Chapter Three

CHARACTERISTICS AND NEEDS OF LONG-RANGE PLANNING CUSTOMERS

STRATEGIC PLANNING

Support to strategic planning has an approach very different from that of supporting acquisition or force development. In the latter two types of planning, there is a legitimate need for point estimates because instructions and regulations from above the Department of the Army require them, and because they provide an agreed-upon set of performance characteristics that can be used as a standard across various acquisition and force development activities. Strategic planning, however, operates by identifying and monitoring the Army’s key assumptions. The system uses scenarios and cases to try to stress these assumptions and cause them to fail. With knowledge of what would make an important assumption vulnerable, the system can monitor the landscape for signs of trouble.

Army assumptions may be vulnerable in ways that are not addressed in the formal, DOD scenarios like those found in the Defense Planning Guidance. Strategic planning must provide additional scenarios or case studies to cover the scenario domains left empty by official, fully coordinated scenarios, and to test critical assumptions exhaustively against vulnerability. Support to strategic planning means crafting the scenarios for assumption testing and subsequently monitoring the global security environment for indications that the Army’s assumptions might be failing.
Strategic Planning Intelligence Needs

The strategic planners are concentrated in the Strategy, Plans, and Policy directorate of the Army DCSOPS. They also include the major command (MACOM) planners. The strategic planning problem set is qualitatively different from the one that confronts the acquisition and force development planners. The strategic planners want more than point estimates or consensus-based forecasts about the future. They seek evidence that suggests their important assumptions are becoming vulnerable.

Core Functions

At the highest level, Army strategic planners have two core functions: making sure the Army is adequately preparing for the future, and making sure the Army can do its part in the National Military Strategy. To accomplish these functions, strategic planners endeavor to

- help keep the Army substantially hedged against the most significant unfavorable outcomes; and
- prevent surprise.

Key Assumptions and Decisions

Our experience with Assumption-Based Planning indicates that an organization must discover its own load-bearing assumptions. Nevertheless, we believe some assumptions emerge from our workshops and interviews with officials as clearly important to the Army, and we offer them below. Key assumptions of strategic planners, as derived from workshop comments, focus on the following areas:

- the applicability of guidance contained in the National Security Strategy (NSS), National Military Strategy (NMS), and vision of U.S. warfighting;
- the state of the world, including the emergence of new major military powers;
- the nature of warfare; and
- resourcing (e.g., budget) levels.
**Critical Signposts to Monitor**

Among the signposts that DCSINT should monitor for Army strategic planners are:

- Changes in the nature of warfare;
- Changes in the current threat or opposing capabilities;
- Changes in the international environment;
- Changes in U.S. defense resources; and
- Changes in U.S. military capabilities.

**ACQUISITION**

Once threat-based (i.e., focused on Soviet military capabilities), the Army’s acquisition practices have become more capabilities-based (i.e., focused on exploiting its own technological advantages).\(^1\) Recent programs including the Crusader howitzer, Theater High-Altitude Area Defense (THAAD), the Comanche helicopter, the Javelin anti-tank missile, and product improvements to other major systems all reflect the influence of capabilities-based rather than threat-based development.\(^2\) For example, Crusader was not envisioned as a response to developments in enemy artillery, but as the optimal exploitation of U.S. technological potential to produce a desired artillery capability. THAAD likewise sought to produce a desired air defense capability as a hedge against missile proliferation, even though the specific threat systems were held by only a handful of states. Comanche too, represents a desired capability to operate

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\(^1\)See HQDA, Army Vision 2010, especially the graphic on p. 10 that depicts “leveraging technology” as the foundation for “full spectrum dominance.”

forward of the FLOT (forward line of own troops), not as a response to enemy developments in armed reconnaissance capabilities. Javelin results as much from the age and limitations of the Dragon and TOW anti-tank weapons it replaces as from anything else. The Army sought a new, light, long-range anti-tank capability on its own merits, not in response to an emergent new armor threat. Requirements for new weapons and equipment reflect the changed demands of Army operational notions developed in the “Force XXI” and the “Army After Next” efforts rather than any specific threat. Except for certain legal requirements to produce system threat assessment reports (STAR reports) and similar documents for the acquisition process, Army intelligence’s role has been diminished with the emphasis on capabilities-based planning.

There have been changes within DOD as well, including changing planner worries, changing acquisition practices, and downsizing of Army intelligence support. Although their predecessors tended to focus on specific “threat systems,” planners today are at least as concerned about technological proliferation and hybridization and the trends in foreign technological development. Planners want to assure the U.S. technological lead because it provides the freedom to base acquisition on U.S. capabilities and because it offers potentially high-payoff approaches. Thus, despite downward trends in global defense outlays and arms transfers, planners need periodic reassurance that the U.S. lead in military technology is holding and that their acquisition strategy is not becoming vulnerable.

