



Afghanistan Operations Reconstruction

Part II: Capabilities Development and Sustainment

Eugene A. Razzetti

This article, in furtherance of Part I in this series (see the January-February issue of *Defense Acquisition*), focuses on identifying and analyzing a “capability gap” and proposing more practical ways to reduce it or close it completely. We also examine “sustainment” because solving the capability gap without addressing sustainment (of the identified solution) can make the entire effort meaningless.

The section titled “Non-materiel Solutions” includes like findings and conclusions from a study of logistics and resupply in 2006 in the Middle East by the Center for Naval Analyses (CNA), in which the author participated. The fact that findings, conclusions, and recommendations are similar in 2019 to what they were in 2006 reinforces an implied inability of the Department of Defense (DoD) to seek, document, and optimize lessons learned in the Middle East.

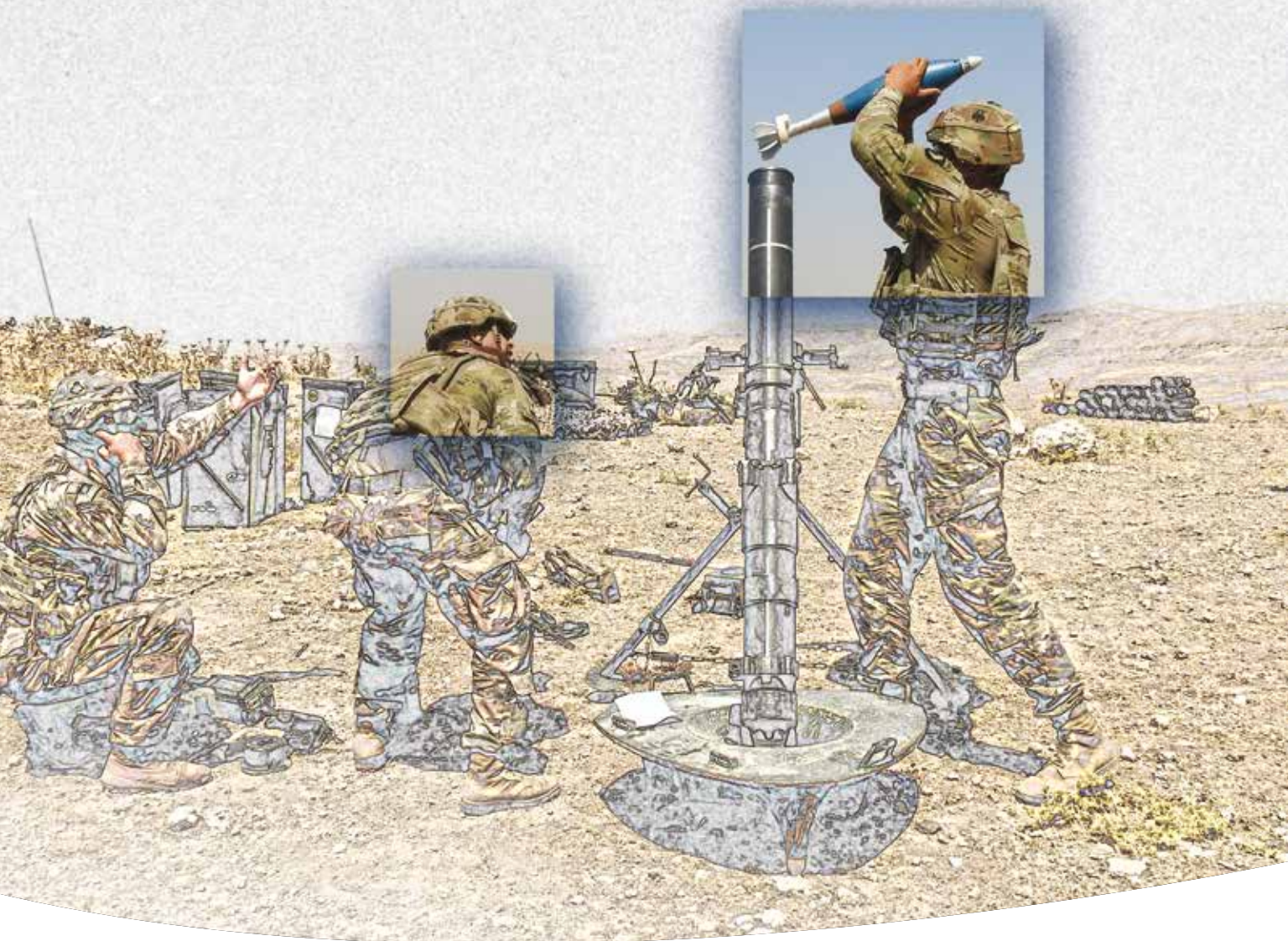
A CAPABILITY GAP ADDRESSES THE NEED FOR ADDITIONAL capabilities or for optimizing those that already exist. For our purposes, the proof of an optimized capability is an optimized (and perhaps, a safer) mission.

