction and Security in Post-Saddam Iraq*, Brookings Institution, Accessed 27 April 2006, http://www.brook.edu/ iraqindex.

Orr, Robert C., "Governing when Chaos Rules," in *Winning the Peac*e, Robert C. Orr, editor, (Washington, CSIS Press, 2004).

Petraeus, David H., LTG, "Learning Counterinsurgency: Observations from Soldiering in Iraq," *Military Review* (January–February 2006).

Rosen, Nir, *In the Belly of the Green Bird: The Triumph of the Martyrs in Iraq*, (New York: Free Press, 2006).

Shafer, D. Michael, *Deadly Paradigms: The Failure of US Counterinsurgency Policy*, (Princeton, NJ: Princeton University Press, 1988).

Sorley, Lewis, *A Better War: The Unexamined Victories and Final Tragedy of America's Last Years in Vietnam*, (New York: Harcourt, 1999).

Webster's Ninth New Collegiate Dictionary, Merriam-Webster Inc., 1985.

White, Josh, "Along Iraq-Syria Border, a Struggle to Cover the Terrain," *Washington Post*, 1 November 2006.

Defense Science Board Reports and Studies

Defense Science Board 2004 Summer Study on Transition to and from Hostilities, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, Washington, DC, December 2004.

DSB Task Force Report on Force Protection in Urban and Unconventional Environments, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, Washington, DC, March 2006.

Office of the Under Secretary of Defense (AT&L), *Defense Science Board 2006 Summer Study on 21st Century Strategic Technology Vectors*, February 2007.

Report of the Defense Science Board Task Force on Managed Information Dissemination, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, Washington, DC, October 2001.

Report of the DSB Task Force on Strategic Communication, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, Washington, DC, September 2004.

US Department of Defense

Chairman, Joint Chiefs of Staff, *Joint Capabilities Integration and Development System*, CJCSI 3170.01F, 1 May 2007.

Chairman, Joint Chiefs of Staff, *Joint Operations Concepts Development Process*, CJCSI 3010.02B, 27 January 2006.

Chairman, Joint Chiefs of Staff, *Operation of the Joint Capabilities Integration and Development System*, CJCSM 3170.01C, 1 May 2007.

Defense Intelligence Agency and Irregular Warfare Support Program, *Development of a Civil-Police Capability for the DoD in Counterinsurgency War-fighting*, 30 January 2006, For Official Use Only.

Department of Defense Dictionary of Military and Associated Terms, 12 April 2001 (As Amended in 12 July 2007), Joint Publications 1-02, (Washington, DC: US Department of Defense, 2007). Accessed 28 September 2007, http://www.dtic.mil/doctrine/jel/doddict/index.html.

Deputy's Advisory Working Group (DAWG), [personal communication to authors], 6 February 2007.

US Department of Defense, Joint Staff, *Information Operations Roadmap*, 30 October 2003, Unclassified.

Irregular Warfare Support Program, *Quick–Look Assessment of Iraqi Law Enforcement*, version 1.3, 25 September 2006, For Official Use Only.

Joint Staff, *Doctrine for Joint Urban Operations*, Joint Publication 3-06, 16 September 2002.

Joint Staff, *Information Operations*, Joint Publication 3-13, 13 February 2006.

Joint Staff, *Joint Operations*, Joint Publication 3-0, 17 September 2006.

Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations, DoDD No. 3000.05, 28 November 2005.

Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations, DODD Directive Number 3000.05, (Washington, DC, 28 November 2005).

Quadrennial Defense Review Irregular Warfare Execution Roadmap, 15 December 2006.

Secretary of Defense, *Quadrennial Defense Review Report*, Washington, DC, February 2006, downloaded 20 August 2007 from https://acc.dau.mil/CommunityBrowser.aspx?id=32488.

US Joint Forces Command, Joint Warfighting Center, *Irregular Warfare Special Study*, 4 August 2006.

Services (Army, Air Force, Navy, and Marines)

Center for Emerging Threats and Opportunities, *CETO Quick Look: Dealing with the Civilian Population in Post-Saddam Iraq*, Marine Corps Warfighting Laboratory, 6 February 2003, accessed 30 July 2006, www.ceto.quantico.usmc.mil/studies/Post-SaddamIraq.pdf.

US Army and US Marine Corps, *Counterinsurgency,* Headquarters, Department of the Army Field Manual FM 3-24 and Headquarters, Marine Corps Combat Development Command Marine Corps Warfighting Publication MCWP 3-33.5, December 2006.

US Army, Office of the Deputy Chief of Staff for Military Operations, *A Program for the Pacification and Long-Term Development of South Vietnam (PROVN),* (Defense Technical Information Center, Ft. Belvoir, VA, March 1966).

