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Building Partner Capabilities for Coalition Operations

Jennifer D. P. Moroney • Nancy E. Blacker Renee Buhr • James McFadden Cathryn Quantic Thurston • Anny Wong

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Published 2007 by the RAND Corporation 1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138 1200 South Hayes Street, Arlington, VA 22202-5050 4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665 RAND URL: http://www.rand.org To order RAND documents or to obtain additional information, contact Distribution Services: Telephone: (310) 451-7002; Fax: (310) 451-6915; Email: order@rand.org This monograph documents research conducted for the U.S. Army on the feasibility of adopting a new approach to building partner capabilities and capacity for coalition operations. It is the latest in a series of RAND Arroyo Center studies supporting the Army's efforts to bolster the capabilities of partner armies for the spectrum of coalition operations.

Ongoing operations and emerging mission requirements place a heavy burden on Army resources, resulting in capability gaps that the Army is unable to fill by itself. One way to fill those gaps is to build the appropriate capabilities in allies and partner armies through focused security cooperation. As a supporting entity, the Army must use its limited resources in a way that effectively builds capabilities that support Joint requirements, and it must do so through close coordination with other agencies to build capacity.

This monograph builds on prior RAND Arroyo Center work by examining the types of capabilities the U.S. Army might develop in partner armies, based on current and anticipated U.S. Army capability gaps. This study argues that U.S. Army planners need a more comprehensive understanding of the types of capability gaps that partner armies might fill and a process for matching them with candidate partner armies. The study also provides guidelines for planning associated Army security cooperation activities and discusses the importance of developing metrics that would allow the Army to assess its security cooperation investment over time.

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This monograph outlines an approach to building the capabilities and capacity of partner armies for coalition operations through the effective use of Army security cooperation. It is important to clarify two key terms in this study, specifically, the difference between capability and capacity. Simply put, *capability* is the ability to perform a function, and *capacity* is the extent of a capability present.¹ Ongoing operations and emerging missions create competing demands for the Army's capabilities, resulting in requirement gaps that the Army is unable to fill by itself. Although there are other ways to fill capability gaps (e.g., with other Services, contractors, or increased Army end-strength), national and Department of Defense (DoD) strategic guidance emphasizes the need to leverage the capabilities of allies and partners to fill these gaps. Thus, this monograph is concerned with how the Army should focus its security cooperation activities to build the most appropriate capabilities in partner armies. As a supporting entity, it must use its limited security cooperation resources in a way that effectively builds partner

¹ These definitions were developed specifically for this study, and differ somewhat from the Joint Capability Area (JCA) lexicon. The study team felt that the latter definitions were too narrowly focused on specific capabilities. According to the JCA lexicon, Building Military Partner Capability refers to "the ability to improve the military capabilities of our allies and partners to help them transform and optimize their forces to provide regional security, disaster preparedness and niche capabilities in a coalition." Building Military Partner Capacity refers to "the ability to encourage and empower the military capacities of our allies and partners through training, education, assistance, diplomacy and other activities so they are prepared to protect homelands, defeat terrorists, and protect common interests while strengthening relations with friendly global and regional powers." "Joint Capability Areas, Tier 1 & Tier 2 Lexicon" (2006).

army capabilities that support Joint requirements. To do this, the Army cannot work in isolation. Partnering with DoD and other U.S. government agencies provides the solution and also enables the development of partner capacity.

This study is part of a larger RAND Arroyo Center effort to assist the U.S. Army in building partner capabilities through enhanced and focused security cooperation. It argues that U.S. Army planners need a comprehensive understanding of the types of capability gaps that partner armies might fill and provides a process for matching them with potential partner capabilities. The study also provides insights into planning associated with Army security cooperation activities and discusses the importance of developing metrics that would allow the Army to assess its security cooperation investment over time.

A New Approach to Building Partner Army Capabilities for Coalition Operations

The study begins with a discussion of the current challenges associated with building capabilities and capacity with partner armies. The discussion focuses on the theory of collective action and the challenge of developing metrics to evaluate Army security cooperation activities. It describes the U.S. Army's role in the development of capability and capacity metrics and shows how they can be linked to security cooperation programs in a way that produces outputs and outcomes relevant to the desired end-states. Several illustrative train and equip programs (TEPs) were reviewed to identify specific lessons that the Army should examine before planning and executing similar TEPs. The review specifically highlights the importance of selecting capabilities sustainable by partners. The analysis shows that economic limitations may pose a serious challenge to the sustainment of capabilities that are relatively complex and costly. It suggests that caution should be taken to avoid developing capabilities that are otherwise widely available among allies, require a high level of effort to build, or are of a lower level of importance to the U.S. Army.

The monograph then identifies U.S. Army capability gaps through a review of strategic and operational guidance documents and relevant Army and Joint studies. Because the Army is a supporting entity, its capability gaps reflect Combatant Command (COCOM) requirements, taking into account Integrated Priority Lists (IPLs), Joint Operating Concepts (JOCs), and COCOM Theater Security Cooperation (TSC) strategies. The result of the review is a set of relevant capability gaps that may be appropriate for building in partner armies and that form the analytic basis for subsequent chapters.

Next, the monograph provides a five-step process for matching U.S. Army capability gaps with candidate partner armies. It presents a set of criteria to help Army planners select candidate partner armies for training or equipping programs. The five steps are (1) determine the relative importance of capability gaps to the U.S. Army in specific situations, (2) consider the level of effort required to build the capability in a partner army, (3) identify capabilities of shared interest to the U.S. Army and the partner army, (4) identify candidate partner armies based on past participation in U.S.-led operations, and (5) determine existing partner army capabilities. The process aims to help Army planners identify which capabilities are of mutual benefit to the United States and partner nations. Finally, the study team applied the five-step process to the data available for one illustrative TEP to gauge its predictive ability.

Recommendations

The study recommends that Headquarters, Department of the Army (HQDA) adopt a focused approach for building the capabilities and capacity of partner armies for coalition operations. To do this, HQDA should focus its efforts on filling capability gaps to support Joint requirements and implement a five-step process for matching U.S. Army capability gaps with partner armies. A further recommendation is that HQDA incorporate specific lessons from previous and ongoing TEPs to improve future planning, execution, and assessment of its security cooperation programs. HQDA should focus on the programs

it controls for building partner capabilities but should coordinate with other agencies to consider all appropriate resources and activities to build partner capacity. Finally, the study recommends developing and employing metrics that link activities to build capability and capacity with the desired ends, thus providing a way to ensure the effective planning and execution of Army security cooperation activities. We owe a great debt to a number of officers, civil servants, and analysts for their assistance on this study. These include current and past members of Army Staff G-35, U.S. European Command, U.S. Army Europe, Special Operations Command Europe, U.S. Central Command, U.S. Army Central Command, U.S. Pacific Command, U.S. Army Pacific, Special Operations Command Pacific, the Joint Staff, the Office of the Secretary of Defense, and the National Guard Bureau.

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ort	AAR
n, Canada, Australia	ABCA
gency Operations Training an	ACOTA
Response Initiative	ACRI
Cross Servicing Agreement	ACSA
of the Philippines	AFP
onal Activities	AIA
onal Activities Plan	AIAP
l Exchange Program	APEP
ies Integration Center	ARCIC
Component Command	ASCC
Cooperation Strategy	ASCS
ce-members Protection Act	ASPA
Planning Guidance	ASPG
Assistance Program	АТАР
nation Roadmap	ATR
ege	AWC
l Exchange Program ies Integration Center Component Command Cooperation Strategy ce-members Protection Act Planning Guidance Assistance Program nation Roadmap	APEP ARCIC ASCC ASCS ASPA ASPG ATAP ATR

BMATT	British Military Advisory Training Team
BPC	Building Partner Capacity
C4	command, control, communications, and computers
CENTCOM	Central Command
CGA	Capability Gap Analysis
CI	counterintelligence
CJCS	Chairman of the Joint Chiefs of Staff
CMEP	Civil-Mlitary Emergency Preparedness
CNA	Capability Needs Analysis
COCOM	Combatant Command
COIN	counterinsurgency
CSA	Chief of Staff of the Army
CSF	Coalition Support Fund
CTFP	Counterterrorism Fellowship Program
CTU	Counterterrorism Unit
DHS	Department of Homeland Security
DoD	Department of Defense
DOJ	Department of Justice
DOS	Department of State
DOTMLPF	Doctrine, Operations, Training, Materiel, Leader- ship, Personnel, and Facilities
DSCA	Defense Security Cooperation Agency
EDA	excess defense articles

ERC	exercise-related construction
ESEP	Engineer and Scientist Exchange Program
EU	European Union
EUCOM	European Command
EXBS	Export Control and Related Border Security
EXORD	Executive Order
FCTP	Foreign Comparative Testing Program
FID	Foreign Internal Defense
FMF	foreign military financing
FMS	foreign military sales
GDP	gross domestic product
GIG	Global Information Grid
GPOI	Global Peacekeeping Operations Initiative
GTEP	Georgia Train and Equip Program
HQDA	Headquarters, Department of the Army
HUMINT	human intelligence
ICC	International Criminal Court
ICRDA-DPS&T	International Cooperative Research, Development and Acquisition–Development, Production, Sci- ence and Technology
IED	improvised explosive device
IFOR	International Security Force
IFP	International Fellows Program
IMET	International Military Education and Training

IPL	Integrated Priority List
ISAF	International Security Assistance Force
ISC	intelligence security cooperation
ISR	intelligence, surveillance, and reconnaissance
JCA	Joint Capability Area
JCEP	Joint Combined Exchange Program
JCET	Joint Combined Exchange and Training
JFCOM	Joint Forces Command
JMETL	Joint Mission Essential Task List
JOC	Joint Operating Concept
JOpsC	Joint Operations Concept
JTF-HOA	Joint Task Force Horn of Africa
KFOR	Kosovo Force
MAJCOM	Major Command
MARFOREUR	Marine Forces Europe
MCF	Multinational Force Compatibility
МСО	Major Combat Operation
METL	Mission Essential Task List
MFO	Multinational Force of Observers
MIP	Multinational Interoperability Program
MOD	Ministry of Defense
MOE	measure of effectiveness
MP	Military Police
MPP	Mission Performance Plan

NADR	Nonproliferation, Antiterrorism, Demining and Related Program
NATO	North Atlantic Treaty Organization
NDS	National Defense Strategy
NGO	nongovernmental organization
NMS	National Military Strategy
NSS	National Security Strategy
O&M	operations and maintenance
OBS	Operation Balanced Strike
OEF-P	Operation Enduring Freedom–Philippines
OIF	Operation Iraqi Freedom
OSD/P	Office of the Secretary of Defense for Policy
PA&E	Program Analysis and Evaluation
PACOM	Pacific Command
PFP	Partnership for Peace
РКО	Peacekeeping Operations
PSI	Pan-Sahel Initiative
QDR	Quadrennial Defense Review
RDT&E	research, development, testing, and evaluation
ROK	Republic of Korea
SAO	Security Assistance Office
SCG	Security Cooperation Guidance
SFOR	Stabilization Force
SOCCENT	Special Operations Command Central

SOCEUR	Special Operations Command Europe
SOCPAC	Special Operations Command Pacific
SOF	Special Operations Forces
SOFA	Status of Forces Agreement
SOLIC	Special Operations Low-intensity Conflict
SON	Schools of Other Nations
SOP	standard operating procedures
SOUTHCOM	Southern Command
SPP	State Partnership Program
SSOP	Sustainment and Stability Operations Program
SSTRO	stability, security, transition, and reconstruction operations
TEP	Train and Equip Program
TRADOC	Training and Doctrine Command
TSC	Theater Security Cooperation
TSCTI	Trans-Sahel Counterterrorism Initiative
ТТР	tactics, techniques, and procedures
U.K.	United Kingdom
U.N.	United Nations
USACE	U.S. Army Corps of Engineers
USAID	U.S. Agency for International Development

Major challenges confront the U.S. Army as it seeks to enhance its ability to work more effectively with partner armies in an operational context. U.S.- and NATO-led operations in Iraq and Afghanistan provide recent examples of large-scale coalitions. Efforts in Kosovo, Bosnia, Haiti, Sinai, and Somalia also demonstrate that the U.S. Army must be able to operate effectively with many different partner armies of varying capabilities around the world. These and other missions are creating competing demands for Army capabilities that result in requirement gaps that the Army is unable to fill.

This monograph argues that U.S. Army planners need a comprehensive understanding of the capability gaps that partner armies might fill and a process for matching them with candidate partner armies whenever possible and appropriate. Although there are various ways to fill capability gaps (e.g., with other Services, contractors, or increased Army end-strength), strategic guidance emphasizes the need to leverage the capabilities of allies and partners for this purpose.¹ Thus, this

¹ Previous RAND analysis suggests that, from a standpoint of using comparative advantage as a rational framework for assessing burden-sharing issues, there is potentially a "business case" for cultivating foreign partner niche capabilities. Given the U.S. Army's current operational and financial constraints, it appears to make sense from a cost standpoint to help our allies and partners develop their capabilities in certain niche areas. Further research is needed to decrease the uncertainty over the requirements and costs of building niche capabilities at home and overseas. In addition, the financial benefits accruing to the United States from developing an overseas niche capability will depend on the degree of risk mitigation pursued (i.e., the number of niche units built in the Unites States or in partner nations) as

monograph focuses on an approach to building the most appropriate capabilities in partner armies.²

Indeed, emerging Department of Defense (DoD) strategic guidance, including the 2005 Quadrennial Defense Review (QDR)³ and the 2006 Building Partnership Capacity [BPC] Execution Roadmap, emphasizes building the military capabilities of partner countries that will enable them to make valuable contributions to coalition operations.⁴

The key questions addressed by the monograph include:

- Which types of military capabilities should the U.S. Army target and why?
- In which partner armies should the Army invest its security cooperation resources?
- What are the characteristics of effective security cooperation activities?
- How will the Army know if its security cooperation investments are paying off?

Addressing these questions will help the Army effectively and efficiently allocate its security cooperation resources. This study will help

well as the existing shortfalls in the military capabilities and requirements of our foreign partners. See Moroney, Grissom, and Marquis (2007, p. 101).

² Although the authors recognize the important role played by other U.S. government entities in security cooperation, a discussion of interagency collaboration is outside the scope of this study.

³ Department of Defense (2005).

⁴ The QDR and the 2006 *Building Partnership Capacity Execution Roadmap* describe an evolving concept. The concept includes guidance on how DoD should train and equip foreign military forces and also points to the need to improve the capacity of other security services (i.e., stability police, border guards, and customs) within partner countries. Moreover, the concept also calls for improving DoD's ability to work with nonmilitary forces (i.e., other U.S. government agencies and nongovernmental organizations (NGOs), coalition partners, and the private sector) in an operational context for integrated operations. The Army is in a position to influence the direction of DoD's emerging BPC strategy. At present, the Army does not yet have its own Service-level plan for BPC.

the U.S. Army create a more systematic approach to building partner army capabilities and capacity for coalition operations through security cooperation. Two key terms used in this study are capability and capacity. Capability refers to the ability to perform a function, whereas capacity refers to the extent of a capability present.⁵ Although the study primarily focuses on the development of partner army capabilities, it also addresses how capability is transformed into capacity through working closely with other U.S. government agencies and leveraging other security cooperation activities.

Study Objectives

This study has five objectives. The first is to identify current and anticipated U.S. Army capability gaps and determine which of them may be appropriate for partner armies to fill. The second is to develop a process that will enable the Army to match these capability gaps with appropriate partner armies. The third is to examine previous and ongoing train and equip programs (TEPs) to identify lessons that may be used in future training programs with partner armies. The fourth is to provide the rationale for developing metrics to track progress in building capabilities and capacity. The final objective is to provide recommendations for using Army security cooperation resources to enhance the capabilities of partner armies to engage in coalition operations.

⁵ These definitions were developed specifically for this study, and differ somewhat from the Joint Capability Area (JCA) lexicon. The study team felt that JCA definitions were too narrowly focused on specific capabilities. According to that lexicon, building military partner capability refers to "the ability to improve the military capabilities of our allies and partners to help them transform and optimize their forces to provide regional security, disaster preparedness and niche capabilities in a coalition." Building military partner capacity refers to "the ability to encourage and empower the military capacities of our allies and partners through training, education, assistance, diplomacy and other activities so they are prepared to protect homelands, defeat terrorists, and protect common interests while strengthening relations with friendly global and regional powers." See "Joint Capability Areas" (2006).

Approach

The RAND study team undertook a number of analytic activities to accomplish the study objectives outlined above, including a literature review of national, DoD, and U.S. Army strategic guidance on requirements for capabilities and security cooperation. The team also reviewed Army and Joint capability gap assessments, partner capabilities and contributions to coalition operations, and after-action reports (AARs) on several train and equip programs. The team conducted workshops with subject matter experts and spoke extensively with key policy planners and implementers at Department of the Army headquarters (HQDA), the Combatant Commands (COCOMs), and the Component Commands. The preliminary findings of earlier drafts of this monograph were also vetted with these functional and regional experts.

Organization of the Monograph

Chapter Two provides an overview of the current challenges associated with building partner capabilities and capacity with partner armies. It begins with a set of assumptions regarding security cooperation and a discussion of the theory of collective action; it then provides an overview of the challenge associated with developing metrics to evaluate Army security cooperation activities. The chapter closes with a discussion of key findings for several TEPs to identify lessons that may be used for future Army security cooperation. Chapter Two is linked with Appendix A, which provides background, context, and key findings of each TEP reviewed by the study team.

Chapter Three identifies U.S. Army capability gaps based on known requirements identified through a review of strategic and operational guidance documents and appropriate Army and Joint studies. It is linked with Appendix B, which provides detailed definitions for each capability gap.