Gap analysis is a tool for comparing actual performance or results with what was expected or desired. It identifies poor or unacceptable strategies, practices, or technologies—and then (if done properly) recommends corrective action.

The benefits of successful gap analysis include:

- Gaining insight into areas that need improvement

Razzetti is a retired Navy Captain, management consultant, International Organization for Standardization (ISO) auditor, and military analyst. He is the author of five management books, including *Hardening by Auditing*, a handbook for measurably and immediately improving security management.



- Ensuring that program requirements are being met
- Uncovering areas of program weakness
- Providing information to decision makers
- Prioritizing needs and focusing limited resources and energy.

Program managers (PMs) can perform gap analyses for real world or conceptual scenarios. However, performing conceptual gap analyses will likely require assumptions. Whether analyses involve real world or conceptual situations, they need as many real facts and as much real data as you can gather.

Similarly, gap analyses can be strategic and focus on the overall organization and the planning and execution at that level, or they can be tactical, and focus on the day-to-day work of a team or department in furtherance of a specific mission. Since both methods are based on real-world situations, there may be no need to make assumptions. You may have everything that you need.

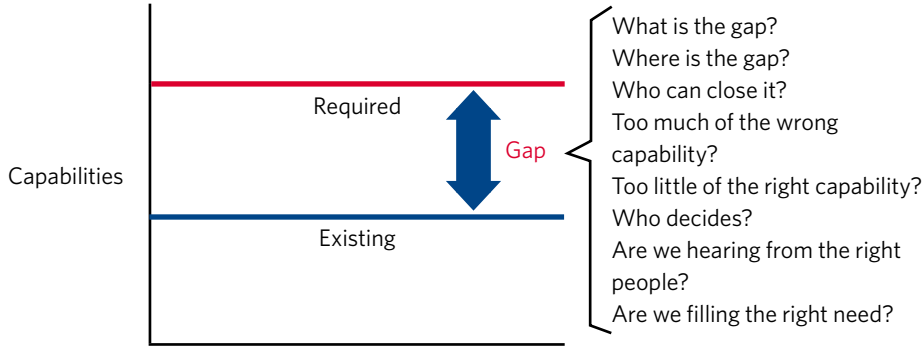
The *Inspector General's (IG's) Report* identified strategic and tactical capability gaps throughout in-theater operations in Afghanistan, stressing the need to determine:

- What is the gap?
- Where is the gap?
- Is the correction too much (i.e., impractical)?
- Is the correction too little (i.e., ineffective)?
- Who decides?
- Is this the right solution for the mission?

Figure 1 describes capability gap analyses as it applies currently to operations in Afghanistan. PMs must focus on what and who identifies the gap, conducts credible gap analyses, and then precisely construct corrective action(s)—all in constant cooperation with U.S. and partner nation Warfighters.

PMs and Warfighters should perform gap analyses frequently—thoroughness, timeliness, and involvement of all players can maximize their effectiveness. Gap analyses

Figure 1. Identifying the Capability Gap



Source: All tables and figures by the author.

can adjust strategies to better fit evolving situations, or to realign organizational processes.

Note: Separate, but inseparable from gap analysis, is risk assessment, which examines the future, while gap analysis examines the present. Both are essential to successful program management in general and logistic resupply in particular; but discussing them in further detail is not in the scope of this article. Please see my previous articles discussing risk assessment and management.

Capability Development—From Gaps to Maps

Capability gaps point to the need to develop additional capabilities, revamping the existing ones, or doing away with redundant ones and the like, in order to optimize the organization or the mission.

After capability gaps are identified and analyzed comes capability development, which is accomplished by mapping those gaps. That is, listing the gaps and placing alongside them potential corrective actions to increase capability. Table 1 is an example of a capability gap analysis “map.” It combines capability gap descriptions and recommended solutions, and then it adds a plan of action and milestones, which assigns responsibilities and completion dates. In so doing, the map becomes a

dynamic, actionable, management prioritization tool (i.e., a mini-strategic plan), which can replace more questionable endeavors, such as generating meeting minutes and recurring reports.