US Department of State

Office of the Coordinator for Reconstruction and Stabilization, *Post-Conflict Reconstruction Essential Task*s, (April 2005).

State [cable] 140016, "Rule of Law Demarche," cable to US ambassador in Iraq, 26 August 2006.

US House of Representatives

US House of Representatives, *Report of the Committee on Armed Services House of Representatives on H.R. 4205*, Report 106-616, May 2002.

US Government

Bowman, Steve, *Iraq: U.S. Military Operations,* (Congressional Research Service, Washington, DC, 18 May 2005).

National Security Council, *National Strategy for Victory in Iraq*, November 2005.

Schlesinger, James R., chairman, *Final Report of the Independent Panel to Review DoD Detention Operations*, August 2004.

Special Inspector General for Iraq Reconstruction, *July 2006 Quarterly and Semiannual Report*.

Miscellaneous

Davidson, Janine, Mark Smith, and Peter Brooks, briefings by, and discussions with, SAIC/Hicks & Associates in 2005 and 2006. (Their analysis on the "micro-foundations" of insurgency, 2005 and 2006.)

Institute for Defense Analyses, Task Order AJ-8-2743, Joint Advanced Warfighting Program, subtask 5, (Institute for Defense Analyses, Alexandria, VA).

Lacey, James, personal communication with authors, 2005, face-to-face interviews with US military in Iraq.

Appendix E. Acronyms and Abbreviations

This page is intentionally blank.

APC	armored personnel carrier
ARNG	Army National Guard
AT&L	Acquisition, Technology, and Logistics
ATF	Alcohol, Tobacco, and Firearms
AWACS	Airborne Warning and Control System
BDA	Battle Damage Assessment
C2	command and control
C3	command, control, and communications
C4ISR	command, control, communications, computers, intelligence, surveillance, and reconnaissance
CAP	combined action platoon
CBA	capability-based assessment
CETO	Center for Emerging Threats and Opportunities
CIDG	Civilian Defense Group
CINC	Commander-in-Chief
CJCS	Chairman, Joint Chiefs of Staff
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CJCSM	Chairman of the Joint Chiefs of Staff Manual
CMO	civil-military operations
CNO	computer network operations
COCOM	combatant command
COIN	counterinsurgency
CONOPS	concept of operations
CPA	Coalition Provisional Authority
CSIS	Center for Strategic and International Studies
DAWG	Deputy's Advisory Working Group
DDR&E	Director, Defense Research and Engineering
DIA	Defense Intelligence Agency
DoD	Department of Defense (United States)
DoS	Department of State (United States)
DOTMLPF	doctrine, organization, training, materiel, leadership and education, personnel, and facilities

DPS	defense planning scenario, Defense Planning Scenario
DSB	Defense Science Board
DSPD	Defense Support to Public Diplomacy
EMP	electromagnetic pulse
EOD	explosive ordnance disposal
EPA	Environmental Protection Agency
EW	electronic warfare
FAA	Functional Area Analysis
FEMA	Federal Emergency Management Agency
FLN	Front de Libération Nationale
FM	field manual
FNA	Functional Needs Analysis
FSA	Functional Solutions Analysis
FSO	Foreign Service Officer
FYDP	Future Years Defense Program
GoI	Government of Iraq
GPS	Global Positioning Satellite
GVN	Government of Vietnam
GWOT	Global War on Terrorism
HASC	House Armed Services Committee
HAZMAT	hazardous materials
HMMWV	High Mobility Multi-Purpose Wheeled Vehicle
HN	host-nation
HNG	host-nation government
HUMINT	human intelligence
IDA	Institute for Defense Analyses
IED	improvised explosive device
IMN	Iraqi Media Network
IO	information operations
IPB	Intelligence Preparation of the Battlefield

ISF	Iraqi security forces
ISR	intelligence, surveillance, and reconnaissance
IT	information technology
ITWA	Initial Threat Warning Assessment
IW	irregular warfare
JAWP	Joint Advanced Warfighting Program
JCA	Joint Capabilities Area
JCD&E	Joint Concept Development and Experimentation
JCIDS	Joint Capabilities Integration Development System
JCOA	Joint Center for Operational Analysis
JDAM	Joint Direct Attack Munition
JFC	joint force commander, Joint Functional Concept
JFCOM	Joint Forces Command (United States)
JIC	Joint Integrating Concept
JIEDDO	Joint Improvised Explosive Device Defeat Organization
JOpsC	Joint Operations Concept
JP	joint publication
JROC	Joint Requirements Oversight Council
JTF	joint task force
JWFC	Joint Warfighting Center
KIA	killed in action
LTG	lieutenant general
MANPAD	man-portable air defense
MCO	major combat operations
MI	military intelligence
MoI	Ministry of the Interior
MOUT	Military Operations in Urban Terrain
MP	military police
NATO	North Atlantic Treaty Organization
NDS	National Defense Strategy