Chapter Four describes a five-step process for matching U.S. Army capability gaps with candidate partner armies. Step 1 determines the relative importance of capability gaps to the U.S. Army. Step 2 considers the level of effort required to build the capability in a partner army. Step 3 identifies capabilities of shared interest to the United States and the partner. Step 4 identifies candidate partner armies as determined by past participation in U.S.-led operations. Step 5 determines existing partner army capabilities. This process will help Army planners identify capabilities that are mutually beneficial to the U.S. Army and partner armies. The study team then applied the five-step process to the data available for one illustrative TEP to gauge its predictive ability.

Chapter Five presents RAND's recommendations. In addition to suggesting that the Army adopt a five-step process for matching U.S. Army capability gaps with partner armies, the chapter outlines a number of planning, programmatic, and assessment changes that would make Army security cooperation planning and execution more effective.

The Challenge of Building Partner Capability and Capacity: Theory and Practice

This chapter provides an overview of the current challenges associated with building capabilities and capacity with partner armies. It is divided into three sections, beginning with the study's assumptions regarding security cooperation, followed by a discussion of the theory of collective action.

Section two provides an overview of the challenge of developing metrics to evaluate Army security cooperation activities. It describes the U.S. Army's role in the development of capability and capacity metrics and shows how they can be linked to security cooperation programs to assess outputs and outcomes relevant to the desired end-states.

Section three provides key findings from several TEPs. The study team analyzed seven TEPs from a planning/funding and execution perspective to identify lessons that could be used for future Army security cooperation. TEPs represent a mechanism to build partner capabilities and capacity through security cooperation, providing focused training and equipment. The analysis includes TEPs conducted in Georgia, Colombia, the Philippines, the Pan-Sahel and Maghreb regions of Africa, Yemen, and Central Asia. A common set of factors is applied to determine the strengths and weaknesses of each TEP. An additional goal of this section is to identify lessons that could inform the development of metrics. Detailed descriptions of the background and context for each TEP are in Appendix A.

Assumptions and Theory

The process for matching U.S. Army capability gaps with candidate partner armies is based on six assumptions. Underlying all of them is an assumption of rationality.¹ Successful collaboration between the United States and partners depends on the extent to which each is acting in its own state interest. When these interests align, cooperation is more likely to be fruitful and sustainable. The first three assumptions, therefore, deal directly with U.S. Army interests and the last three assumptions address partner army interests.

Assumption 1: The U.S. Army has two major reasons for building partner capabilities and capacity. The first is to integrate partners into ongoing and future U.S.-led coalition operations around the world. The second is to enable partners to address domestic and regional problems *without* U.S. military participation.²

Assumption 2: The U.S. Army has two primary ways to fill capability gaps using partner armies. The first is to focus on partner armies that already have the required capabilities. The second is to build these capabilities from a basic level or to significantly improve nascent capabilities, over a longer period.

Assumption 3: The U.S. Army can fill some of its capability gaps with partner armies using security cooperation programs. Ideally, the U.S. Army could meet all of its capability requirements by itself. However, budget limitations make it necessary to consider other ways to acquire these capabilities. Either the capability gap can remain unaddressed and the Army accepts that risk or the Army may choose to try to harness the preexisting abilities of a partner army or to develop a capability in a partner army through a TEP. This largely depends on the U.S. Army's assessment of the reliability of the partner army. The

¹ For a seminal work on applying rational actor assumptions to the study of security issues, see Schelling (1963). Also, see Olson and Zeckhauser (1966, pp. 266–279), and Sandler (1993, pp. 446–483).

² This chapter and, indeed, the overall monograph, does not focus on building capabilities in partner armies for their own domestic purposes or to enable them to participate in operations in their region without the United States, though we recognize that domestic utility is an important motivation for BPC.

cost of developing the partner army's capability or, indeed, the cost of forgoing that capability in one's own army in the hopes that a partner will be available to fill that gap requires that the expected benefit of cooperation outweigh the costs.

The next three assumptions provide a context for thinking about building partner capabilities and security cooperation from the partner's perspective.

Assumption 4: The strength of a partner's support for U.S. operations around the world indicates the extent to which that partner's international views and interests overlap those of the United States. The primary evidence of such support includes a partner's participation in major U.S.-led military operations, although location and type of operation are also important considerations.³ A secondary indicator of support is the coincidence of the partner's United Nations (U.N.) General Assembly voting record with that of the United States. A similar stance on issues deemed "important" by the U.S. Department of State (DOS) might serve as a signal of shared political interests.⁴

Assumption 5: Security cooperation activities that aim to build partner capabilities are more likely to succeed and potentially develop into capacity if the capability is of interest to both the partner and the U.S. Army.⁵

Assumption 6: A partner will probably be more interested in developing capabilities that (1) have domestic application,⁶ (2) increase its international prestige, and (3) support its military transformation or modernization efforts. A higher level of interest will increase the likeli-

³ See Appendix C for details on how "substantial participation" is determined and for a full list of the U.S.-led coalition operations examined.

⁴ These correlations are an important consideration in selecting candidate partner armies to fill U.S. Army capability gaps, as they suggest that the partner will likely be available to participate. However, partner countries should be willing to accept the fact that support of U.S.-led coalition operations may make them a target for terrorist attacks.

⁵ Other factors such as domestic budgetary constraints that could affect a partner's ability to sustain a capability may also influence a partner's decision to deepen its military cooperation with the United States.

⁶ The study team views domestic and regional utility as important considerations for gaining partner buy-in and especially for sustaining a capability.

hood of long-term sustainment of capabilities and can potentially lead to development of capacity—provided the partner has the resources and will to become involved. The challenge to the U.S. Army is to overcome the impulses of its partners to be free riders.⁷

Much conceptual work has addressed this challenge; some of the insights were useful in establishing the fourth, fifth, and sixth assumptions detailed above. One way to overcome the collective action dilemma is to provide certain exclusive goods to those who contribute to the collective effort. This logic can easily apply to security cooperation: A partner that supports the United States in coalition operations gains some exclusive good (e.g., training or equipment). By comparison, those that do not support the United States in coalition operations would not receive such training or equipment because they are less-likely candidates for participation in Army security cooperation activities.

This logic has been a fundamental force behind U.S. foreign policy decisions, including its security cooperation endeavors. Nevertheless, getting a partner to support the United States in coalition operations (or any other enterprise) is not always an easy task—even for a superpower such as the United States. Moreover, the certainty of this support is always in question even when the United States appeals to shared interests and provides partners with incentives such as financial or military materiel. Therefore, it makes sense to choose partners with common interests so that the United States will be able to count on its partners to maintain, sustain, and mobilize their capabilities in support of shared goals without additional incentives.

Another way to overcome the collective action problem and engender long-term security cooperation is by tailoring the coopera-

⁷ Game theory, and the insights provided by rational actor assumptions outlined above, can give analysts a useful way to think about coalition relationships. Alliances or ad hoc coalitions are a form of security cooperation that fall under the larger rubric of collective action problems. A rational state, or rational partner, will often hope to forgo the investment in providing a public good (in this case, international or regional security) in the hopes that another state will single-handedly incur the costs. Since public goods are by their nature nonexcludable, the free rider state will expect to enjoy the good provided by the state incurring the cost. Very often, the stronger the state, the more willing it will be to incur the cost and allow the other states to free ride. See Olson (1965).

tive relationship in a way that the partner state's own interest reinforces. In gaming terms, it is possible to move from a collaboration game scenario⁸ to a coordination game scenario, where cooperation is the optimal result.⁹ This type of game is easier to enforce and continue, since both partners gain a greater payoff from cooperating than from defecting.¹⁰

Maintaining this type of game and, by association, security cooperation depends on two other important variables. First, both parties must be convinced that their relationship will continue into the future; in other words, they are involved in "iterated" games with one another.¹¹ The expectation that partner states will cooperate in an indefinite number of interactions is essential to making the long-term payoff for cooperation outweigh the short-term payoff for defection. This provides an important insight into the choice set of coalition partners; the states involved in the cooperation should have some reason to believe that cooperation will continue.¹²

The second variable that must be accounted for in maintaining a coordination game is the political suitability of the partner, which is directly linked with the first discussed above. By and large, democratic governments, or those with at least some trappings of democracy (e.g., free and fair elections, open economies, and freedom in expression and association), may more likely be deemed "acceptable" partners for U.S. security cooperation activities; however, in practice, states without strong democratic traditions are sometimes acceptable because of political or military expediencies. However, if the United States is

⁸ Such as the typically uncooperative Prisoner's Dilemma with high payoffs for defection.

⁹ An example is the Battle of the Sexes game.

¹⁰ Martin (1992).

¹¹ Axelrod and Keohane (1985).

¹² One could argue that countries involved in formal alliances such as NATO (which has shown remarkable resiliency as an institution and in retaining its membership), or those interested in joining a formal alliance such as NATO, may be more willing to consider the long-term payoff. Likewise, states that participate in other cooperative endeavors with the United States, either through international organizations or through bilateral agreements, may be more likely to cooperate because of the potential for issue linkage across these cooperative domains. See Wallander (2000); Keohane (1984).

training a partner army in, for example, a potentially lethal capability, criticism is far less likely if it involves a democratic regime. An authoritarian regime may use these skills at home; the fact that the United States provided them with the skills would be politically untenable. However, when dealing with democracies, one must take into account the two levels at which partner states are playing. Partner states must play the "domestic" game, paying attention to their constituents and domestic special interests, while concurrently playing a game on the international level with their coalition partners.¹³

Because states must balance the demands of this two-level game, it is especially important that state interests and the sentiment of state electorates be considered when determining how much the U.S. Army can count on the availability of a given partner to support U.S.-led coalition operations. Prior assistance to U.S. military efforts may be an indication that the domestic level is relatively amenable to U.S. foreign policy. Another indicator of shared interest is a partner's U.N. General Assembly voting record. Regardless, the nature of electoral institutions and democratic governance indicates that at times, established partners will be unable to cooperate in a particular security cooperation endeavor. Thus, one can only determine the likelihood of cooperation from a partner in probabilistic terms. Overall, those who have collaborated with the U.S. Army in the past may be more likely to do so in the future than those who have not, but there is no absolute guarantee of cooperation in all scenarios. The interests to keep in mind in the strategic game of coordination include political and military goals. It is important to bear in mind that often partner interests go beyond the material (e.g., financial and materiel) to encompass the symbolic. Partners are likely to have an interest in increasing their prestige, on either a domestic or international level.¹⁴ Prestige has its uses; partner states may believe that increased prestige will give them more bargaining power in their relationships with other states, or they may believe that prestigious military capabilities have domestic value in terms of

¹³ See Putnam (1988).

¹⁴ For an example of the literature on prestige and military capabilities, see Perkovitch (1998); Katzenstein (1996).

national sentiment or distraction from domestic political issues. It is therefore important to motivate partners to participate in security cooperation with the U.S. Army not only to meet their domestic needs but also to foster shared interests with the United States and to secure partner support in coalition operations.

The Challenge of Developing Metrics¹⁵

Measuring the effectiveness of activities requires asking how well an activity serves to produce the desired results, relative to goals and objectives. For the private sector, this question is often linked to whether, and to what degree, a company makes a profit. For the public sector, assessing effectiveness is more challenging, since profit is not the ultimate goal. Instead, the objectives might be linked to public safety and health, security, economic growth, and other public goods and services. Consequently, government agencies have shifted increasingly to measuring their effectiveness by how well results of their activities contribute to agency missions and goals.

Metrics for capability measure the ability to perform a function, i.e., the type, quality, and quantity of knowledge, skills, materiel support, or interoperability achieved. Metrics for capacity measure the extent of capacity present, i.e., its availability, readiness, operational strength, or the performance of partner armies. For COCOMs and partner armies—the users of the new capabilities—knowing what kind of capability is present is not enough to ensure effective operations planning and mission success. Therefore, capacity data are important in determining how quickly the desired capabilities can be mobilized, how much capability is available, and for how long it can be deployed.

Building partner capability is not an end-state but is instead an interim step toward building partner capacity. Using logic modeling, Figure 2.1 illustrates how Army security cooperation contributes to improving partner support of a particular mission, in this case, stabil-

¹⁵ The rationale for developing metrics for building partner capability and capacity builds on previous RAND Arroyo Center research for HQDA. See Marquis et al. (2006).

ity, security, transition, and reconstruction operations (SSTRO), as an illustrative end-state.¹⁶ Capability and capacity can increase or decrease over time depending on how well they are sustained. To depict this relationship, Figure 2.1 uses broken arrows to connect the outputs with outcomes and the outcomes with ends.

Figure 2.1 can be read from left to right and vice versa. Left to right is the view most familiar to those involved in planning and executing Army security cooperation activities. Reading it from left to right provides an operational view that connects inputs (e.g., personnel, funding) to Army security cooperation activities, which in turn produces outputs; in other words a capability is produced. These capabilities enable the development of outcomes that promote the desired endstates. By comparison, reading this diagram from right to left allows for a more strategic view of Army security cooperation that begins with

Figure 2.1

Inputs –	Security — Cooperation — Activities	Outputs ·····	Outcomes ····	···▶ Ends
Billets, \$\$\$	Builds and sustains knowledge and skills and supports materiel transfer	Partner acquires capability	Partner capacity grows	Improves partner support in SSTRO
		Metrics: Quality/type and quantity of capabilities acquired	Metrics: Military readiness Operational strength Performance	
Army	Army, other Services, other U.S. agencies, contractors	Partner armies		COCOMs
Title 10	Titles 10 and 22			

RAND MG635-2.1

¹⁶ Although the Army currently uses the term "Stability Operations," at the time of this study, this mission area was referred to as SSTRO.

the desired ends and considers what is needed to attain them. This is a view common to those involved in strategic policy and program planning. These two views are complementary, connecting policy guidance with operational processes. It is important to note that an awareness of both the policy demands and the operational processes helps to identify the most appropriate metrics for the outputs (i.e., capabilities) and outcomes (i.e., capacity) of Army security cooperation.

Army security cooperation activities, whether they involve, for example, classroom instruction, field training and exercises, or transfer of equipment, enable partner armies to build capabilities through the acquisition of skills, materiel support, and interoperability. Army security cooperation activities can also contribute to sustaining capabilities, especially when working with other U.S. government partners, which in turn can lead to increased capacity.

Previous RAND Arroyo Center research classified more than 70 Army security cooperation activities into eight categories.¹⁷ For example, as shown in Table 2.1, military training teams, found within the category of military education and training, can develop a partner army's skills. Moreover, U.S.–United Kingdom combined exercises can promote both skills development and interoperability.

Other types of Army security cooperation activities (e.g., military exercises) enable partner armies to test the capabilities they have acquired. Also, a long-term, stable relationship in security cooperation helps partner armies sustain capabilities.

It is important to tie capabilities to appropriate security cooperation programs in a way that produces outputs relevant to the desired end-states. Building partner capability in force protection, for example, requires identifying the many programs that will help create this capability. The point is that Army activities alone may not lead to all of the desired outputs, and it will probably be necessary to look outside the Army for other important contributions. Table 2.2 illustrates how Army, DoD, and interagency programs might collectively develop skills, provide materiel support, and build interoperability.

¹⁷ Marquis et al. (2006).

Categories	Program Examples	Capability Outputs (Skills Development, Materiel Support, Interoperability)
Military education and training	Military training teams Marshall Center for Security Studies	Skills development Skills development
Military-to-military contacts	U.S. Army Corps of Engineers (USACE) International Program Civil Military Emergency Preparedness Program	Skills development, material support Skills development
Military-to-military exchanges	Military Personnel Exchange Program Reciprocal Unit Exchange Program	Skills development Skills development
Standing forums	Conference of European Armies North Atlantic Treaty Organization (NATO) Standardization Agreement	Interoperability Interoperability
Military exercises	U.S.–United Kingdom combined exercises America, Britain, Canada, Australia (ABCA) Exercise Program	Skills development, interoperability Skills development, interoperability
Research, development, testing, and evaluation (RDT&E)	Information Exchange Program Engineers and Scientists Exchange Program	Skills development, interoperability Skills development, interoperability
International support arrangements and treaty compliance	United Nations Military Observer Arms Control Treaty Implementation	Skills development, materiel support
Materiel transfer and technical training	Foreign military sales/ financing Excess Defense Articles (EDA)	Materiel support Materiel support

Table 2.1 Army Programs Linked to Categories and Outputs

Table 2.2 shows that Army programs focus more heavily on skills development and interoperability. Materiel support relies more on other DoD programs and interagency activities. Collectively, security

	Skills Development	Materiel Support	Interoperability
Army Program	Schools of Other Nations (SON), Medical outreach, Civil-Military Emergency Preparedness (CMEP), Engineer and Scientist Exchange Program (ESEP), Army Personnel Exchange Program (APEP)	N/A	Army War College International Fellows Program (AWC- IFP), Multinational Interoperability Program (MIP), International Cooperative Research, Development and Acquisition– Development, Production, Science and Technology (ICRDA-DPS&T), SON
DoD Program	Counterterrorism Fellowship Program (CTFP), Joint Staff exercises, National Guard State Partnership Program (SPP), Intelligence Security Cooperation (ISC)	Exercise-Related Construction (ERC)	Joint Staff exercises, CTFP, State Partnership Program (SPP), ISC, Foreign Comparative Testing Program (FCTP)
Interagency Program	Foreign Military Financing (FMF), Foreign Military Sales (FMS), International Military Education and Training (IMET), Anti- Terrorism Assistance Program (ATAP), Export Control and Related Border Security (EXBS) Program, Global Peacekeeping Operations Initiative (GPOI), and Nonproliferation, Antiterrorism, Demining and Related (NADR) Program	FMF, FMS, Excess Defense Articles (EDA)	FMF, FMS, IMET

Table 2.2 Using Multiple Programs to Develop Outputs and Outcomes

cooperation that leverages programs across the U.S. government can address all the desired outputs and outcomes, which potentially lead to the development of capacity.