Non-Materiel Solutions

Non-materiel solutions are practical, actionable measures that warfighters can employ to increase operational safety and mission performance, without (awaiting) the benefit of new technologies. CNA studied operations in key Middle East strategic ports of debarkation in 2006. It concluded that non-materiel solutions like those listed in Table 2 can make practical, expedient, contributions to mission readiness and efficiency—using what is already available in most cases. The study (in which I participated) went on to recommend incorporating non-materiel solutions into operational planning, concept of operations (CONOPS),

Table 1. Capability Gap Analysis Map, With a Plan of Action and Milestones

Operation	Existing	Required	Gap	Corrective Action	Risk (R/Y/G)	Assigned	Comp. Date	Remarks
1-15	Insufficient MEDEVAC capability	5-10 Simultaneous MEDEVACs	Insufficient trained helo pilots	15 Armored ambulances & drivers		USA/Col. Smith	15 Oct. 2020	10 in-theater now

EXAMPLE

Gap Analysis

Plan of Action & Milestones

Date: _____
 Prepared by: _____
 Approved by: _____

Key: MEDEVAC=medical evacuation.

Configuration management is as essential in information technology (e.g.; computer software and hardware) as it is in civil and industrial engineering (e.g., roads, bridges, canals, dams, and buildings).

and standard operating procedure development, along with training plans—including command post and tabletop exercises and wargames. The study showed further that non-materiel solutions could, in fact, reduce or eliminate the need for those of a materiel or technological nature (e.g., a weapons system or airframe), which often required time, testing, and funding—all with training pipelines of their own.

Table 2 summarizes non-materiel solutions categories of the CNA study, including examples of recommended actions. Many of the areas of the 2006 study have direct correlation and contribution to the current operations in Afghanistan.

If it turns out that a materiel solution (e.g., an enhanced High Mobility Multipurpose Wheeled Vehicle [HUM-VEE]) is the best course of action, then, as these and most studies determine, there must be discipline among the configurations of the systems and equipment to be used in-theater. Specifically, there must be effective configuration management, especially for equipment used in-theater by both U.S. and partner nation forces.

Configuration Management

Configuration management is a system engineering process for establishing and maintaining consistency of a product’s performance, functional, and physical attributes with its requirements, and design, and operational information throughout its life. Configuration management processes are used by the military to manage changes throughout the life cycles of complex systems—such as weapons, military vehicles, and information systems. Configuration management is as essential in information technology (e.g.; computer software and hardware) as it is in civil and industrial engineering (e.g., roads, bridges, canals, dams, and buildings).

Configuration Identification consists of setting and maintaining baselines, which define the system or subsystem architecture, components, and any developments at any point in time. It is the basis by which changes to any part of a system are identified, documented, and later tracked through design, development, testing, and final delivery.

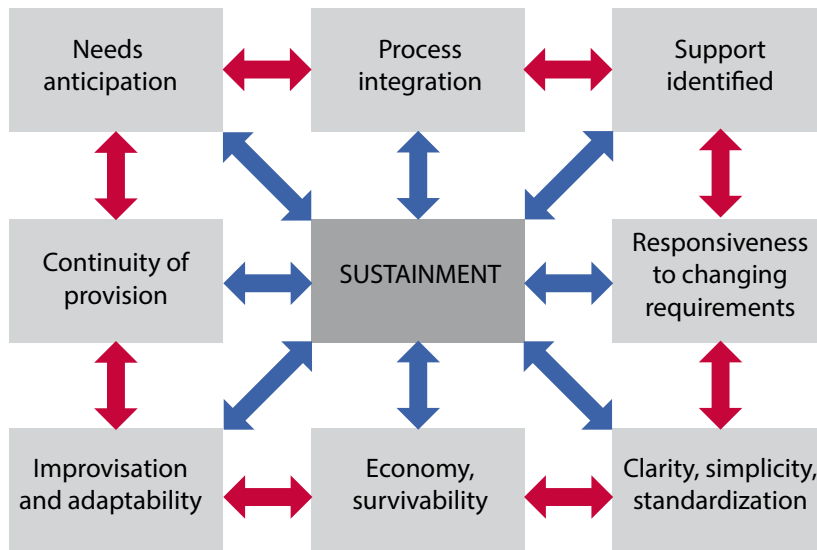
Configuration Verification and Audit describes an independent review of hardware and software for the purpose