**Acquisition (ACQ) Intelligence Needs**

The Army acquisition community is an eclectic one, involving Army laboratories and arsenals, Program Executive Offices and Program Management activities for individual equipment and weapon systems initiatives, a host of commercial firms, and the directing and supervising offices of the Assistant Secretary of the Army for Research and Technology.

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3 Telephone interview with Colonel Steve Reeves, Chief Scientist’s office within the office of the Deputy Assistant Secretary of the Army, Research and Technology, June 10, 1997.

4 Planner comments from the project workshop at RAND, Washington, D.C., June 18, 1997.
search, Development, and Acquisition. Collectively this community seeks to create weapons and equipment that exploit the United States' strong suit in technology, while avoiding designs that would be vulnerable to foreign systems. Current policies can be safely characterized as "technology push"—exploiting U.S. technological advantages while watching for foreign technical developments and threats.

This community wants point estimates, "certified threats," formally published intelligence products, and consensus on future forecasts. Acquisition regulations—another Cold War legacy—demand these as a means to ensure that the equipment produced is appropriate for the enemies and conditions the Army is likely to encounter over a 20-year or longer time horizon: a daunting job for intelligence, indeed. Intelligence products, in this community, are often not only intended to inform the technical decisions, but are also used by the acquisition community to demonstrate compliance with laws and regulations.

**Core Functions**

At the highest level, ACQ's core functions within the Army are

- research, development, and acquisition (RDA) for new U.S. Army systems;
- RDA for modification of existing Army systems; and
- protection of individual Army systems from vulnerabilities, primarily to enemy systems (sometimes called weapon system life-cycle support).

**Key Assumptions and Decisions**

The key question that ACQ needs to have answered by DCSINT is "How could an adversary break or degrade current and planned U.S. Army capabilities?" DCSINT intelligence assessments provide the basis for ACQ planners' assumptions about the state of the world and emerging threats to Army capabilities. Three major sets of assumptions on factors that could break or degrade Army capabilities must be addressed by ODCSINT: assumptions about the importance of technology, assumptions about changes in adversary technologies,
and assumptions about adversaries’ ability to translate these technologies into militarily effective capability.

From our study of the capabilities-based approach, one unstated assumption of this community is that new technology—not asymmetric strategies, innovative doctrine and organization, or other non-technological factors—will produce the most capable opposing forces or will be the principal source of capabilities that might “break” U.S. Army capabilities. Changes in adversary weapon systems can result from:

- indigenous technological breakthroughs;
- arms transfers;
- foreign technological exploitation; and
- co-production agreements.

**Critical Signposts to Monitor for ACQ**

These three sets of key assumptions appear to us to lead to a number of critical signposts that need to be monitored to ensure that Army capabilities are not negated. These include data on the following:

- Estimates of current military and technological capabilities, and available resources
- Forecasts of changes in available resources
  - Among services, branches of services
  - To RDT&E, and to acquisition
  - To arms transfers, and to advisors
- Technological breakthroughs
  - Basic science or engineering breakthroughs

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5 Translation of technology into militarily effective capabilities requires operational concepts that exploit the technology by providing the enabling doctrinal, organizational, and training frameworks; these considerations appear to be given less emphasis by ACQ long-range planners than opposing technologies.

6 All signposts derive from planner remarks during the project workshops.
— Product (weapon system) engineering and acquisition

• Technological diffusion (transfers of enabling technologies)
  — Arms transfers
  — Foreign technological exploitation
  — Co-production

• Incorporation of technologies into militarily effective capability
  — The emergence of asymmetric strategies
  — The emergence of new operational concepts
  — Innovative doctrine, organization and training

**FORCE DEVELOPMENT**

The force development process builds the force packages that provide the U.S. Army’s deployable combat power and the combat developments activities that define the capabilities of the units within the force packages. Traditionally, intelligence support to FD meant providing approved threats and scenarios, developing foreign force structures and order-of-battle information, and describing foreign military operational practices. The task today has expanded. The FD community still wants to know the details of foreign militaries, but these details have expanded to scan more countries and to include more information about command, control, communications, computers, and intelligence systems (C4I). Force developers also need more intelligence about foreign communications networks and, in general, more about electronic infrastructure.\(^7\)

But besides expansion of the traditional support role, other factors influence intelligence support to force development: the Army’s capabilities-based approach, the focus on modern, conventional warfare as the principal test of force development initiatives, and planner worries.

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The Capabilities-Based Approach

As was the case with acquisition, force development emphasizes capabilities over threat and other factors. Force XXI, the Army After Next, and their supporting activities—including the Battle Labs, advanced warfighting experiments, and similar initiatives—emphasize developing desirable capabilities to improve force effectiveness, efficiency, and the prospects of survival. As with acquisition, the capabilities-based approach appears to assume that technology push will have a major role in producing the best solutions that will be superior to those of foreign forces. Intelligence support must, therefore, monitor this assumption and help guard it from potential vulnerabilities. Monitoring this assumption means that Army intelligence must be on the lookout for foreign military developments that could cause it to fail.