In practice, the Army plays a supporting role to the COCOMs in security cooperation. COCOMs articulate their priorities for security cooperation through their Theater Security Cooperation Strategies, which aim to advance the goals and priorities of the Secretary of Defense.¹⁸ Clearly articulated goals and objectives from the COCOM enhance the Army's efforts to evaluate its security cooperation programs and activities, as well as ensure that its efforts to plan and prioritize resources for future activities support the needs of the COCOMs.

The Importance of Train and Equip Programs for U.S. Army Planning

Recent and ongoing TEPs are important to analyze for several reasons. Planners at the strategic level reviewing recent DoD guidance (e.g., QDR, *BPC Execution Roadmap*, OSD Security Cooperation Guidance (SCG)) have begun to concentrate their security cooperation resources more heavily on the train and equip aspects of building partner capabilities.¹⁹ As mentioned above, TEP lessons can also inform the development of metrics for building partner capabilities and capacity by highlighting specific goals for sequencing activities. Metrics in turn can be useful in helping Army planners develop TEPs and assess program success over time or within a specific phase.²⁰

At the operational level, it would be useful for the U.S. Army to look more closely into the lessons of past TEPs to avoid inefficiencies in future endeavors. It is important that Army planners understand the best sequencing of security cooperation activities (e.g., basic training before advanced technical training) to maximize the partner army's ability to build and sustain a capability. Moreover, by delving into the details of the operational planning and execution of each TEP, opportunities can be identified for leveraging the capabilities and

¹⁸ "How the Army Runs 2005–2006" (2006).

¹⁹ Section 1206 of the 2006 Defense Authorization legislation authorized DoD to appropriate an additional \$200 million toward training and equipping foreign forces.

²⁰ In the case of the TEPs examined in this monograph, overall assessments were not conducted. Instead, only piecemeal evaluations of specific security cooperation activities were conducted ad hoc, and on occasion, of TEP phases. This approach to assessment does not lend itself to a comprehensive view of how the various security cooperation activities combine to produce a successful TEP.

resources of other actors (e.g., other Services, interagency, or donor countries) for sustainment purposes—a key factor in developing capacity.

The study team had a difficult time finding historical data for all the TEPs analyzed. At the tactical level, historical data on TEPs are not readily available to units implementing TEPs. Some limited data from AARs are maintained in various databases at the COCOMs and component commands but, overall, historical data, particularly from TEP assessments, have not been maintained. Army training teams responsible for developing curricula and methods could benefit greatly from such insights, if they were available.

In an effort to identify some specific TEP lessons, the study team considered the following key questions:

- 1. What are the major recurring themes from each TEP?
- 2. What are the key success stories, perhaps conveyed through anecdotal evidence?
- 3. If there were major problems, were they attributable to a planning or execution issue within the TEP or were the problems political? Could they have been mitigated through better planning?
- 4. In the illustrative TEPs surveyed where the U.S. Army was not heavily involved during all stages, was there a particular gap the Army could have filled?
- 5. What key collective lessons should be taken into account for future TEPs to avoid mission failure or significant adverse mission effects?

Selection of TEPs

An illustrative TEP from each COCOM provides geopolitical diversity to our assessment. In addition, the examples include both bilateral and multilateral training, as well as conventional and unconventional training methods. Some were led by the U.S. Army or Army Special Forces, whereas in others, the Army played the supporting role to another Service. $^{21}\,$

The study team selected a few long-running TEPs that included distinct training phases. The team believed that the longer the duration and the more TEP phases, the more likely that AARs and assessments would be available. Of the seven TEPs considered, three included at least two distinct phases:

- Georgia Train and Equip Program (GTEP)/Sustainment and Stability Operations Program (SSOP)
- African Crisis Response Initiative (ACRI)/African Contingency Operations Training and Assistance (ACOTA) program (sub-Saharan Africa)
- Pan-Sahel Initiative (PSI)/Trans-Sahel Counterterrorism Initiative (TSCTI) (North Africa).

The remaining TEPs were of shorter duration and consisted of only one phase:

- Operation Enduring Freedom–Philippines (OEF-P)
- Plan Colombia
- Yemen
- Operation Balanced Strike (OBS) Central Asia.

Key Factors Examined

Eleven factors were examined relative to each of the seven TEPs:

- Type of program (e.g., peacekeeping)
- Training method (e.g., led by U.S. military, or contractor)
- Specific goals
- Partner forces trained/equipped
- Duration of program

²¹ Although not an exhaustive representation of all possible TEPs, this sample set reflects the study team's best effort to identify a reasonable cross-section of typical TEPs around the world.

- Cost and specific security cooperation programs/activities employed
- Army role and other U.S. and partner military forces involved
- Partner and U.S. civilian interagency involvement
- Equipment and infrastructure provided
- Assessment conducted
- Donor countries involved.

What follows is an overview of the key findings from the seven TEPs along with the overall key themes that emerge from the collective analysis. The detailed background, context, and key findings for each TEP are found in Appendix A.

Collective Findings from the TEPs

During the course of the TEP analysis, several common themes emerged. They are grouped under two headings: planning/funding and execution. Many of these findings reveal complex issues that will be difficult to resolve.

Planning/Funding

1. Consider multiple sources of funding at the outset. Because TEPs are typically not funding sources in and of themselves, the resources to support them are compiled from several funding sources. These programs may have different legislative rules and requirements that govern their use. For example, some programs allow for the provision of training or equipment, but others do not. More specifically, some allow for lethal training and some only for nonlethal training.²² Therefore, it is important to include program managers and planners with detailed knowledge of specific funding issues early on in the planning process.

 $^{^{22}}$ The authorization in Section 1206 of the 2006 National Defense Authorization Act to conduct additional TEPs will require creativity to ensure that they are properly resourced from the outset.

- 2. *Plan for the long term regarding equipment provided to a partner.* Often, the equipment purchased for a TEP is a short-term fix.²³ A more strategic view of what that equipment may be used for in the future, including coalition operations where a high level of interoperability with the U.S. Army is required, will help planners determine whether the equipment provided is likely to be appropriate in the longer term.
- 3. Sequence training/equipment to ensure suitability to the environment, and resource accordingly. To increase a partner's ability to take advantage of the training provided by a TEP, the provision of training and equipment in a logical, sequential way (i.e., developing basic soldiering skills before introducing advanced technical training and equipment) is an important consideration. Moreover, a greater awareness of other DoD and U.S. government agencies' activities that could be incorporated into the TEP would help Army planners take a more comprehensive approach to planning and execution. It is also important for specific training activities (e.g., military training teams) to accompany the equipment provided, particularly when it is technologically complex.
- 4. Train fully manned units with professional soldiers where possible; plan for recurring training requirements; obtain commitment for multiple-year sustainment. The partner units selected for a TEP should be fully manned with professional soldiers (rather than conscripts) before the start of the TEP. This will ensure a higher level of return on U.S. security cooperation investment. It is important to medically clear all soldiers selected for TEP training. Planning should include provisions for recurring training after the initial TEP is complete to ensure a higher level of sustainability. Likewise, a multiple-year commitment from the partner will also increase capability sustainment.
- 5. Assess the program as a whole, not just as specific activities or phases. Of the TEPs considered by the study team, only limited assessments were conducted. In the cases where assessments were

²³ Through, for example, an excess defense article grant or from another donor country.

mandated, they typically focused on specific activities or, in some cases, individual phases. Planners did not assess each TEP as a whole. A comprehensive, program-wide approach to TEP assessment would provide a better understanding of the overall effectiveness in accomplishing the objectives set forth and would provide data for output metrics.²⁴ It would also allow the program managers to see which activities work well and why, potentially helping to reallocate Army security cooperation resources to address the gaps.

- 6. *Manage partner expectations early and throughout the TEP*. High operational tempo requirements for U.S. forces sometimes result in cancellation or postponement of a TEP-related training activity. Although this is not always avoidable, it is important to consider the political consequences of canceling or postponing key training events.
- 7. Increase U.S. and partner interagency involvement to improve sustainability. Planners may wish to include other security services in the most advanced stages of the TEP, perhaps as a culminating event, to test interoperability and procedural issues in the partner country. National response to disasters and consequence management exercises may be a venue for considering how the TEP forces fit within the response capabilities and procedures on a national level.
- 8. Coordinate with key donors through a clearinghouse arrangement to improve sustainability. Consulting donors early on in the TEP process though bilateral mechanisms, or perhaps through a broader clearinghouse involving multiple donors, can help reduce the burden on U.S. forces and increase the sustainment potential of the TEP-trained forces by ensuring long-term financial commitment to the trained forces. However, the United States should not necessarily rely on donors for critical pieces

²⁴ For example, the Army Peacekeeping and Stability Operations Center at the Army War College in Carlisle, Pennsylvania, or the Center for Army Lessons Learned in Fort Leavenworth, Kansas, might consider taking on this role of capturing lessons from DoD train and equip programs.

of the TEP, since political will and resource availability from donors is often tenuous and uncertain.

9. Ensure human rights vetting for all participants, not just the military. From the U.S. perspective, this includes Leahy Amendment²⁵ vetting for both military and civilian officials.²⁶ TEP planners must consider violations relative to criminal acts, corruption, and human rights abuses, for both the partner country and the individual soldiers. Lack of adherence to the Leahy provisions can quickly put an end to a TEP.

Execution

1. Army conventional forces could have been more heavily involved in many DoD TEPs. U.S. Special Forces and the U.S. Marine Corps often led the TEPs, since the training was primarily for Special Operations Forces (SOF) units. However, of the TEPs considered in this chapter, the partner military forces started from a very low level of capability; therefore, highly specialized U.S. forces may not have been necessary to include at each stage of the TEP. In future TEPs, the Army should consider augmenting the training provided by other Services with conventional army forces or even reserve forces or the National Guard,²⁷ especially if operational tempo requirements do not lend themselves to allowing Army SOF participation.

²⁵ The Department of State has the lead for human rights vetting under the Leahy Amendment provisions. See http://www.state.gov/g/drl/rls/42314.htm.

²⁶ The Leahy amendment to the DoD Appropriations Act for 2006 states, "None of the funds made available by this Act may be used to support any training program involving a unit of the security forces of a foreign country if the Secretary of Defense has received credible information from the State Department that the unit has committed a gross violation of human rights, unless all necessary corrective steps have been taken" (P.L. 109-148 §8069).

²⁷ Specifically worth considering is the National Guard's State Partnership Program (SPP) which pairs U.S. states with foreign partners to conduct military-to-military, civil-to-military, and civil-to-civil activities to build partner capacity.

- 2. Programs executed by the U.S. military resulted in improved military-to-military relationships. Although contractors have effectively augmented U.S. military forces in certain TEPs, they are no substitute for "the uniform" in developing and sustaining an official military-to-military relationship with the partner country. Defense consultants bring a valued expertise to the TEP, but their involvement is unlikely to create or support a militaryto-military relationship.
- 3. Building the capability at higher headquarters to manage forces increases sustainability. Training units without incorporating higher headquarters into the overall training program and educating them as to proper use of the forces can inhibit the effective employment of the TEP-developed capabilities. For example, there is a danger that those forces could be used for missions other than what they were trained for if the higher headquarters is not involved in training.
- 4. Emphasis on regional and multinational activities as well as common doctrine and procedures improves regional interoperability. Most TEPs have a regional application, even if the connection is not explicit. Building capabilities that are applicable at the regional level requires common standard operating procedures (SOPs) and tactics, techniques, and procedures (TTPs) with neighbors, and a host of multinational activities to exercise those capabilities at various stages of the TEP. Such an approach is likely to improve regional interoperability.
- 5. Establishing an Army unit specifically for training foreign forces should be considered. It may be worth considering the establishment of an Army unit that would be dedicated to the training and equipping of foreign armies.²⁸ Of course, the creation of such a unit will depend on U.S. operational tempo.

²⁸ For example, the U.S. Marine Corps has done this and has had considerable success in training foreign forces.

Conclusion

The theoretical discussion in the first part of this chapter stresses the importance of shared interests in motivating partners to participate in security cooperation and, more important, to sustain capabilities and build capacity.

The development of metrics for both building partner capability and increasing partner capacity to conduct operations is essential to help planners and operators evaluate the effectiveness of Army security cooperation activities. HQDA, as the supporting entity, must coordinate with the COCOMs and Army Service Component Commands (ASCCs) to develop metrics, especially those for capacity. These metrics will help to keep security cooperation programs on track by helping to sequence activities in pursuit of specific interim goals and final end-states. This chapter also illuminates some specific lessons that the Army should be aware of before planning and executing TEPs in the future. By highlighting the challenges of collective action, the role of Army security cooperation activities in producing measurable outputs and outcomes, and the lessons from previous TEP efforts, this chapter provides the context and rationale for identifying gaps and for developing a process to match them with partner armies. The following chapter describes this process in detail.

Identifying U.S. Army Capability Gaps for Coalition Operations

This chapter identifies U.S. Army capability gaps¹ based on known requirements identified through a review of national and DoD strategic and operational guidance documents and Army studies on capability gaps. The intent is to identify a set of capability gaps that might be met by developing relevant capabilities in partner armies. Comparing multiple studies provided a way to corroborate the importance of specific capability gaps. Many capabilities appeared in two or more of the studies considered, despite the different methodologies used by the authors. This finding increased the study team's confidence in the list of capability gaps discussed at the end of this chapter. It is important to note that the study team relied on the reports and analyses available at the time to identify current U.S. Army capability gaps. Therefore, the process described may not be repeatable exactly as written. However, it should provide a useful template for Army planners to use in future efforts to identify gaps.

Strategic-Level Guidance Documents

National Strategies

The study team reviewed national and DoD strategic and operational guidance as well as capability assessment studies to identify capability gaps. The National Security Strategy (NSS) provides top-level strategic

¹ Gaps in capabilities may be the result of no existing capability or a lack of proficiency or sufficiency in an existing capability. (Chairman of the Joint Chiefs of Staff, 2005.)

guidance to DoD and other departments and a framework for interagency strategic planning. A major theme of the March 2006 NSS is that the United States must gain the support and active cooperation of friends and allies. It is in this spirit that the National Defense Strategy (NDS)—DoD's internal strategic guidance document—addresses the need to strengthen alliances and partnerships.² The NDS points out that the United States does not currently have the capacity to address all global security challenges without assistance and will require the support of the international community.

The Chairman of the Joint Chiefs of Staff (CJCS) develops the National Military Strategy (NMS) to implement the NDS. The NMS outlines the nation's military objectives and desired capabilities, priorities, and attributes for all the armed forces in the military operational spectrum. Carrying forward the guidance contained in the NSS and NDS, the NMS instructs the military departments to enable "multinational partners through security cooperation and other engagement activities."³

Both the NDS and NMS direct the Service Chiefs and Combatant Commanders to identify required capabilities. Two key methods for achieving this are the Integrated Priority List (IPL) and the Joint Operations Concept (JOpsC).⁴ Combatant Commanders prepare IPLs, which establish prioritized lists of capability shortfalls.⁵ In addition to IPLs, Joint Forces Command (JFCOM), in coordination with

² National Defense Strategy (2005, p. iv).

³ National Military Strategy (2004, p. 8).

⁴ According to section four of the JOpsC, "The JOpsC, Joint Operating Concepts (JOCs), Joint Functional Concepts and Enabling Concepts represent an interrelated construct of concepts. In this construct of concepts, joint operating concepts, joint functional concepts, and enabling concepts are subordinate to the JOpsC." Joint Operations Concepts (2003).

⁵ The Department of Defense Dictionary of Military and Associated Terms describes the integrated priority list as "A list of a Combatant Commander's highest priority requirements, prioritized across Service and functional lines, defining shortfalls in key programs that, in the judgment of the Combatant Commander, adversely affect the capability of the Combatant Commander's forces to accomplish their assigned mission. The integrated priority list provides the Combatant Commander's recommendations for programming funds in the planning, programming, and budgeting system process."

other COCOMs, develops JOpsCs, which provide a foundation for defining military capabilities by describing the characteristics of the future Joint Force.⁶ The key point taken from the national-level strategic documents is the importance of developing U.S. capabilities and cooperating with partner militaries to meet U.S. strategic goals and fill capability gaps.

Army Strategies

At the Service level, the Army Strategic Planning Guidance (ASPG) and the Army Transformation Roadmap (ATR) build the foundation for comparing capability gaps to Army needs. These documents link directly to the department-level strategies. The ASPG is the Army's institutional strategy and serves as its principal long-range planning document. The ASPG is linked to the JOpsC and provides guidance to "optimize our forces, capabilities, and organizations to best contribute to the joint capabilities and methods required of each of the joint operating concepts and joint functional concepts."⁷ The ATR is the Army's strategy for executing transformation and military modernization while sustaining the high demand for operational forces. It describes how the Army will support the Combatant Commanders' ability to execute their missions by providing relevant capabilities to the joint team.⁸

Army Capabilities Studies

The study team reviewed studies conducted by Training and Doctrine Command's (TRADOC) Army Capabilities Integration Center (ARCIC) and the G-3.⁹ In addition, the study team consulted with experts from the Joint Staff to determine if there are additional capabil-

⁶ Joint Operations Concepts (2003, pp. 14–17).

⁷ Army Strategic Planning Guidance FYs 2006–2023 (p. 6).

⁸ Army Transformation Roadmap (2003, pp. 1–7).

⁹ The study team engaged in focused discussions with the authors of these studies. The studies provide detailed information about required capabilities and gaps and offer analysis that prioritizes them.

ity gaps not identified by the Army.¹⁰ The ARCIC, part of TRADOC, produced two of the four studies used by the study team.¹¹ These two studies—the Capability Needs Analysis (CNA) and the Capability Gap Analysis (CGA)—speak directly to current Army capability gaps. It is important to note that the studies used the Combatant Commanders' IPLs and the JOpsC as primary sources for identifying these gaps. A discussion of each of these studies follows.