Table 2. Non-Materiel Solutions

Area	Non-Materiel Solution
Mission Analysis	Identify all resources, time constraints; CONOPS development/revision
Part Throughput	Early receipt of loadout data; spreadsheet modeling; primary/secondary routing
Medical operations	Practical MEDEVAC procedures; vaccinations; preventive/protective treatment (prophylaxis)
Decontamination plan/ prep	Modeling potential CBRNE attacks; protective masks/filters; predictive modeling
Force Protection	Augmentations; defined task organizations; sector/grid systems; Standard operating procedures
Host nation support	Logistics; facilities; food service; laundry; executive agents; battle books; country teams
Risk assessment/ minimization	Threat assessment; define unacceptable risk spreadsheet modeling; mitigation
Weather prediction	Meteorological detachments; weather cells; fresh water management; prediction and warning
Training	Seminar wargame/tabletop; software familiarization; pre-deployment unit training; needs analysis; task analysis; emergency responder; firefighting; building/area evacuation
Checklist development	Tactical Operations Center setup; node hardening; personnel/material decontamination

Key: CBRNE=chemical, biological, radiological, nuclear and explosive; CONOPS=concept of operations; MEDEVAC=medical evacuation.

Figure 2. Ongoing, Proactive, Sustainment



The IG Team observed numerous sustainment shortcomings; but, by virtue of their charter, could not initiate corrective action. For that reason, the Army would do well to consider assigning an experienced mid-grade officer (major or lieutenant colonel) to the IG's team for follow-on investigation and assessment of Afghanistan operations. He or she could provide immediate voice/hard copy feedback and expediting to pre-designated officials in the Continental United States. "Action Items" would become "Completed Actions" almost immediately, and without awaiting generation of "after-action" reports and briefings.

Figure 2 describes ongoing, effective, sustainment. Note the constant two-way communication. Without that continuous flow—involving all players and users—there can be no ongoing sustainment.

of assessing compliance with established performance requirements, commercial and appropriate military standards, and functional, allocated, and product baselines. Configuration audits verify that the system and subsystem configuration documentation comply with the functional and physical performance characteristics before acceptance into an architectural baseline.

The IG's Report contained numerous instances wherein a robust program of configuration management would have added measurably to equipment compatibility and mission effectiveness.

Sustainment—Don't Leave Home Without It

The Dictionary of Military and Associated Terms defines sustainment as "the provision of personnel, logistic, and other support required to maintain and prolong operations or combat until successful accomplishment or revision of the mission or the national objective."

Sustainment is essential to maintaining combat power, enabling strategic and operational reach, and providing U.S. forces with endurance. The principles of logistics are the same as the principles of sustainment, and while these principles are independent, they are also interrelated.

A crucial sustainment principle, responsiveness, is the ability to react to changing requirements, to meet needs, and to maintain support. Responsive sustainment means that commanders maintain operational focus and pressure, set the tempo of operations to prevent exhaustion, replace ineffective units, and extend operational reach.

Summary

Failure to address capability and sustainment and include real-time, actionable, reach-back remains a clear and present deficiency in Afghanistan; and clear and present deficiencies create clear and present dangers.

Capability gaps must be minimized, and sustainment of the optimum solutions (whether materiel and non-materiel) must be maximized. The fact that supply chain shortcomings in the Middle East persist despite years of opportunity to streamline and fine tune, suggests that they need greater visibility in real-time and not just in after-action reports. Again, the DoD would do well to consider augmenting the IG's staff with a liaison officer/expediter, who can both cut through and report "red tape."

The talented, energetic, and dedicated professionals of the IG's staff can provide their findings—fully documented. They can brief in any venue and both seek and relish every opportunity to impart their valuable body of knowledge. They cannot, however, correct capability gaps and sustainment failings in the supply chain, reverse stagnating tendencies, or streamline burdensome and ineffective liaison, communication, and reach-back procedures that endanger the warfighter. That ball is in our court.

Check out the I.G. report at: <https://www.sigar.mil/pdf/lessonslearned/SIGAR-19-39-LL.pdf> and build your worklist. The warfighters in Afghanistan (like my grand-nephew) would really appreciate it.

The author can be contacted at generazz@aol.com.