NGO	non-governmental organization
NLOS	non-line of sight
NMS	National Military Strategy
NSC	National Security Council
NTC	National Training Center
NYPD	New York Police Department
OAS	Organisation Armée Secrète
OIF	Operation Iraqi Freedom
OODA	observe, orient, decide, act
OPSEC	operations security
ORHA	Office of Reconstruction and Humanitarian Assistance
OSCE	Organization for Security and Cooperation in Europe
OSD	Office of the Secretary of Defense
PA	Public Affairs
PA&E	Programs Analysis and Evaluation
PD	public diplomacy
PME	Professional Military Education
PROVN	Program for the Pacification and Long-Term Development of South Vietnam
PSYOPS	psychological operations
QDR	Quadrennial Defense Review
QRF	Quick Reaction Force
R&D	research and development
RF	radio frequency
RoE	Rules of Engagement
RoL	Rule of Law
RPG	rocket-propelled grenade
RW	regular warfare
S&T	science and technology
SC	strategic communications

SOCOM	Special Operations Command
SOF	special operations forces
TC	Theater Communications
TTP	tactic, techniques, procedures
UAV	unmanned aerial vehicle
UJTL	Universal Joint Task List
UK	United Kingdom
UN	United Nations
USA	United States Army
USAF	United States Air Force
USAID	United States Agency for International Development
USD	Under Secretary Of Defense
USECT	understand, shape, engage, consolidate, transition
USG	United States Government
USMC	United States Marine Corps
USSOCOM	United States Special Operations Command
VBIED	vehicle-borne improvised explosive device
VC	Viet Cong
VCJCS	Vice Chairman Joint Chiefs of Staff
WIA	wounded in action
WMD	weapons of mass destruction
WP	Warsaw Pact

This page is intentionally blank.

REPORT DOCUMENTATION PAGE	Form Approved OMB No. 0704-0188

1. REPORT DATE (DD-MM-YY)	2. REPORT TYPE	3. DATES COVERED (From – To)
August 2007	Study (Final)	

4. TITLE AND SUBTITLE	5a. CONTRACT NO.
Improving Capabilities for Irregular Warfare. Volume I: Framework and Applications	DASW01-04-C-0003
	5b. GRANT NO.
	5c. PROGRAM ELEMENT NO(S).

6. AUTHOR(S)	5d. PROJECT NO.
William J. Hurley, task leader; Joel B. Resnick; and Alec Wahlman	
	5e. TASK NO. AJ-8-2456; AJ-8-2743
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NO.
Joint Advanced Warfighting Program – Institute for Defense Analyses 4850 Mark Center Drive, Alexandria, VA 22311-1882	IDA Paper P-4267

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR'S / MONITOR'S ACRONYM(S)
Director, Rapid Reaction Technology Office Defense Research and Engineering; Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics 2231 Crystal Dr., Suite 900, Room 9204 Arlington, VA 22202	RRTO
	11. SPONSOR'S / MONITOR'S REPORT NO(S).

12. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for public release; distribution unlimited.

13. SUPPLEMENTARY NOTES

Volume I: Framework and Applications. Volume II: Capabilities Analysis.

14. ABSTRACT

This two-volume report describes a framework for identifying program initiatives aimed at significantly improving US capabilities for irregular warfare (IW). The framework has two components: a characterization of the capabilities needed to conduct IW in terms of the *type* of capability (Understand, Shape, Engage) and the *object* being addressed (Environment, Population, Host-Nation Government, Red, Blue); and a set of five attributes (Human Terrain, Civil-Military Coordination, IW Combat Characteristics, Consolidation, and Transition) that distinguish IW from "regular warfare." The report first applies the framework to Iraq-like IW. It identifies a set of twenty-three high-level missions and ninety-two capabilities, which are broadly assessed on the basis of recent performance. The report then applies the framework to specific areas of high importance: Transition, Theater Communications, Personal Interactions, Civilian and Military Organizations and Activities, Policing-Related Capabilities, and Technology. Each application illustrates the study approach to identifying directions for initiatives for improving performance. Finally, the report discusses steps for implementing IW-related initiatives within DoD and how the process may serve as a vehicle for focusing the attention of subject-matter experts and stakeholders on critical IW issues.

15. SUBJECT TERMS

Analysis; assessment; capability; civil-military coordination; counterinsurgency; framework; human terrain; influence operations; Iraq; irregular warfare; law-enforcement techniques; military; mission; personal interactions; policing; process; program; reconstruction; rule of law; security; stability; technology; tools; transition.

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NO. OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE	UU	250	Mr. Benjamin Riley
U	U	U			19b. TELEPHONE NUMBER (Include Area Code) (703) 602-0689

This page is intentionally blank.