Capabilities Needs Analysis

The CNA assists the Army with the development of its future force by

- identifying and assessing Army requirements to support Joint required capabilities
- assessing and integrating the programmed Doctrine, Operations, Training, Materiel, Leadership, Personnel, and Facilities (DOTMLPF) solutions supporting the Army requirements identified above
- identifying required capability gaps that the Army cannot fill.¹²

The CNA first identifies 1,300 Joint and Army capabilities from the JOpsC. It then consolidates these capabilities into 61 "required capabilities," which are rank-ordered and sorted into three categories. The top 30 capabilities represent a high risk of mission failure if absent or lacking; the second category (capabilities 31–47) poses a medium risk of mission failure if absent or lacking. The remaining 14 capabilities are low risk, presenting minor mission effect if not addressed. From these, Army planners identified the top 11 capability gaps, shown in Table 3.1.

 $^{^{10}}$ These discussions revealed no additional capability gaps not already highlighted in the Army studies.

¹¹ ARCIC is responsible for the identification, design, development, and synchronization of capabilities into the Army current Modular Force and the future Modular Force, bringing together all the Army agencies as well as joint, multinational, and other DoD agencies to manage rapid change. ARCIC identifies capabilities for the Army across Doctrine, Operations, Training, Materiel, Leadership, Personnel, and Facilities (DOTMLPF) imperatives.

¹² U.S. Army, Training and Doctrine Command (2005).

Table 3.1 CNA Capability Gaps

1. Enhanced Soldier Protection

- 2. Modular, Scalable, and Tailorable Battle Command and Control
- 3. Enhanced Platform/Group Protection
- 4. Dynamic Uninterrupted C4 Architecture
- 5. Ability to Train the Force How and as It Fights
- 6. Ability to Detect and Identify Full Range of Obstacles
- 7. Sustainment of Modular Forces
- 8. Enhanced Intelligence, Surveillance, and Reconnaissance (ISR)
- 9. Modular, Tailorable Forces
- 10. Capability for Lethal Overmatch

11. Strategic Force Projection/Intratheater Operational Maneuver and Sustainment

Capability Gap Analysis

Also conducted by ARCIC, the CGA differs from the CNA in that it deals with the near term as opposed to anticipated capability gaps and draws heavily on COCOM IPLs as primary source documents. This analysis assesses force needs by identifying both capability gaps and performance requirements.¹³

During the evaluation process, ARCIC categorized the gaps by source and then prioritized them based on frequency of occurrence in the various sources. Finally, it adjusted the initial draft prioritization

¹³ The CGA assists in near-term resource decisions, informs Future Force Gaps CNA and experimentation, influences industry research and development, identifies requirements for science and technology research, and affects the Army budget in the execution year and supplemental request. U.S. Army, Training and Doctrine Command (2006).

using the Delphi technique.¹⁴ The result was the list of the top ten capability gaps depicted in Table 3.2.¹⁵

Of note, although produced using different source documents and methodologies, these two ARCIC studies share several capability gaps. This is an important finding, since the two studies used different source documents and methodologies. The concurrence of similar

Table 3.2 CGA Capability Gaps

- 1. Networked-Enabled Battle Command
- 2. Protect Force in Counterinsurgency Operations
- 3. Soldier Protection in Counterinsurgency Environment
- 4. Logistics and Medical in Counterinsurgency (COIN) Operations and Non-Contiguous Battlespace
- 5. Train the Force How and as It Fights
- 6. Tactical Communications
- 7. Ability to Conduct Joint Urban Operations
- 8. Joint Interoperability, Coalition, and Interagency Operations
- 9. Enhanced ISR Capabilities
- 10. Timeliness of Analysis, and Information Dissemination

¹⁴ RAND developed this technique in the late 1960s as a forecasting methodology. It was later adopted by the U.S. government as a group decisionmaking tool that permits a group of experts to arrive at a consensus of opinion when the decisive factors were subjective and not necessarily empirically observable. Part of this analysis involved a subjective process wherein gaps were ranked relative to one another. Once quantitatively ranked, each subgap went through a "Near Term Rating"—a subjective assessment of how near-term solutions mitigate subcapability gaps: red—does not enable mission performance to standard; amber—can partially enable mission performance; and green—enables mission performance to standard. The subgaps were likewise assessed. It is worth noting that the Delphi technique has been criticized for not being scientifically rigorous. Its chief critic, Harold Sackman, does admit, however, that the Delphi technique does "have value as an informal exercise for heuristic purposes" (Sackman, 1974).

¹⁵ Table 3.2 also illustrates how current operations in Iraq and Afghanistan have driven Army capability gaps specifically for counterinsurgency operations.

gaps across the studies suggests their importance not only for current use but also for their role in future Army and Joint operations.

HQDA G-3 Army Capability Analysis

The HQDA Army Capability Analysis, led by the G-3, focuses on top Service capability priorities, as opposed to Joint capability gaps. G-3 uses a subjective, weighted analysis, producing a product linked to such guidance as the ASPG.¹⁶ The result is a prioritized list of the Army's top 36 capabilities (see Table 3.3).

The study team compared the G-3 study results to findings from the CNA and CGA and found that 19 of the 36 Army priorities identified in the G-3 study directly corresponded with the capability gaps identified in either the CNA or the CGA.

Army Capability Gaps: A Composite, Illustrative List

Table 3.4 presents a composite list of prioritized Army capabilities found in the CNA, CGA, and G-3 studies. To synthesize the results of the three Army studies, the RAND study team first identified capability gaps and capability priorities that appeared in more than one study.¹⁷ The study team then developed new gap titles that best described each of the collective groupings. The results depicted in Table 3.4 are a grouping of five capability gaps that appeared in all three studies and an additional six gaps that appeared in only two. The rank-ordering is directly from the respective studies.

The five capabilities that appeared in all three Army studies likely represent gaps that are a high priority for the Army. The remaining six gaps are also presumably still important but considered as somewhat less so, since they were corroborated in only two of the three studies.

 $^{^{16}\,}$ Focused discussion with Headquarters, Department of the Army G-3 (2006).

¹⁷ The capabilities that were eliminated because of their appearance in only one study were primarily from the HQDA G-3 study, which focused on improving the institutional Army. Examples include "tell the Army story," "man the force," "meet statutory requirements," and "provide morale, welfare and recreation, and Army community activities."

Table 3.3 G-3's Army Capability Priorities

1. Conduct combat operations

- 2. Sustain the force
- 3. Integrate new/modernized equipment and advanced technologies into the force
- 4. Research, develop, test, and evaluate new technologies
- 5. Provide infrastructure to support Army operations
- Conduct irregular warfare to include Foreign Internal Defense (FID), counterintelligence (CI), and stability operations
- 7. Provide full-spectrum anti-terrorism/force protection
- 8. Man the force
- 9. Train, validate, mobilize, deploy, redeploy, and demobilize the force
- 10. Conduct airborne, air assault, and or special operations
- 11. Operate in a Joint environment
- 12. Provide unit-based, collective Mission Essential Task List (METL) training
- 13. Provide integrated battle command
- 14. Provide integrated logistics support to the force
- 15. Provide operational intelligence fusion
- 16. Recruit and retrain the force
- 17. Provide institutional training and education
- 18. Provide quality of life for soldiers and their families
- 19. Communicate via the Global Information Grid (GIG)
- 20. Provide movement of Army forces and materiel
- 21. Generate doctrine to support Army, Joint, and multinational operations
- 22. Provide a national-level maintenance system
- 23. Project power from installations
- 24. Conduct information operations
- 25. Provide corporate management and business operations
- 26. Conduct homeland defense and support civil authorities
- 27. Meet treaty obligations and perform theater security cooperation
- 28. Provide health/medical service support
- 29. Preserve order and provide legal administration
- 30. Enable theater access and theater opening
- 31. Meet statutory requirements
- 32. Integrate safety, occupational health, and environmental awareness throughout Army operations

Table 3.3 (continued)

33. Provide hazardous munitions detection, removal, and disposal

- 34. Conduct personnel recovery
- 35. Tell the Army story

36. Provide morale, welfare, recreation, and Army community activities

Conclusion

This chapter synthesizes the separate, but related, efforts within the Army to identify current and anticipated capability gaps. There may be other efforts under way to identify Army capability gaps within U.S. Army academic institutions or outside the Army, but these studies are the most prominent efforts within HQDA. As they are internal Army studies, we recognize that there may be inherent institutional biases. Other studies might come up with alternative lists of capability gaps that may or may not be in full agreement with the Army studies we used as the basis for our analysis. The synthesized list, although representing the Army's overall top capability gaps, is only an interim step in identifying capability gaps that would be appropriate for filling in with partner armies. Additional considerations include whether these capabilities are appropriate for a partner army, whether the capability should remain organic to the U.S. Army or other Services, and whether high-end allies could fill the gaps with existing capabilities. The following chapter describes a five-step process for matching U.S. Army capability gaps with candidate partner armies and applies the data available from one illustrative TEP to gauge its predictive ability.

Table 3.4 U.S. Army Capability Gaps: A Composite List

GAP Title	CNA	CGA	G3	Total
Networked Battle Command	2. Modular, Scalable, and Tailorable Battle Command and Control	1. Networked-Enabled Battle Command	13. Provide integrated battle command	3
Force Protection	1. Enhanced Soldier Protection 3. Enhanced Platform/Group Protection	2. Protect Force in Counterinsurgency Operations 3. Soldier Protection in Counterinsurgency Environment	7. Provide full-spectrum anti-terrorism/ force protection	3
C4 and Information Operations	4. Dynamic Uninterrupted C4 Architecture	6. Tactical Communications 10. Timeliness of Analysis, and Information Dissemination	15. Provide operational intelligence fusior 19. Communicate via the Global Information Grid (GIG) 24. Conduct information operations	ı 3
Train the Force	5. Ability to Train the Force How and as It Fights	5. Train the Force How and as It Fights	9. Train, validate, mobilize, deploy, redeploy, and demobilize the force 12. Provide unit-based, collective METL training 16. Recruit and retrain the force 17. Provide institutional training and education	3

Table 3.4 (continued)

GAP Title	CNA	CGA	G3	Total
Logistics	7. Sustainment of Modular Forces	4. Logistics and Medical in Counterinsurgency (COIN) Operations and non-contiguous battlespace	 Sustain the force Provide infrastructure to support Army operations Provide integrated logistics support to the force Provide movement of Army forces and materiel Provide a national-level maintenance system 	3
Enhanced ISR	8. Enhanced ISR Capabilities	9.Enhanced ISR Capabilities	5	2
Joint Urban Operations		7. Ability to Conduct Joint Urban Operations	11. Operate in a Joint environment	2
Force Projection	11. Strategic Force Projection/ Intratheater Operational Maneuver and Sustainment		23. Project power from installations	2
Medical		4. Logistics and Medical in Counterinsurgency (COIN) Operations and non- contiguous battlespace	28. Provide health/medical service support	2
Joint, Interagency and Coalition Operations		8. Joint Interoperability, Coalition, and Interagency Operations	21. Generate doctrine to support Army, Joint, and multinational operations	2
Detect and Identify Obstacles	6. Ability to Detect and Identify Full Range of Obstacles	/	33. Provide hazardous munitions detection, removal, and disposal	2

Matching U.S. Army Capability Gaps to Candidate Partner Armies

This chapter develops a five-step process for matching the capability gaps identified in Chapter Three with candidate partner armies.¹ For a variety of political, economic, or operational reasons, not every U.S. Army capability gap can, or should, be filled by a partner army. It presents criteria designed to help Army planners assess the extent to which U.S. Army capability gaps are appropriate for partner armies to fill.² Additionally, the chapter provides factors to consider when selecting partner armies for security cooperation training or equipment programs.

The second section focuses on the Georgia TEP to illustrate the five-step process. Specifically, the study team was interested in whether decisions made in the TEP were consistent with the logic developed in the process. In other words, if the Army had applied this process during the planning phase, would the TEP have focused on the same capabilities? The team selected the Georgia TEP because of its scope, duration, number of phases, and objective (i.e., deploy capable forces to

¹ This chapter builds on recent RAND Arroyo Center research for HQDA, including the Multinational Force Compatibility (MFC) study, which developed a four-phased planning framework for selecting candidate capabilities and candidate partner armies for niche capabilities cultivation. See Moroney, Grissom, and Marquis (2007).

² Although there are other ways to fill capability gaps (e.g., other Services, contractors, and increased Army end-strength), national and DoD strategic guidance emphasizes the need to leverage the capabilities of allies and partners to fill these gaps.

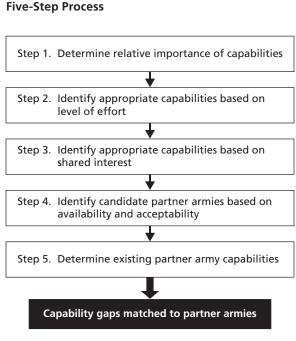
Iraq). In addition, of all the TEPs examined, the Georgia TEP had the most robust collection of assessments and after-action reports.

Approach

Considering the previous conceptual discussion, the process developed by the study team for matching U.S. Army capability gaps with partner armies includes five steps as shown in Figure 4.1. This process intends to identify capabilities of interest to the U.S. Army and candidate partners.

Step 1: Determine Relative Importance of U.S. Army Capability Gaps

The study team convened a workshop on May 18, 2006, of subject matter experts from HQDA (G-3 and G-8) and RAND to vet the



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Figure 4.1

study team's initial assessment of the importance to the Army of each capability gap.³ Although each capability is important, the importance of each relative to another is significant for Army security cooperation planners as they attempt to allocate resources. Before convening the workshop, however, the study team bounded the discussions by setting aside those capability gaps from Chapter Three considered as being clearly appropriate only for high-end allies or as an organic capability of the U.S. Army. These capabilities included

- networked battle command
- C4 and information operations
- train the [U.S.] force
- force projection
- Joint, interagency, and coalition operations.

The relative importance of each of the remaining capability gaps was derived from Table 3.4 in Chapter Three:

- force protection
- logistics
- enhanced ISR
- Joint urban operations
- medical
- detect/identify obstacles.

In addition to the capability gaps from Chapter Three, the workshop participants considered an additional four capabilities they believed would be good candidates. These include

- nonlethal capabilities
- detainee operations

³ The study team identified subject matter experts with deep knowledge of the capability gaps as well as with experience working with a variety of partners in several regions through COCOM Theater Security Cooperation. Officials from the Office of the Secretary of Defense, Special Operations/Low-Intensity Conflict (OSD/SOLIC) Stability Operations, provided additional feedback into this step separate from the workshop.

- engineering
- human intelligence (HUMINT).

Although these four capability gaps did not rank as high in the Army studies, several participants in the working group with direct and recent knowledge of ongoing operations strongly recommended their inclusion.

During the early stages of the workshop discussion, it became apparent that to reach a consensus of the relative importance of the ten capability gaps, the threat environment and mission are worth considering. The study team suggested that the participants consider the capabilities in the context of a high-threat environment, for example, the security environment that existed in parts of Iraq in early 2006. The aim of considering the threat environment was to ensure a stable context in which the capabilities could be discussed and compared. The mission category selected for the workshop was SSTRO, chosen because of its importance to the Army and its utility to partner countries.⁴ The workshop participants continued their deliberations with this scenario in mind.

Another issue was that many of the capabilities can be interpreted in a number of ways. For example, it is possible to think about force protection in terms of a networked weapons system (high-end) or a small unit patrolling without sophisticated, expensive technologies (low-end). Thus, each capability gap was discussed relative to a specific task within the broader category. For example, the workshop participants discussed force protection in relation to the more specific task of "base camp protection." Medical capabilities were discussed in reference to "controlling infectious diseases." Nonlethal capabilities were discussed as "crowd control," and so on.⁵ In sum, the greater the specificity, the better the group was able to form a consensus on the "importance" factor.

 $^{^4}$ $\,$ As opposed to more high-end capabilities reserved for Major Combat Operations (MCOs), for example.

⁵ See Appendix B for a complete description of each capability gap and the specific tasks considered.

Recognizing that all the capability gaps were important to the Army, the workshop developed two categories—"more important" and "less important"—to describe the gaps' relative importance. The following were "most important":

- force protection;
- enhanced ISR;
- Joint urban operations
- HUMINT.

Of lesser importance were:

- nonlethal capabilities
- medical
- logistics
- detect/identify obstacles
- engineering
- detainee operations.

Step 2: Identify Appropriate Capabilities Based on Level of Effort

In the second step, the workshop participants considered several factors relative to each capability. These were

- 1. complexity of the capability
- 2. cost to train and equip a partner army
- 3. level of sensitivity to U.S. national security.

The workshop participants discussed each of these factors in isolation and in a composite form labeled "level of effort," which combined complexity, cost, and sensitivity. Observations from this discussion are presented below.

First, some capabilities are highly complex and technical and require specialized education and training; others may have a lower level of complexity. Although the complexity of a capability can derive from many factors, the study team considered the following two to be most relevant: (1) the length of time to train, and (2) the technological nature of the equipment. Using these factors as a guide, the workshop participants categorized the selected capabilities as having a relatively low or high degree of complexity.

Second, some capabilities are relatively costly to develop and sustain. Indeed, the high cost of such capabilities could be one reason for gaps within the U.S. Army. Thus, low-cost capabilities that require minimal U.S. investment may be desirable for partners.

Third, some capabilities are more sensitive than others in terms of U.S. national security: for example, enhanced ISR capabilities (higher level of national security sensitivity) versus medical capabilities (lower level of national security sensitivity).

Furthermore, an engineering capability, which encompasses a broad array of disciplines (e.g., civil, electrical, and mechanical), would be both complex and costly to develop. Building such a capability in a partner army requires a significant investment in initial and follow-on training and education to develop and sustain soldiers' skills. Likewise, building an engineering capability may require that the U.S. Army provide and maintain specialized equipment to develop fully an organic engineering capability in a partner army. The complexity and cost of such an endeavor would most likely be substantial. Conversely, a capability such as detainee operations is neither as complex nor as costly to provide and does not require expensive or specialized equipment. However, there are serious sensitivities associated with the conduct of detainee operations. Not only must the partner safeguard U.S. techniques and tactics, but also it must avoid misconduct or the perception of misconduct. As a result, the U.S. Army must have the utmost confidence in a partner army entrusted with conducting detainee operations in a U.S.-led operation.

Table 4.1 summarizes the workshop's findings for Step 2. For each of the three factors, the shaded boxes indicate those capability gaps the participants determined to be at the higher end of the spectrum, i.e., most costly, most complex, and most sensitive. For example, the workshop considered detect/identify obstacles, HUMINT, and enhanced ISR to be at the higher end for each of the three factors. Engineering was high in two of the three factors, whereas the remaining capabilities were high in only one or none of the factors. To synthesize

Complexity	Cost	Sensitivity	
Detect/identify obstacles	Detect/identify obstacles	Detect/identify obstacles	
HUMINT	HUMINT	HUMINT	
ISR	ISR	ISR	
Engineering	Engineering	Engineering	
Logistics	Logistics	Logistics	
Detainee operations	Detainee operations	Detainee operations	
Joint urban operations	Joint urban operations	Joint urban operations	
Nonlethal capabilities	Nonlethal capabilities	Nonlethal capabilities	
Medical	Medical	Medical	
Force protection	Force protection		

Table 4.1 Level of Effort

these results, the study team considered that capabilities deemed high in two or more factors would require a high level of effort to build with a candidate partner.

Figure 4.2 shows how the results of this step relate to the discussion of "importance to the U.S. Army" in Step 1. "High level of effort" meant that it was "high" in relation to two or more of the factors listed in Table 4.1. The goal was to identify capability gaps that were of high interest to the U.S. Army in a particular mission and those that would require less effort to build.

Capabilities in the top-right quadrant of Figure 4.2 are possible candidates for building partner capabilities, but because of the higher level of effort required, they may be more appropriate for high-end allies or for remaining organic to the U.S. Army. According to the workshop discussion, enhanced ISR and HUMINT would fall in this category.

Capabilities in the lower-right quadrant would be least attractive as a security cooperation investment. These capabilities, namely, detect/identify obstacles and engineering in most cases are probably not worth the investment of significant Army security cooperation

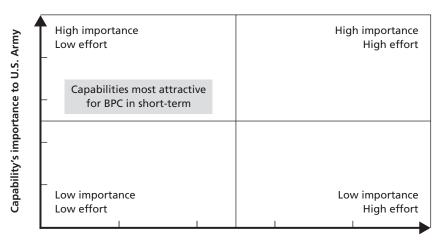


Figure 4.2 Capability Gaps Appropriate for Building Partner Capabilities

Level of effort required to build capability

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resources because they are of lower importance to the U.S. Army and require a higher level of effort to build.

Capabilities that fall in the lower-left quadrant might be worth considering, primarily because of the relatively low level of effort required to build. These include nonlethal, medical, logistics, and detainee operations. These capabilities may still be in the U.S. Army's interest to build in partner armies, if resources are available.

Finally, the capabilities in the top-left quadrant are most likely to be attractive to the U.S. Army because they are of high importance to the United States and require a lower level of effort in terms of the security cooperation investment. Development of these capabilities in an ally or partner army is most likely to be in the U.S. Army's interest. In this example, they include force protection and Joint urban operations.

Overall, it may be more appropriate to work with a partner army to close a capability gap of high importance than one of low importance. Likewise, of those capability gaps of higher importance, it may be more appropriate for the U.S. Army to help build partner capabilities that require a lower level of effort. Although high-importance/ high-effort capabilities may not be suitable for building partner capability, they do suggest areas to pursue with high-end allies, many of which may already have such a capability to contribute.

Step 3: Identify Capabilities of Shared Interest to the U.S. Army and Partner Armies

Although the relationship between the importance to the U.S. Army and the level of effort provides some insight into the types of capabilities appropriate for building with partner armies, it does not give the whole picture. Step 3 identifies those capability gaps most likely to be of interest to *both* the U.S. Army and the candidate partner. In this step, the relationship provides additional insight into the types of capabilities that are of interest to both parties and are therefore more sustainable.

To determine importance to the partner, the study team considered three factors:

- 1. Whether the capability has *dual-use* applicability, meaning that the capability has utility in both a domestic and a deployed context. The assumption, from the beginning of the chapter, is that there is a greater chance that the partner will be committed to developing and sustaining its capabilities if they can also be for domestic purposes or as a way to enhance or offset expenses of a country's military capabilities, such as peacekeeping units for U.N. operations.⁶
- 2. The *international prestige* associated with building and deploying a capability, meaning that deploying the capability in an international context carries the potential to enhance the partner's stature within the international community; and
- 3. Whether the capability *supports military modernization* goals, which would be useful, for example, in a partner's efforts to gain membership in NATO.

⁶ Moroney, Grissom, and Marquis (2007).

Table 4.2 summarizes the workshop's findings for Step 3. For each of the three factors, the elements in boldface indicate those capability gaps the participants determined to be of greatest interest to partners, i.e., generally speaking the most dual-use applicability, most prestigious, and most applicability to military modernization. For example, the workshop considered HUMINT and engineering to be at the high end for each of the three factors. Joint urban operations, enhanced ISR, detect/identify obstacles, and logistics were high in two of the three factors. To synthesize these results, the study team considered those capabilities deemed high in two or more factors to be of overall high interest to a partner.

The relationship between the importance to the U.S. Army and the importance to the partner provides the final insight into the types of capabilities that are appropriate for building with partner armies. Figure 4.3 illustrates the relationship where U.S. Army and partner interests converge.

Capabilities in the top-right quadrant are of high importance to the U.S. Army and the partner and therefore are a high priority for

Dual-Use	Prestige	Modernization	
HUMINT	HUMINT	HUMINT	
Engineering	Engineering Engineering		
Joint urban operations	Joint urban operations	Joint urban operations	
ISR	ISR	ISR	
Detect/identify obstacles	Detect/identify obstacles	Detect/identify obstacles	
Logistics	Logistics	Logistics	
Nonlethal	Nonlethal	Nonlethal	
Medical	Medical	Medical	
Force protection	Force protection	Force protection	
Detainee operations	Detainee operations	Detainee operations	

Table 4.2 Partner Interests

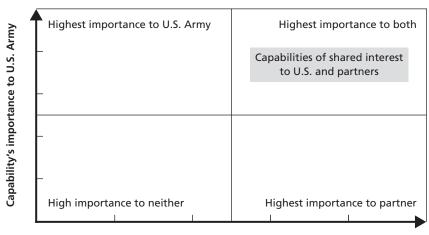


Figure 4.3 Capability Gaps of Interest to U.S. Army and Partner

Capability's importance to partner

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U.S. Army security cooperation resources. According to the workshop discussion, these capabilities include Joint urban operations, enhanced ISR, and HUMINT.

The bottom-right quadrant represents those capabilities that are not as important to the U.S. Army, relatively speaking, but are important to the partner. As such, they are a secondary priority for Army security cooperation resources. Capabilities such as logistics, engineering, and detect/identify obstacles may have a better chance of being sustained in a partner country because of the partner's interest in using and maintaining the capability.

Capabilities that fall in the bottom-left quadrant, such as nonlethal, medical, and detainee operations, may not be high on either the U.S. Army's or the partner's priority lists and may be considered only if additional resources are made available. Sustainment of these capabilities in the partner army may be problematic.

Capabilities in the top-left quadrant, such as force protection, are important to the U.S. Army, and even though they are not as important to partners, attempts to conduct security cooperation activities in these areas are appropriate if the partner is amenable. However, if the partner is not sufficiently enthusiastic or motivated, sustainment of the capability is questionable.

Relative to the illustrative capability gaps discussed in the workshop, Joint urban operations, force protection, and logistics capabilities came out relatively high on both lists in the discussion. These, therefore, would likely be good candidates for security cooperation because of their high importance to both the U.S. Army and the partner and the relatively low level of effort required to build them. Nonlethal, medical, and detainee operations may be worth considering depending on the mission requirements, despite possible limitations resulting from either the high level of effort required or low partner interest.

Step 4: Identify Candidate Partner Armies Based on Availability and Political Acceptability

In Step 4, the study team developed a list of candidate partners based on their availability to work with the U.S. Army in capabilitybuilding activities. To do this, the study team identified partners that have participated in, or provided support to, selected U.S.-led coalition operations. The operations examined include Operation Iraqi Freedom (OIF), Operation Enduring Freedom/International Security Assistance Force (ISAF) in Afghanistan, Operation Secure Tomorrow in Haiti, Kosovo Force (KFOR), International Security Force/Stabilization Force (IFOR/SFOR) in Bosnia, U.N. operations in Somalia, and Multinational Force of Observers (MFO) in Sinai, Egypt. The operations represent many regions of the globe, and they are notable for the duration of their cooperative efforts. This wide selection of operations allowed for some regional variability⁷ as well as a longer-term view of coalition partner contributions.

First, the study team created a list of candidate partners that contributed to these efforts. Then, the study team divided partners into categories according to (1) high-level support; (2) mid-level support; (3) low-level support; and (4) noncombatant support (i.e., basing access

 $^{^{7}\,}$ Something that examining only recent efforts in Iraq and Afghanistan could not provide.

or refueling). The level of support in the first three categories was determined by comparing a ratio of troops committed to a coalition effort to the total active duty armed forces available to that country.⁸ For each country, the largest contribution of troops made to a coalition operation was the basis for the ratio calculation. These ratios were then compared using quartiles as the dividing line between high, mid, and low levels of support.⁹ Countries were considered based on the number of operations they supported.

Although a high level of support to U.S.-led operations suggests a correlation of interests with the United States, some partners who supported just one operation with a substantial number of forces were also included. The study team deemed them appropriate, since often the decision to support just one operation is based on consideration of the resource limitations some countries face. Likewise, some countries that have provided noncombatant support are included because this type of support is also an essential part of conducting a coalition operation. The intention of this exercise was not necessarily to determine who is a "better" or more capable coalition partner; instead, the ratios provide insight into how large a contribution a given partner is willing and able to provide, given the best-case scenario. Table 4.3 below depicts the results. The full table of partner contributions to the eight coalition efforts, as well as a breakout of the number of coalition efforts that partners have engaged in with the United States, can be found in Appendix C.

As a secondary indicator of shared interest, the study team examined the countries' U.N. General Assembly voting records (see Appen-

⁸ By using this ratio, the results of the analysis would not be biased toward states with large armed forces (and therefore with more to spare for a coalition effort).

⁹ Troop contributions ranged from 0.04 percent of total armed forces (the Philippines) to 33 percent of armed forces (Luxembourg—a major outlier). The third quartile includes partners that provided more than 2.35 percent of their total armed forces; the first quartile includes partners that provided less than 0.37 percent of their armed forces. Mid-level supporters consisted of those states that contributed between 0.37 and 2.35 percent of their armed forces. See Jane's Sentinel Security Assessment.

dix C).¹⁰ The countries highlighted in boldface in Table 4.3 are those whose voting coincidence with the United States on General Assembly votes labeled "important" by the Department of State is particularly low, potentially indicating a lack of congruence in political interests. DOS reports were examined to determine voting coincidence with the United States.¹¹ DOS labels approximately 12–15 votes a year as important-these are votes that bear directly on U.S. foreign policy goals and involve a great deal of U.S. lobbying in the General Assembly. After the voting data from 2000 to 2005 were compiled, an average was taken per country for all six years of voting. The country averages were then divided into quartiles. Of the partners that provided mid- or highlevel support, roughly 90 percent had U.N. voting records that aligned with the United States. The states in the lowest quartile voted the same as the United States on important votes less than 32.8 percent of the time. The study team considered the U.N. voting records a secondary concern, primarily because countries can often overcome the lack of shared political interests in light of mutual regional security interests. The remaining 10 percent of the partners that provided mid- to highlevel support overcame this apparent difference. This is the most likely explanation for why the states in bold text, contrary to their political disagreements with the United States, nonetheless contributed troops to coalition efforts. For this reason, in Table 4.3, the study team chose to keep these states in the table rather than remove them as potential partners.

A few other considerations are worth taking into account when choosing a partner country to work with or train. One is the political acceptability of the partners who have demonstrated that they are available for U.S.-led coalition operations. The acceptability factor is a political litmus test to determine whether a partner is eligible to receive security cooperation resources from the United States.¹² Determining

¹⁰ Other RAND Arroyo Center studies have used U.N. General Assembly voting records to gauge shared interests with the United States. See Szayna et al. (2004).

¹¹ U.S. Department of State (annual). For this exercise, the section entitled "Important Votes and Consensus Actions" was most useful.

¹² Moroney, Grissom, and Marquis (2007).

High-Level Support	Mid-Level Support	Low-Level Support	Non-Troop Contributions
Australia	Albania	Azerbaijan	Albania
Canada	Austria	Chile	Bahrain
Denmark	Belgium	Colombia	Croatia
Dominican Republic	Bulgaria	Egypt	Dominican Republi
El Salvador	Czech Republic	Jordan	Egypt
Fiji	Estonia	Kazakhstan	Japan
Finland	Germany	Korea (ROK)	Kazakhstan
France	Greece	Macedonia	Korea (ROK)
Georgia	Hungary	Moldova	Kuwait
Great Britain	Japan	Morocco	Kyrgyzstan
Honduras	Lithuania	Philippines	Pakistan
Italy	Malaysia	Russia	Qatar
Latvia	Mongolia	Singapore	Saudi Arabia
Luxembourg	New Zealand	Thailand	Turkey
Netherlands	Nicaragua	Turkey	UAE
Norway	Pakistan	Uruguay	Uzbekistan
Zimbabwe	Poland		Yemen
	Portugal		
	Romania		
	Saudi Arabia		
	Slovak Republic		
	Slovenia		
	Spain		
	Sweden		
	United Arab Emirates		
	Ukraine		

Table 4.3 Level of Partner Availability for U.S.-Led Operations

a partner's level of acceptability is a structured way to ask whether, given the current administration's strategy and policies, developing a closer security cooperation relationship with the partner is politically acceptable. The study team identified two indicators that could help determine acceptability. First, in terms of common political values, it should be determined whether the partner has processes in place that lend themselves to democratic practices. One example could be the presence of a functioning and fair legal system. A potential metric for this indicator could be the annual Freedom House publication, *Freedom in the World*, which provides scores on political and civil liberties for all states.¹³

Second, in terms of diplomatic relations, the Army might consider the partner's receptivity to discussions on key issues, as well as the level and nature of bilateral exchanges, such as regular meetings at multiple levels, which can indicate a basis for shared political views. Some possible metrics for this indicator include signed and ratified military agreements, such as the bilateral Status of Forces Agreement (SOFA) and the Acquisition and Cross Servicing Agreement (ACSA). The conclusion of these agreements can indicate a partner country's willingness to deepen military cooperation with the United States. Another possible metric of a partner's willingness to work closely with the United States could be whether it has signed what is considered to be a contentious agreement, such as a waiver to Article 98 of the Rome Statute governing the International Criminal Court (ICC).¹⁴ The signing and ratification of such agreements may demonstrate a higher degree of commitment to deepening political and military cooperation with the United States.¹⁵

Step 5: Determine Existing Partner Army Capabilities

The fifth and final step in the process was to determine candidate partner armies' capabilities. For illustrative purposes, the study team

¹³ Freedom House provides its annual data free of charge on its website.

¹⁴ Essentially, this waiver means that a partner agrees not to render U.S. service members to the ICC. The Department of State currently requires such an agreement, or a presidential waiver, to provide Title 22 security assistance to a foreign state.

¹⁵ Moroney, Grissom, and Marquis (2007).

reviewed available databases and other current sources, since a country's level of readiness may change significantly over time.¹⁶

The study team developed a matrix of available partner armies with existing capabilities that could fill the gaps identified in Chapter Three. These partner armies with existing capabilities represent the potential for quickly filling gaps. The remaining partners suggest a potential investment strategy for security cooperation, including focused resources to build capabilities.

According to the sources consulted, the least available are nonlethal capabilities, detect/identify obstacles, and Joint urban operations. Medical, logistics, detainee operations, and force protection were more available. The most widely available capabilities were engineering, enhanced ISR, and HUMINT.¹⁷ It seems from these data that all six capabilities identified as appropriate in Steps 2 and 3 make sense to build in partner armies, particularly Joint urban operations, force protection, and logistics.

Illustrating the Process

In this section, we apply the Georgia SSOP TEP to illustrate the process developed in this chapter.¹⁸ This TEP provides insights into building partner capacity for operations outside the partner's domestic arena, specifically to OIF.¹⁹ The following questions are considered: (1) Did

¹⁶ Sources for the information include focused discussions with the Central Command (CENTCOM) CCJ5 Coalition Coordination Cell, Jane's Sentinel Security Assessment for each of the countries and the CENTCOM Coalition Partners website (indicates which capabilities coalition partners are providing in the region).

¹⁷ Although HUMINT in general was considered widely available among the countries surveyed, the sources consulted did not differentiate between the various components of HUMINT (e.g., collection, analysis, and dissemination).

¹⁸ The team selected the Georgia TEP because of the scope, duration, number of phases, and objective (i.e., deploy capable forces to Iraq). As discussed above, of all the TEPs examined, the Georgia TEPs had the most robust collection of assessments and after-action reports.

¹⁹ GTEP was aimed exclusively at achieving domestic goals, thus it is somewhat outside the scope of the coalition capabilities analysis that follows.

SSOP focus on the most appropriate capabilities? (2) If not, what other capabilities might have been more appropriate and why? (3) Is there a correlation between the process and the lessons identified in SSOP?

Georgia: Sustainment and Stability Operations Program

GTEP and SSOP are widely viewed as success stories: as a result of these programs, the Georgian military was in a position not only to address domestic challenges (e.g., rooting out terrorists in the Pankisi Gorge—the objective of GTEP) but also to assist in coalition efforts such as OIF (the objective of SSOP). In the process, the Georgian military gained critical skills and developed into a more professionalized force that respected civilian control of military operations and democratic governance.²⁰

Per the SSOP Program of Instruction,²¹ each capability developed is consistent with the example task definitions used by the expert workshop (see Appendix B). The SSOP TEP focused on the following capabilities:

- joint urban operations (e.g., suspect recognition/theory, vehicle recognition/search, urban and security patrols, urban terrain attack)
- force protection (e.g., platoon defense in the bivouac, secure helicopter landing zones, secure patrols)
- logistics (e.g., record-keeping and accountability, coordination supply support, functions of logistics and combat service support)
- medical (e.g., basic first aid, combat life support, preventive medicine)
- engineering (e.g., explosive ordnance disposal/sappers)
- detect/identify obstacles (e.g., react to rural improvised explosive devices (IEDs), urban vehicle search, react to suicide bombers, locate mines, react to mines)
- nonlethal capabilities (e.g., crowd control).

²⁰ GTEP/SSOP unpublished report, U.S. European Command (EUCOM) ECJ5 (2006).

²¹ EUCOM provided the Program of Instruction for SSOP to the study team.

These can be linked to gaps identified in Chapter Three. However, the analysis that follows concludes that, although SSOP met its goals at the strategic level, the United States might have considered different capabilities for development at the operational level. The ability of the Georgian government to sustain some of these capabilities is questionable, and some capabilities could have been provided at a lesser cost by an ally with an existing capability. The following discussion examines the Georgian SSOP in relation to the five-step process.

Step 1: Importance to the U.S. Army

The subject matter expert workshop considered the relative importance of the various capabilities in the context of operations in a high-threat environment.²² Of the capabilities provided through SSOP, the workshop regarded two as being of high importance to the U.S. Army: Joint urban operations and force protection. Five of the capabilities transferred through SSOP to include nonlethal capabilities, medical, logistics, engineering, and detect/identify obstacles were of lesser importance.

Steps 2 and 3: Level of Effort and Shared Interest

To determine whether SSOP provided the appropriate capabilities to the Georgian military, the study team considered the six factors discussed in Steps 2 and 3 of the process. Of the six factors described in Steps 2 and 3, three affect the U.S. decision to develop a capability (e.g., complexity, cost, and sensitivity to U.S. national security). The other three address the recipient's desire to receive and sustain a capability (e.g., international prestige, dual-use, and military modernization).

Although considering all of the capabilities provided through SSOP, the study team examined force protection in detail, since it constituted roughly half of the total program costs for SSOP.²³ In addition, the study team considered whether the Georgian military

²² This makes the workshop results relevant to the SSOP deployment intent.

²³ Providing force protection capabilities in SSOP cost \$30 million.

would be capable, and have the incentive, to sustain the capabilities developed.²⁴

According to the consensus of subject matter experts at the workshop, force protection is neither too complex nor too costly a capability to provide or for the recipient to sustain. In Georgia, the U.S. trainers included force protection in basic light infantry tactics. Basic light infantry training took just 16 weeks—a relatively short time. The units needed standard-issue equipment such as uniforms, small arms, ammunition, and body armor and did not require highly specialized equipment.

The four Georgian light infantry battalions cost approximately \$16.4 million each to train and equip. SSOP also included force protection training, with basic training for an additional two infantry battalions and a support brigade. The total SSOP training cost approximated \$11.9 million per battalion; together, the combined initial expense for GTEP and SSOP was approximately \$128 million. The grand total for force protection train and equip efforts was \$30 million. This sum is not abnormally high and is a good indicator of how much it costs to build this capability from the ground up. Without U.S. assistance, this initial expense would have been a challenge for the Georgian Ministry of Defense, with a budget of only \$960 million in 2006.²⁵ Sustaining the force protection capability is significantly less costly to the Georgian government. Previous RAND Arroyo Center research indicates that the five-year cost of sustaining the SSOP force protection capabilities will be approximately \$9.2 million.²⁶

The actual cost of developing a capability is empirically observable, but many other factors play a role in capability sustainment. These are significantly more challenging to quantify. This is where the judgment of subject matter experts plays a role in Army TEP planning. The workshop participants also determined that providing force protection

²⁴ The need to sustain capabilities was a key finding in the TEP analysis relative to SSOP.

²⁵ CIA World Factbook.

²⁶ Moroney, Grissom, and Marquis (2007).

training to foreign military units is unlikely to pose a threat to U.S. national security interests.²⁷

At the same time, it is not a particularly prestigious capability; it does not have great dual-use applicability, nor is it especially useful in modernization efforts. Therefore, the development of this capability may suffer, as it is not of great interest to Georgia. Nonetheless, it is affordable to the Georgian government and is a useful contribution to coalition efforts. Overall, the development of this capability in the Georgia TEPs seems appropriate and consistent with national and Army priorities.

In addition to Joint urban operations and force protection, the five-step process points to logistics as an appropriate capability to develop in a partner army. Nonlethal and medical capabilities were of lesser interest to the United States and the partner. The two remaining capabilities developed in SSOP—engineering and detect/identify obstacles—may not have been the most appropriate capabilities to build in a TEP. Although considered by the workshop to be of high interest to the partner, both were considered relatively complex and of a potentially high risk to U.S. national security, and detect/identify obstacles were also of high cost. Therefore, these capabilities might have been secondary choice if funding were available. Finally, these two capabilities may not be sustainable in Georgia (see Step 4 for details).

Step 4: Availability and Political Acceptability

In terms of availability, Georgian forces have demonstrated a high level of willingness to participate in U.S.-led coalition operations. SSOP led to the deployment of the trained battalions to Iraq. As shown above, Georgia was a high-level contributor, deploying 600 troops to OIF, totaling about 2.5 percent of its total armed forces.²⁸

²⁷ Multinational Force officials described the Georgian role at a Multinational Force–Iraq forward operating site as primarily providing force protection. See "Georgians Arrive at Caldwell."

²⁸ Georgia's armed forces total 24,700 soldiers. See Jane's Sentinel Security Assessment, *Country Executive Summary.*

In determining if a state is "politically acceptable," a good starting point is an examination of the partner's economic and political fundamentals. In other words, does it exhibit some characteristics of democratic rule? Likewise, do economic indicators instill confidence that the partner's government is stable or that the government can corral the economic resources necessary to sustain the capabilities developed in the TEP after the training concludes?

Georgia passes the democratic governance test: It receives a rating of "partly free" from Freedom House, indicating that it has some elements of electoral government and civil liberties. Moreover, Georgia has signed a number of important agreements with the United States, including a SOFA, ACSA, and a waiver to Article 98 of the Rome Statute governing the International Criminal Court. However, economically, Georgia is a low-income country; its per capita gross domestic product (GDP) is approximately \$3,300 per year.²⁹ This level of per capita GDP is within an economic danger zone that may bode ill for regime stability.³⁰ Likewise, these ratings indicate that Georgia may have financial difficulties sustaining anything but low- or mediumeffort capabilities. This economic frailty is especially important to bear in mind when selecting which capabilities are sustainable in Georgia.

Step 5: Existing Capabilities

Of the partner country capabilities considered, engineering was the most readily available by a wide range of armies around the world. Although medical, logistics, and force protection developed in SSOP are less readily available among other coalition partners, nonlethal capabilities, detect/identify obstacles, and Joint urban operations were the scarcest of the capability gaps.

Summary

SSOP met its basic goals, i.e., the Georgian Army deployed capable forces to OIF.

²⁹ CIA World Factbook (entry on Georgia).

³⁰ Przeworski et al. (2000).

In general, we found the lessons learned from the case study (see Appendix A) to be consistent with the insights provided by the fivestep process. For example, we found that Georgia meets the acceptability criteria as a state with elements of democratic governance and has signed the necessary bilateral agreements with the United States. Georgia clearly has an interest in the capabilities provided (i.e., combating terrorism), which have a dual use at home and when deployed. It has also gained international recognition and prestige because of deploying its trained and capable forces to OIF. Therefore, the five-step process predicts, and the case study bears out, that a security cooperation investment in the form of a TEP in Georgia seems reasonable and potentially fruitful.

The capabilities focused on, however, according to the five-step process, should have been slightly different. Although the SSOP was successful in achieving its primary aim, this could have been an opportunity to build up additional capabilities currently needed most by the U.S. Army. Joint urban operations and force protection are two such capabilities. On the other hand, detect/identify obstacles and engineering were more widely available, high-effort capabilities that the U.S. Army could potentially incorporate from allies or partner armies. In general, it would be more cost-effective to look for the capabilities that already exist when trying to fill gaps.

Conclusion

The five-step process for matching U.S. Army capability gaps with candidate partner armies focuses on identifying those capabilities that are important to the U.S. Army and the partner and require a relatively low level of Army security cooperation resources to build. Overall, Joint urban operations, force protection, and logistics capabilities were the best candidate capabilities because of their importance to the United States and the partner, the low level of effort required to build them, and their scarcity within the partner countries being considered. However, if the scenario changed, the results would likely be different. Subject matter experts provide important input to the process and should be consulted on the capability gaps and also for their expertise on the political, military, and economic situations of the countries being considered.

This chapter also highlights the importance of selecting appropriate capabilities that are sustainable by partners. For example, the economic limitations facing the Georgian government may pose a serious challenge to the sustainment of relatively expensive and complex capabilities such as enhanced detect/identify obstacles and engineering. It is also important for the U.S. Army to focus security cooperation resources, to the extent possible, on building scarce capabilities through TEPs. Finally, the discussion suggests caution so as to avoid the development of capabilities that are widely available, require a higher level of effort, and have a lower level of importance to the U.S. Army. The U.S. Army is facing tremendous demands on personnel, equipment, and other critical resources. The Global War on Terrorism, (GWOT), SSTRO, and other emerging missions are creating competing demands for Army capabilities that result in COCOM requirement gaps that the Army is pressed hard to fill. National and DoD strategic guidance, including the BPC Execution Roadmap, emphasizes the need to leverage the capabilities of allies and partners around the world to fill these gaps and bolster their defense self-sufficiency. From a political perspective, gaining the support of allies and partners may lead to effective cooperation and long-term sustainment of capabilities.

As a result of budgetary, military, and political realities, the Army must consider new ways to focus its security cooperation programs and activities to build the most appropriate and effective capabilities in candidate partner armies. Partners can, and often are, willing to provide capabilities to U.S.-led operations. From an Army security cooperation perspective, then, the key questions are: What kinds of capabilities would be the most appropriate to build in which partner armies and why? What are the best methods for conducting the training? And how will the Army measure the success of its investment?

This monograph builds on prior RAND Arroyo Center work by examining the types of capabilities to develop in partner armies, based on current and anticipated U.S. Army capability gaps. It provides a process for matching U.S. Army capability gaps with candidate partner armies. It argues that U.S. Army planners need a more comprehensive understanding of the types of capabilities that might be built in partner armies and describes how those capabilities might develop into capacity by working with other DoD and U.S. interagency partners. The study also provides insights into planning the associated Army security cooperation activities and a rationale for developing metrics that would allow the Army to assess its security cooperation investment over time.

The six key conclusions and associated recommendations for HQDA thus stem from the findings of the preceding chapters.

Focus on building capabilities that support Joint requirements. Building capable partner armies for coalition operations requires that the U.S. Army consider the strategic and operational requirements of the Joint force when planning its security cooperation programs and activities. The U.S. Army should ensure that the capabilities built in partner armies are consistent with national and DoD strategic guidance and COCOM requirements. As the supporting entity, HQDA should ensure that the Army Security Cooperation Strategy reflects these requirements, taking into account Integrated Priority Lists, Joint Operating Concepts, and Theater Security Cooperation Strategies.

Adopt a process that matches U.S. Army capability gaps with partner armies. The process described in this study provides criteria for evaluating which capability gaps might be most appropriate for partner armies to fill. In broad terms, the capability should ideally be highly important to both the U.S. Army and the partner and should require a relatively low effort to build. Capabilities built at comparatively low levels of complexity, low cost, and minimal U.S. national security sensitivities would be most appropriate. On the other hand, capabilities that require a high level of effort may be best suited to high-end allies with the wherewithal to acquire and sustain them. Further, it is essential to consider the extent to which the partner army can sustain a new capability. Capabilities with the potential for dual use, those that lead to greater international prestige, or those that assist the partner in its military modernization efforts tend to be more sustainable.

Increase visibility into previous and ongoing efforts to train and equip partner armies. It is important for the U.S. Army, from an institutional perspective, to learn from the experiences of its previous TEPs around the world and to apply this experience to ongoing and future TEPs. Lessons and best practices are critical from both a planning and execution perspective and must be captured, analyzed, validated, disseminated, and implemented. It is important to ensure that detailed AAR and assessments of the TEP as a whole exist, but not just for specific activities or phases. Either the Army Peacekeeping and Stability Operations Institute at the Army War College in Carlisle, Pennsylvania, or the Center for Army Lessons Learned in Fort Leavenworth, Kansas, should be tasked to capture, analyze, validate, and disseminate lessons from DoD train and equip programs. Results of the assessments must be shared widely with HQDA, Army Service Component Commands (ASCCs), and other appropriate agencies for planning purposes and with the deploying units that will develop curriculum, create new training methods, and conduct the training.

Coordinate closely with ASCCs, COCOMs, OSD/Policy and DSCA,¹ and the interagency when planning TEPs to ensure appropriate resources and activities are considered. When the Army has a significant or lead role in a TEP, it is important for HQDA, as the supporting entity, to be actively involved in the planning effort, particularly where Army security cooperation resources are used. In terms of resources, the desired end-state should be considered when selecting funding sources to ensure that training and equipment will contribute to the desired outcomes, whether to meet a short- or a long-term goal. Moreover, it is important to involve other U.S. government agencies early on when DoD funding sources are either inadequate or not available. Consulting donors through bilateral mechanisms or through a multilateral clearinghouse process can result in additional resources that can potentially reduce the burden on the U.S. Army.

In terms of activities, it is important to ensure that the partner's expectations do not exceed TEP goals. HQDA should work closely with the COCOMs, ASCCs, and the partner armies, for example, through Army staff talks, to ensure a clear understanding on all sides. When sequencing TEP activities, the proficiency of the partner army should

¹ The Defense Security Cooperation Agency (DSCA) has a role to play in two areas: (1) development of metrics for evaluating security cooperation program effectiveness and (2) security assistance guidance and management.

be assessed to ensure the proper skill level of training. In addition, when identifying personnel to conduct the TEP, the Army should consider the importance of establishing a long-term, military-to-military relationship with the partner army. In this regard, military trainers, rather than contractors, would be more likely to produce the desired outcome. Finally, although we acknowledge the challenges associated with providing multilevel training, the Army, nonetheless, should train higher headquarters staffs to ensure that the partner army can effectively use the capabilities developed in line units.

Focus on programs the Army controls for building partner capabilities and leverage other DoD and interagency programs. Capabilities are the direct outputs of security cooperation activities. Tying capabilities to appropriate Army security cooperation programs in a way that produces outputs relevant to the desired end-states is important. HQDA should focus on Army capability-building programs that are designed to develop skills, provide materiel support, and promote interoperability. However, when the Army alone is not able to contribute to all of the desired outputs, looking across the interagency community may provide the solution. To achieve this collaboration, HQDA should actively coordinate with, and clearly communicate Army capability gaps to, other DoD and U.S. government stakeholders that control programs designed to build partner capabilities for coalition operations.

Use metrics that link capability and capacity to the desired ends. The development and implementation of metrics linked to desired ends is an essential step in ensuring that Army security cooperation activities are most effective. Developing metrics for capability and capacity requires awareness of the desired ends and the ability to connect them with specific Army security cooperation programs. HQDA should develop capability metrics for Army security cooperation programs for BPC, for example, those programs that improve skills, provide materiel support, and promote interoperability. Then, these capability metrics can be linked to COCOM requirements and plans can be made to support the development of capacity metrics. This requires close coordination with U.S. interagencies, COCOMs, and ASCCs. The study team analyzed each of the seven illustrative TEPs to determine the key findings and specific lessons discussed below.

TEP #1: Georgia Train and Equip/Sustainment and Stability Operations Programs

GTEP took place in Georgia from May 2002 to April 2004, followed by a second TEP, SSOP, from April 2005 to June 2006. GTEP was U.S.-led by Special Operations Command Europe (SOCEUR) and U.S. Army Europe (USAREUR). It trained four infantry battalions and a mechanized armor team, and also provided the necessary equipment (e.g., uniforms, field equipment, and weapons) to perform their tasks. The main purpose of GTEP was to train and equip the Georgian battalions using company infantry tactics with the intended goal of managing the volatile Pankisi Gorge region, where suspected terrorists were operating. In other words, GTEP built the capacity of the Georgian forces to respond to a domestic problem. Training was given to 2,600 soldiers from the Ministry of Defense and the Ministry of Interior forces. GTEP cost a total of \$64 million, which was taken from 16 DoD and DOS security cooperation resources.¹

The follow-on SSOP TEP was in response to shortcomings in GTEP training (e.g., the lack of command-level knowledge of how to use the forces trained in the TEP) and the Georgian Army's indi-

¹ For example, Security Assistance (FMF, IMET, and EDA grants), Georgia Border Security and Law Enforcement, Cooperative Threat Reduction Defense and Military Contacts, and operations and maintenance drawdown.

cation of interest in assisting in Operation Iraqi Freedom.² Marine Forces Europe (MARFOREUR) led the training with contractor support. Two infantry battalions, two logistics battalions, as well as signal, reconnaissance, and engineer brigade companies were trained and equipped, as were the Land Forces Command Staff and an operations cell from the General Staff. Security cooperation resources were pooled from FMF, IMET, Peacekeeping Operations (PKO) funds, and Coalition Support Funds (CSF) to total \$65 million. GTEP and SSOP achieved their primary objectives; GTEP achieved its goal of providing troops to the Pankisi Gorge, and SSOP-trained forces contributed to OIF. U.S. government agencies involved included DoD, DOS, and the Department of Homeland Security (DHS).

Of all illustrative TEPs considered in this study, the Georgia TEPs afforded the best data for analysis. Phased assessments conducted by EUCOM and MARFOREUR were made available to the study team. To garner a greater level of insight and specific lessons, the study team convened a roundtable discussion involving GTEP and SSOP experts from EUCOM, MARFOREUR, the Office of the Secretary of Defense for Policy (OSD/P), the DSCA, the Joint Staff, and DOS. Workshop participants were carefully chosen to include those with first-hand knowledge of the two Georgia TEPs, including policy, funding, and operational experts. The nine key findings from the study team's analysis of GTEP and SSOP are as follows.

1. Clearly identify desired end-state before planning the TEP. What is expected of the partner army following a TEP? Is the intention to have a more professional force, to sustain a capability in the partner army for domestic or regional use, or to deploy to a U.S. coalition effort? Had the goal of deployability for U.S. coalition operations been identified in GTEP, SSOP training to deploy the forces might have been included earlier on. If the desired end-state is participation of the partner army in a U.S. coalition effort, planners should establish this from the outset

² The focus was on the 1st infantry brigade.

and include penalties for nondeployment or nonsustainment of the capabilities developed.

- 2. Consider simultaneous training at all levels of command. In GTEP, the initial focus on the company level was problematic because the higher headquarters (battalion and brigade commanders) were not included in the early stages and therefore did not know exactly how to employ the trained forces. Higher-level staffs should be trained alongside their subordinate units to permit more effective use of TEP-trained forces and to improve overall unit cohesiveness.
- 3. Fully man training units with professional soldiers to improve sustainment. It is important to ensure that a partner country has a plan in place, and the resources identified, to sustain the TEP units for several years. Contracted or professional soldiers help ensure longer-term continuity in trained units because they are building a career in the military and will therefore be around longer to train new soldiers and staff. Moreover, the establishment of a basic training course for the contracted soldiers will help ensure the availability of replacement soldiers.
- 4. Create and maintain forward command-and-control elements for TEP. MARFOREUR, as the lead training component for SSOP, created a successful command-and-control element to draw together the support elements. This ensured continuity and reduced logistics and administrative problems that could have otherwise hindered TEP activities.
- 5. Conduct activities that encourage regular interface of host nation interagency actors. During GTEP, the Georgian Border Guards and the Ministry of Interior interacted more frequently than normal with other Georgian security services within the Ministry of Defense, which ultimately improved interagency coordination.
- 6. Ensure that security cooperation funding providers and in-country teams are involved early on in the TEP development. Security assistance planners, to include those at DSCA and at the Security Assistance Offices (SAOs) in-country, should be consulted in the early phases of TEP development to discuss timelines

and resources. Moreover, the TEP commander on the U.S. side should coordinate closely with the SAOs and the COCOM country desk officers in J-4 and J-5 to ensure that the objectives and goals of the TEP link into COCOM Theater Security Cooperation strategies.

- 7. Consider appropriate donor resources early in the planning effort. Donors can be useful for filling gaps in TEP requirements. In GTEP, the British Military Advisory Training Team (BMATT) program provided high-impact training as the culminating event of the TEP. Specifically, each battalion was given a weeklong peacekeeping support operations scenario related to the British-funded Georgia Security Assistance (GSA) program. The event maximized the effect of the TEP by providing a realworld operational context to the training. However, although early donor involvement is often helpful in parsing resources, the United States should develop and maintain a contingency plan in case donor assistance falls through.
- 8. *Where possible, train to U.N. standards.* To improve the ability of forces to deploy for regional or other multilateral operations, training to U.N. standards is essential, especially for peacekeeping-related TEPs.
- 9. Encourage the partner to host multilateral exercises to reinforce what has been learned. Georgia hosted two Partnership for Peace (PFP) exercises following the GTEP training, allowing Georgia to both exercise with, and showcase new TEP capabilities to its regional partners.

TEP #2: African Crisis Response Initiative/ African Contingency Operations Training and Assistance Programs

The ACRI TEP occurred from 1997 to 2002, followed by ACOTA from 2002 to the present. Trained African Army forces under these two programs include those from Côte d'Ivoire, Benin, Botswana, Ethiopia, Gabon, Ghana, Kenya, Malawi, Mali, Mozambique, Namibia, Nigeria, Rwanda, Senegal, South Africa, and Zambia. The ACRI program was train-the-trainer oriented, aimed at training African forces for peacekeeping and humanitarian assistance purposes on a domestic

level. The goal was to train four to five battalions per year. Security cooperation resources totaled \$1.5 million per year.

ACOTA expanded on ACRI by training deployable battalions for PKOs in regional and global efforts in a hostile environment. The idea was that the battalions receiving ACOTA training would be available for PKOs directed by the United Nations, the African Union (AU), or other international organizations. The target was to train 14 battalions per year. ACOTA training, funded by the DOS GPOI, included light infantry tactics, small unit tactics, humanitarian operations, and rules of engagement consistent with the U.N. Charter. Since 1999, both ACRI and ACOTA have predominantly used contractors as trainers, with some oversight from the U.S. military. Security cooperation resources totaled \$38 million per year from FY 2002 to FY 2005. France was a key donor country and organized clearinghouse meetings to deconflict foreign assistance and pool resources, where possible.

In the case of ACRI, EUCOM planners in the Africa branch did not conduct assessments or capture lessons learned from training or related events. The study team also was unable to obtain assessments of ACOTA; it is not evident that they exist. Therefore, the study team relied instead on focused discussions with key planners and operators from EUCOM, OSD, and DOS. The three key findings from the ACRI and ACOTA illustrative TEPs are as follows:

1. For TEPs designed to deploy forces to a regional or out-of-area operation, resources should be tied to political commitments. Because some of the ACOTA battalions that received training with a specific goal to deploy in support of coalition operations never actually did so, the ACOTA TEPs occur now only if countries are committed to deploying the units in support of regional, U.S.-led coalitions, or U.N. peacekeeping missions. For example, ACOTA efforts in Botswana ended after the country decided not to deploy forces to multilateral peacekeeping operations in the region (either U.N.- or Economic Community of West African States [ECOWAS]-led efforts) or Operation Iraqi Freedom.

- 2. U.S. training units should have access to the necessary funds to carry out their training tasks. Personnel must have access to cash, government credit cards, etc., to ensure that they are able to operate effectively and procure small items without difficulty. This is especially important if funding from multiple sources is used, which is likely to be the case in most TEPs.
- 3. Obtaining donor support through a clearinghouse process is worth considering early on in the TEP. The Africa clearinghouse concept developed in November 2004 to support ACOTA activities provided a forum for coordinating activities with European allies. The process will potentially improve sustainability of the ACOTA TEP; 13 allies plus the European Union (EU) participated in and hosted meetings within the clearinghouse construct for ACOTA/ACRI.

TEP #3: Pan-Sahel Initiative/Trans-Sahel Counterterrorism Initiative

PSI began in 2002, followed by TSCTI in June 2005, which is currently ongoing. Under PSI, SOCEUR and MARFOREUR trained four African states: Chad, Mali, Mauritania, and Niger. TSCTI expanded to include Algeria, Morocco, Nigeria, Senegal, and Tunisia. Both TEPs intended to build the partner's military capabilities to combat terrorist influences in the region, deny terrorists safe haven, protect the borders, track the movement of terrorists, and enhance regional cooperation in counterterrorism. PSI and TSCTI trained rapid reaction companies of soldiers in skills such as marksmanship, communications, patrolling, and medical care. Security cooperation resources for PSI totaled \$7.5 million in FMF from FY 2002 to FY 2003. Funding for TSCTI increased exponentially to \$508 million from FY 2005 to FY 2008.

The study team obtained data for the PSI/TSCTI TEPs from several government sources on the planning and operational side, including EUCOM, SOCEUR, and MARFOREUR. These data included some after-action reports and a limited number of activity assessments. Focused discussions were conducted with EUCOM and OSD on the planning and with SOCEUR on the execution of PSI and TSCTI. The six key findings from the PSI and TSCTI TEPs are as follows:

- 1. Consider providing more advanced technical equipment early on for combating terrorism-related TEPs. The provision of night vision devices for counterterrorism-trained forces would likely have helped the PSI-trained forces capture suspected terrorists.
- 2. *Assess literacy rates before the TEP*. Low literacy levels (including recognizing numbers) in Chad, for example, degraded training in land navigation, planning, and communications.
- 3. *Consider language barriers and, where possible, hire local interpreters.* U.S. interpreters did not know the local dialects in Chad and Niger, inhibiting the ability to train the soldiers.
- 4. *Include training aids in predeployment training.* TEP training should be specific enough to ensure that can training be conducted unassisted. This includes the prior development of all lesson materials and training aids. Resources in-country may simply not be available for sophisticated devices (or even simple ones in some cases). Instructors must be fully trained and familiar with all training aids before deployment.
- 5. Ensure that contractors have guidance on which equipment is permissible to purchase/provide. For example, during PSI, the compasses supplied to Chad/Niger were not luminescent, which limited the possible training activities, especially at night.
- 6. *Emphasize multinational activities and common doctrine*. Regionally focused TEPs must include training at the multinational level, using common SOPs and TTPs, to improve regional interoperability.

TEP #4: Operation Enduring Freedom–Philippines

OEF-P began in May 2003 and is currently ongoing. The aim of the program is to train and equip the Philippine forces to counter the activities of terrorist groups, particularly the Abu Sayyaf Group, on a domestic scale, and to deny safe haven to Al Qaida operatives in the region. OEF-P units were trained in light infantry, night flying operations, combat and humanitarian engineering, and intelligence capabilities. OEF-P is U.S.-led and executed by Special Operations Command Pacific (SOCPAC); contractors are not involved. Security cooperation resources totaled \$180 million from FY 2001 to FY 2004 from FMF,

IMET, and DoD drawdown. In FY 2005, FMF was just under \$30 million and IMET funds totaled 33 million.³

The study team collected information from numerous sources. Mission Performance Plans (MPP) from DOS were consulted for the specific interagency activities. Focused discussions with officials from OSD/P, DSCA, the Joint Staff J-5, Pacific Command (PACOM) J-56, and SOCPAC provided perspectives on U.S. strategic interests in conducting OEF/P and subsequent security cooperation with the Philippines. Officials from PACOM and DSCA provided insights into experiences on the ground and the larger context and history of U.S. security cooperation with the Philippines. The study team did not have access to AARs or assessments and it is not clear whether they exist. A review of data collected produced four key insights from OEF/P:

- 1. *Counterterrorism-oriented TEPs can greatly facilitate the deepening of bilateral security ties with partners.* OEF-P was created at the end of 2001 to expand the capability of the Armed Forces of the Philippines (AFP) to capture high-value targets from key terrorist organizations. Security ties between the United States and the Philippines grew substantially, making it possible for the U.S. military to increase its interaction with Philippine security forces in a variety of relationship-building events.
- 2. Innovative approaches to TEPs in the civic sector can help the U.S. military counter terrorist activities. In addition to training and equipping the AFP for counterterrorism and counterinsurgency operations, the U.S. military also provided direct military assistance (as part of annual bilateral exercises with the AFP) to communities by engaging in engineering, medical, and dental activities. The presumption was that the communities would then be less likely to provide sanctuary to terrorists. This model is replicated elsewhere in the Philippines by U.S. forces jointly with the AFP.

 $^{^3~}$ IMET funds allocated to the Philippines are the largest in Asia and the second largest in the world.

- 3. A partner country's ability to absorb new capabilities and its commitment to sustaining them is critical to achieving desired outcomes. Despite some ongoing policy changes for reform and modernization, widespread corruption, institutional weaknesses, and low morale plague the Philippine government and the AFP, which greatly diminishes the ability of the AFP to sustain the TEP-trained forces.
- 4. Politics can terminate participation in out-of-area operations, even though trained forces may want to continue their mission. The AFP was eager to obtain additional military training and assistance from the U.S. military to help bring about much needed reforms and modernization. However, the kidnapping of a Filipino civilian contractor in Iraq by insurgents and their demand for Philippine withdrawal in exchange for his freedom changed domestic public opinion and forced the government to withdraw from Iraq just one month short of completing the tour. This resulted in the Philippines losing \$10 million in PKO funds.

TEP #5: Plan Colombia

Plan Colombia began in 2000 to train and equip Colombian commando battalions for counterinsurgency and counternarcotics operations in the domestic arena. The TEP for counterinsurgency and counternarcotics involved the Army and other Services; contractors conducted needs assessments and provided technical training and direct support for materiel. Although Plan Colombia officially ended in 2005, U.S. assistance continues at a high level. U.S. security cooperation with Colombia traditionally focuses on supporting the Colombian National Police, which has responsibility for countering illicit narcotics smuggling. Inclusion of a counterterrorism component in Plan Colombia expanded U.S. military involvement, and in TEP efforts in particular. Indeed, the TEP has become a core component of U.S. assistance to Colombia. Training efforts focus on including human rights training, airpower, intelligence, communications, and interdiction capabilities. Security assistance, primarily IMET and FMF (e.g., estimated at over \$100 million for FY 2006), is the main funding source, as is the Andean Counterdrug Initiative (e.g., estimated at \$463,000 for FY 2006).⁴ U.S. government agencies involved include DoD, DOS, DHS, and the Department of Justice (DOJ).

The study team obtained input from numerous officials at the DOS, DSCA, Southern Command (SOUTHCOM) J-5, and U.S. Air Force International Affairs. The study team also obtained Mission Performance Plans and information on U.S. policy toward Colombia and use of U.S. assets in Colombia from SOUTHCOM and DOS. The four key findings from the Plan Colombia TEP are as follows.

- 1. Political leadership, commitment, and a comprehensive approach are important considerations at the outset of the TEP. These qualities enabled the TEP to build capability to counter narcotrafficking, terrorist groups, and insurgents as well as restore government control over ungoverned territories. Plan Colombia worked to curtail narcotics trafficking and improve security through a unified counternarcotic and counterterrorism campaign that is executed along with economic development, justice sector reform, and humanitarian assistance programs.
- 2. *Civilian contractors can play a significant role in supporting TEPs.* Contractors, often ex-military personnel, conduct needs and capability assessments, training, and maintenance. They often can provide necessary personnel and skills that the U.S. military cannot. As contractors, they can also focus their time to address specific issues on a continuous basis, as opposed to military forces on temporary training assignments.⁵
- 3. *DoD needs to emphasize sustainment in TEP development.* The United States and the partner countries must consider sustainment as a component of capability building. Budgeting for sustainment with existing security cooperation resources is important. Because this was not a consideration in Plan Colombia, knowledge, skills, and materiel tended to deteriorate not long after training and materiel transfers were completed.

⁴ "Colombia: Security Assistance" (n.d.).

⁵ For example, the Army Special Operations Forces, which typically come into Colombia to conduct training and leave as soon as training is completed.

4. TEP metrics should have buy-in from the U.S. interagency, especially if the resources expended come from several agencies. Interagency coordination helped to demonstrate Plan Colombia results to legislative and executive branch leadership for support and funding.

TEP #6: Yemen

The TEP in Yemen began in 2002 and is ongoing. The focus is to increase Yemen's ability to counter terrorism at home and improve border security. Training provided by the Yemen TEP included skills such as hostage situations, counterterrorism operations, response to domestic crises, and crowd control. The Counterterrorism Fellowship Program, PKO, FMF, and U.S. Agency for International Development (USAID) provide resources. Yemen received approximately \$2 million in IMET and \$18 million in FMF from FY 2005 to FY 2006. The program was U.S.-led by Special Operations Command Central (SOC-CENT), with significant assistance from the United Kingdom.

In March 2006, the study team conducted focused discussions with several Army officers who were instrumental in the planning and operational aspects of the Yemen Counterterrorism Unit (CTU). They were the primary sources of data for this analysis as, again, no AARs were available. The four key findings from the Yemen TEP are as follows.

- 1. To the extent possible, use U.S. military personnel to train partners, especially where military-to-military relationships are in the early stages of development. During the Yemen TEP, it became clear that the Yemen military preferred training from U.S. military personnel rather than from contractors.
- 2. Training with U.S. Special Forces or other specialized teams is needed mostly at the end of a TEP, as the culminating event. Whereas conventional forces are likely to have the skills necessary to conduct TEPs in less-advanced partners, specialized counterterrorism training can come only through more specialized forces. Joint Combined Exchange and Training (JCET) exercises, for example, do not have to be the backbone of all

counterterrorism-related TEPs. In the case of Yemen, the Joint Task Force Horn of Africa (JTF-HOA) provided a vehicle for specialized training at the end of the TEP.

- 3. *TEP funding sources are not flexible enough to train all critical security forces.* DoD needs the ability to engage and train with interior forces as well as regular defense ministry forces. Because of the role interior forces often play in combating terrorism, security cooperation resources should allow training for these security forces, even though they may not be military. In Yemen, the CTU interior forces were not initially eligible to receive IMET—the primary funding source used for this TEP.
- 4. *Partnering with allies is critical for filling personnel gaps and sustainment.* In Yemen, British military trainers filled gaps when not enough U.S. training personnel were available. Over time, the U.K. trainers were fully integrated into the training schedule.

TEP #7: Operation Balanced Strike

The Operation Balanced Strike TEP began in 2003 and continued through 2004. Its aim was to develop counterterrorism skills through live fire exercises, with the specific goal of combating the influence of the Islamic Movement of Uzbekistan (IMU). The scope of the program was regional and SOCCENT led and executed the training. Two battalions were trained in each of the participating countries—Kyrgyz-stan, Tajikistan, and Uzbekistan. The program provided infrastructure such as sniper towers, shoot houses, and classrooms. Security assistance totaled \$13.5 million in FY 2003 from the Iraqi Freedom Fund.

To obtain data for the OBS TEP, CENTCOM and SOCCENT officials were consulted to obtain both the planning and execution perspectives. As in many other TEPs, after-action reports were unavailable and it is not apparent that they were conducted. However, the study team did obtain detailed briefings, which provided insights into the assessment of OBS. The three key findings from the OBS TEP are as follows.

1. Use of common SOPs or TTPs in bilateral TEPs can improve subsequent regional interoperability. Even in regions such as Central Asia, where cooperation between partners is problematic for political and historical reasons, the use of common standards can facilitate regional cooperation later when the political environment becomes more conducive.

- 2. Perceived "unfulfilled commitments" can have negative political consequences. In Central Asia, the perceived lack of U.S. interest in the region affected the political and military relationships with the three target countries. The countries had intended to support OIF with a higher level of support, including access to regional facilities and even deployed troops, but rescinded their offers to send forces to OIF after OBS was indefinitely delayed. Overall, the continuous start-stop of this TEP led to diminished partner support.
- 3. Consider multiple security cooperation funding sources, not just security assistance. For OBS, only Title 22 security assistance was considered as a funding source. However, other security cooperation funding sources, such as CTFP and Joint Staff exercises, could have been applied.

This appendix provides the definitions for the capability gaps identified in Chapter Three. Reproduced here verbatim are the definitions for each capability gap as specified in the three Army studies. In developing Table 3.4, it became clear that the various studies used similar but slightly different terms to describe the capability gaps. To standardize the terminology for the purposes of this monograph, the study team developed titles that best described the capability gaps across all three studies.

The workshop of subject matter experts also contributed greatly to the understanding of the capability gap terminology. Their scenariobased discussions ensured a consistent context for considering the gaps and were an essential factor in developing a meaningful list of the capability gaps' relative importance.

The study team bounded the workshop discussions by setting aside those capability gaps considered as clearly appropriate only for high-end allies or as an organic capability of the U.S. Army. These five capabilities included networked battle command; command, control, communications, and computers (C4) and information operations; training the force; force projection; and Joint, interagency, and coalition operations.

The study team determined that the remaining capability gaps were too broad to enable a focused discussion in the context of a highthreat environment scenario. Thus, the study team selected an example of a specific task within the broader capability gap. These specific aspects and their associated definitions, as agreed to by the workshop and the study team, are provided here to give the reader insight into how the capability gaps were assessed by the subject matter experts and how they relate directly to the capability gaps identified in the studies.

Networked Battle Command

CGA Study

The network enables joint and expeditionary battle command. It is about enabling leaders of the joint and expeditionary force to command and control large maneuver formations, sustain the force with minimal forward presence, and achieve broad political-military objectives across the full spectrum of operations.

CNA Study

Defined as command and control systems, infrastructure, and procedures that are networked throughout the force. This system of systems will be adaptable to the requirements of the operation through modular network construction that enables systems to be added or removed without network disruption. Includes the ability to promulgate selfcontained, standardized units that are highly deployable and readily sustainable. These forces will be able to be combined as the mission, enemy, terrain, time, and troops available dictate. The new modular organizations provide a mix of land combat power that can be organized by task for any combination of offensive, defensive, stability, or support operations as part of a joint campaign.

Workshop Discussion

Not discussed. Determined to be for high-end allies or remain organic to the U.S. Army.

Force Protection

CGA and CNA Studies

Defined as actions taken to prevent or mitigate hostile actions (to include friendly fire) against personnel, resources, facilities, and critical

information during those military, paramilitary, political, economic, psychological, and civic actions taken to defeat insurgency, especially actions related to overall force protection. Includes actions taken to prevent or mitigate hostile actions against individual soldiers during those military, paramilitary, political, economic, psychological, and civic actions taken to defeat insurgency. Remedies include active and passive measures on the ground, in the air, and in space, all aided by enhanced situational awareness/understanding. Includes actions taken to keep soldiers medically and psychologically healthy by easing combat stress before, during, and after deployment.

Workshop Discussion

The workshop considered the specific task of base camp protection as an illustration. Task defined as: Situation as in Camp Victory in Iraq, protect soldier from excessive exposure along lines of communication, need for persistent surveillance, CS/CSS units lack robust fighting capabilities, biometrics such as battlefield identification system application, identify contractors with base access duties.

C4 and Information Operations

CGA Study

Defined as voice, data, and video communication support to the tactical fight and the capacity and ability to communicate dismountedto-dismounted, dismounted-to-mounted at a tactical level in all environments. Focused on, but not limited to, battalion level and below. Includes the ability to analyze intelligence and other information and provide that information to units to permit the conduct of operations. Also includes the delivery of timely intelligence information to tactical units or the accessibility by tactical units to this information.

CNA Study

Defined as open architecture C4 systems that are reliable under all circumstances and that operate at extended ranges from deployment through operations in theater and through redeployment. These systems of systems will readily share information throughout the force.

Workshop Discussion

Not discussed. Determined to be for high-end allies or remain organic to the U.S. Army.

Train the Force

CGA and CNA Studies

Defined as tough, realistic training, to include training in theater both before and after combat operations, which takes full advantage of existing and emerging technologies. Training should address the unit's ability to prepare for both current and future operations. Resources for training should be readily available to deployed forces in austere circumstances. These resources should take full advantage of technology that enables embedded training.

Workshop Discussion

Not discussed. Determined to be for high-end allies or remain organic to the U.S. Army.

Logistics

CGA Study

Defined as actions and efforts to promulgate and promote efficient delivery and consumption of supplies at all levels by all units. Also incorporates actions to improve combat service, combat service support, and medical units' visibility, distribution, accountability, and operations.

CNA Study

Provide for efficient, effective, and timely delivery of supplies at all levels by all units throughout the battlespace and the full range of military operations, especially where the battlespace is noncontiguous and operations are conducted at a high tempo. Ensure visibility of the supply system to all units and organizations supporting or using the system. Organize and equip supply units to support units from home station through deployment and return with tailorable supply packages.

Workshop Discussion

The workshop considered the specific task of distribution capabilities as an illustration. Task defined as: In-transit visibility, materiel handling assets, visual display of management and support systems.

Enhanced ISR

CGA and CNA Studies

Defined as activities that synchronize and integrate the planning and operation of sensors, assets, processing, exploitation, and dissemination systems in direct support of current and future operations. This is an integrated intelligence and operations function.

Workshop Discussion

The workshop considered the specific task of detect and warn of direct/ indirect fires as an illustration. Task defined as: Asymmetric tactical reconnaissance, Q-36/37 radars.

Joint Urban Operations

CGA Study

All Joint operations planned and conducted across the range of military operations on or against objectives on a topographical complex and adjacent natural terrain where manmade construction or the density of noncombatants are the dominant features.

Workshop Discussion

The workshop experts considered the specific task of *distinguish enemy from populace* as an illutration. Task defined as: Ability to observe the enemy within the populace, limited nonlethal capabilities to expand soldier options, limited nonlethal training and doctrine knowledge. Does not include sophisticated future force tracking.

Force Projection

CNA Study

Enable the Army Future Force to respond rapidly from a strategic distance and deploy by air and sea through multiple entry points for immediate employment in theater and to conduct intratheater operational maneuver and sustainment by ground, air, and sea particularly with mounted, protected forces.

Workshop Discussion

Not discussed. Determined to be for high-end allies or remain organic to the U.S. Army.

Medical

CGA Study

Actions and efforts to promulgate and promote efficient delivery and consumption of supplies at all levels by all units. Also incorporates actions to improve combat service, combat service support, and medical units' visibility, distribution, accountability, and operations.

Workshop Discussion

The workshop considered the specific task of controlling infectious diseases as an illustration. Task defined as: Personal hygiene education, knowledge of infrastructure, monitor soldiers' health status remotely. This does not include pandemic disease control such as Avian Influenza or large-scale biological or germ warfare.

Joint, Interagency, and Coalition Operations

CGA Study

The ability of all U.S. Service units, coalition units, and allied units to conduct tactical and operational-level operations. This interoperability seeks to maximize the effectiveness of Joint, coalition, and allied forces as well as minimize fratricide among them. Includes the ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces and to use the services so exchanged to enable them to operate effectively together.

Workshop Discussion

Not discussed. Determined to be for high-end allies or remain organic to the U.S. Army.

Detect and Identify Obstacles

CNA Study

Enable detection and identification of obstacles, especially explosive devices, at ranges safe from obstacle ballistics effects. Provide means to examine, classify, and report obstacles.

Workshop Discussion

The workshop considered the specific task of *IED detection and neutralization* as an illustration. Task defined as: Protect soldiers from IED effects, protect multiple platforms, involves sophisticated understanding of the system, not just defeating the device.

Added Capability Gaps

Nonlethal Capabilities

Workshop Discussion

The workshop considered the specific task of *crowd control* as an illustration. Task defined as: Riot control in crowded markets, riot type control at the entrances to base camp. This does not include sophisticated electronic monitoring or preemptive crowd control.

Engineering

Workshop Discussion

The workshop considered the specific task of *explosive ordnance disposal* as an illustration. Task defined as: Keep major supply routes clear in a high threat environment.

Detainee Operations

Workshop Discussion

The workshop considered the specific task of *prisoner guarding* as an illustration. Task defined as: Guard prisoners in a high threat environment.

HUMINT

Workshop Discussion

The workshop considered the specific task of *analysis* as an illustration. Task defined as: Interdict enemy forces before they encounter friendly forces, protect installations from sabotage, accumulate intelligence from reporting elements quickly, lack of decision support tools for tactical commanders.

APPENDIX C Coalition Partner Contributions to U.S.-Led Operations

Table C.1 Number of U.S.-Led Coalition Operations Deployed to by Partners

1 Coalition Operation	2–3 Coalition Operations	4–7 Coalition Operations
Austria	Albania	Australia
Chile	Azerbaijan	Belgium
Colombia	Bulgaria	Canada
Dominican Republic	Egypt	Czech Republic
El Salvador	Fiji	Denmark
Georgia	Greece	Estonia
Honduras	Latvia	Finland
Japan	Luxembourg	France
Jordan	Macedonia	Germany
Kazakhstan	Mongolia	Hungary
Malaysia	Morocco	Italy
Moldova	New Zealand	Lithuania
Nicaragua	Portugal	Netherlands
Pakistan	Republic of Korea	Norway
Philippines	Russia	Poland

1 Coalition Operation	2–3 Coalition Operations	4–7 Coalition Operations
Saudi Arabia	Singapore	Romania
Uruguay	Slovenia	Slovak Republic
Zimbabwe	Sweden	Spain
	Thailand	United Kingdom
	Turkey	
	Ukraine	
	United Arab Emirates	

Table C.1 (continued)

Partner Country	Total Forceª	OIF	OEF	ISAF	Bosnia	Kosovo	Haiti	Sinai	Somalia	Max. %
Albania	12,500	70	n/a	PKs	100	Basing	0	0	0	0.80
Australia	52,190	2,000	Major fleet unit	240	50	0	0	25	650	3.83
Austria	34,024	0	0	0	300	0	0	0	0	0.88
Azerbaijan	72,100	151	23	0	0	0	0	0	0	0.21
Bahrain	11,260	0	Basing, overflight	0	0	0	0	0	0	N/A
Belgium	39,800	0	210	36	300	0	0	0	850	0.75
Bulgaria	45,000	500	0	100	50	0	0	0	0	1.11
Canada	52,300	0	2,250	Battle group	1,000	0	700	29	850	4.30
Chile	81,000	0	0	0	0	0	300	0	0	0.37
Colombia	190,300	0	0	0	0	0	0	358	0	0.18
Croatia	18,900	0	0	0	Basing	0	0	0	0	N/A
Czech Republic	40,300	300	17	44	850	150	0	0	0	2.11
Denmark	23,860	496	101	460	800	0	0	0	0	3.35

Table C.2 Partner Contributions (Personnel and Nonpersonnel)

Table C.2 (continued)

Partner Country	Total Forceª	OIF	OEF	ISAF	Bosnia	Kosovo	Haiti	Sinai	Somalia	Max. %
Dominican Republic	23,700	602	0	0	0	0	Basing	0	0	2.54
Egypt	440,000	Overflight	Overflight	0	1 Battalion	0	0	0	1,663	0.37
El Salvador	15,770	380	0	0	0	0	0	0	0	2.41
Estonia	5,700	37	10	23	50	0	0	0	0	0.88
Fiji	3,250	700	0	0	0	0	0	338	0	21.50
Finland	30,980	5	60	86	850	0	0	0	0	2.74
France	244,560	0	5,500	750	10,000	4,700	900	15	2,000	4.08
Georgia	24,700	600	0	0	0	0	0	0	0	2.43
Germany	280,800	0	3,900	2,500	4,000	3,900	0	0	1,500	1.42
Greece	166,000	0	Basing	Basing	1,000	429	0	0	0	0.60
Honduras	8,300	370		0	0	0	0	0	0	4.46
Hungary	35,400	500	0	175	500	320	0	41	0	1.41
Italy	202,200	2,700	1,000	2,800	2,100	4,750	0	76	2,500	2.35
Japan	234,880	1,000	Logistics	Logistics	0	0	0	0	0	0.43

Table C.2	2 (cont	inued)
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Partner Country	Total Forceª	OIF	OEF	ISAF	Bosnia	Kosovo	Haiti	Sinai	Somalia	Max. %
Jordan	100,500	Training	150	0	0	0	0	0	0	0.15
Kazakhstan	67,300	29	Overflight	0	0	0	0	0	0	0.04
Kuwait	16,200	Basing	Basing	0	0	0	0	0	0	N/A
Latvia	5,580	135	0	10	50	0	0	0	0	2.42
Lithuania	9,230	54	40	6	50	30	0	0	0	0.59
Luxembourg	900	0	0	10	300	0	0	0	0	33.33
Macedonia	11,600	34	0	19	0	Basing	0	0	0	0.29
Malaysia	103,300	0	0	0	650 ^b	0	0	0	0	0.63
Moldova	6,562	24	0	0	0	0	0	0	0	0.37
Mongolia	7,650	170	0	21	0	0	0	0	0	2.22
Morocco	200,000	0	Basing	0	650	0	0	0	650	0.33
Netherlands	46,200	1,265	180	361	2,060	0	0	0	0	4.46
New Zealand	10,970	60	Frigate, logistics	0	50	0	0	20	0	0.55
Nicaragua	14,100	120	0	0	0	0	0	0	0	0.85
Norway	27,200	150	330	330	750	0	0	3	0	2.76

Table C.2 (continued)

Partner Country	Total Forceª	OIF	OEF	ISAF	Bosnia	Kosovo	Haiti	Sinai	Somalia	Max. %
Pakistan	620,000	Logistics	Logistics	Logistics	0	0	0	0	5,000	0.81
Philippines	118,000	51	0	0	0	0	0	0	0	0.04
Poland	133,150	2,400	0	87	600	800	0	0	0	1.80
Portugal	45,570	128	16	0	900	0	0	0	0	1.97
Qatar	12,400	0	Basing	0	0	0	0	0	0	N/A
Republic of Korea	672,000	465	Logistics	0	0	0	0	0	250	0.06
Romania	88,235	793	436	306	100	0	0	0	0	0.89
Russia	902,000	0	Search & hosp		1,200	3,200	0	0	0	0.35
Saudi Arabia	124,500	Basing	Basing	Basing	0	0	0	0	678	0.54
Singapore	60,500	180	180	33	0	0	0	0	0	0.29
Slovak Republic	23,800	104	40	17	50	0	0	0	0	0.44
Slovenia	7,300	5	0	SOF unit	50	0	0	0	0	0.68
Spain	114,774	1,300	540	500	1,100	0	0	0	0	1.13

Table C.2	(continued)
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Partner Country	Total Forceª	OIF	OEF	ISAF	Bosnia	Kosovo	Haiti	Sinai	Somalia	Max. %
Sweden	36,940	0	0	84	807	0	0	0	0	2.18
Thailand	334,500	443	Eng. Company	130	0	0	0	0	0	0.13
Turkey	517,100	0	Air refuel	360	1,200	0	0	0	300	0.23
Ukraine	257,000	1,700	Overflight, airlift	0	500	240	0	0	0	0.66
United Arab Emirates	65,500	0	Basing, overflight	0	0	1,200	0	0	(c)	1.83
United Kingdom	187,970	11,000	1,000	3,500	13,000	3,300	0	0	0	6.92
Uruguay	24,690	0	0	0	0	0	0	87	0	0.35
Zimbabwe	34,000	0	0	0	0	0	0	0	1,000	2.94

^a Found in Jane's Sentinel Security Assessment, Country Executive Summaries.

^b Estimated—Malaysia contributed one battalion to Bosnia IFOR.

^c United Arab Emirates contributed troops to UNITAF, but no data are available on the number deployed.

Bosnia—number of troops deployed based on IFOR/SFOR.

Kosovo—number of troops deployed based on KFOR.

Haiti—number of troops deployed based on Operation Secure Tomorrow.

Sinai—number of troops deployed based on Multinational Force and Observers.

Somalia—number of troops deployed based on Operation Restore Hope.

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