The Focus on Modern, Conventional Warfare

The overwhelming majority of force development activities consider modern, high-tempo conventional combat operations to be the acid test. The advanced warfighting experiments at Fort Irwin pit the experimental force against a modern, mechanized enemy. The recent Army After Next Winter Wargame also pitted the United States against high-tech enemy forces.

With very little attention devoted to unusual modes of warfare, there is a danger that FD could be blindsided by adversaries who do not pursue a conventional way of war. For example, what if an opponent refuses to fight and simply hides its forces until the United States tires and withdraws? The United States would need the means to force a decisive engagement. Or suppose the opponent is an actor without obvious centers of gravity that U.S. forces are trained to locate and attack. The enemy may benefit from difficult terrain or have other advantages that allow them to fight in an unexpected way that keeps the Army from following its preferred mode of operations. Scanning the international landscape for potential foes who might practice unusual modes of warfare is thus a critical task in providing support to force development.
**Planner Worries**

A principal concern is developing intelligence against more of the credible regional actors, including nonstate, so-called transnational actors. Ideally, the FD community would wish to have files on these entities like the ones they maintain on states: equipment holdings, order of battle, and so on.

Asymmetric strategies—approaches to war that avoid U.S. strengths while concentrating on U.S. weaknesses—also enjoy a priority similar to that of tracking transnational actors. The planners in the project’s workshops conceived of the asymmetrical strategy problem as distinct from unusual modes of warfare in that it emphasizes exploiting technology to gain advantage rather than rethinking warfare in some fundamental way. For example, an actor applying an asymmetrical strategy might have a thoroughly conventional military. His plan might be to embark on a terrorist campaign on the territory of U.S. allies, causing enough damage to fracture the coalition and deprive the United States of allied facilities while avoiding defeat on his own territory, maneuvering to stay out of the U.S. path until frustration caused a policy change and a U.S. withdrawal. As the example suggests, planners worry that rather ordinary forces might somehow be supplemented with limited amounts of equipment—terrorist bombs in this instance—that produce militarily significant results.

**Force Development Intelligence Needs**

Like their colleagues in acquisition, the force developers are engaged in exploiting technology to produce the most capable units possible and arraying them in force packages that yield the most versatile, lethal, and sustained land combat power possible.\(^8\) Force developers watch foreign military developments for indications that they may make U.S. Army forces vulnerable.

Force developers also want point estimates, often provided as forecasted order-of-battle data on various foreign militaries. The community is seeking inputs for models and other analytical tools to help

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\(^8\)That is, within the constraints of the capabilities that have been developed by ACQ.
it understand the advantage of one type of unit relative to another, or one force package compared with another.

**Core Functions**

The core functions of Army force developers are

- comparative analyses of alternative force structures at all echelons; and
- identification of preferred force structures.

**Key Assumptions and Decisions**

FD needs the same question answered that ACQ does, namely “How could an adversary break, degrade, or limit U.S. Army current or planned capabilities?” and it has the same 20+ year time horizon as ACQ. Force developers do their planning on the basis of assumptions about likely modes of warfare and examine cases within and outside planning guidance parameters. The emergence of unanticipated modes of warfare or cases outside the guidance parameters can vitiate planning assumptions.

Unanticipated modes of warfare include

- unusual combat organizations;
- plans to achieve unique military or political objectives;
- innovative concepts of operation, use of technologies, or doctrine.

The emergence of cases outside planning guidance parameters can include

- cases in noncanonical regions;
- cases in unique environments (terrain, weather, etc.);
- restricted host nation support or base access;
- coalition constraints; and
- exercises or mobilizations that engender a new threat.
Critical Signposts to Monitor

Among force developers’ long-range planning signposts that DCSINT should monitor are

- the effectiveness of foreign military organizations in the context of specific force-on-force scenarios;
- accuracy of portrayals of foreign capabilities;
- mobilization or force generation capabilities;
- changes in resources
  - budget allocations
  - RDA activities
  - arms transfers
  - advisors;
- major changes from current practices
  - unusual actors/methods of warfare
  - revolutionary organization or C2.

CHAPTER OBSERVATIONS

This chapter has summarized the characteristics and needs of the long-range planning customers. The strategic planners need broader types of information more applicable to their planning processes than what they currently receive. Two other intelligence consumers, ACQ and FD, continue to need Cold War-era point estimates for what seem to be legitimate, if somewhat dated, purposes. FD operates in an environment constrained by two potentially dangerous assumptions: that the capabilities-based approach is adequate and sufficient to field the best force for the future, and that a future peer competitor will remain the most difficult adversary. Even ACQ and FD, moreover, have sought information about trends in the world that could influence their activities. The question is, could Army intelligence deliver beyond its stock in trade of specific estimates? Does it have the tools to sort through the ever-growing mounds of
data to produce the intelligence its long-range planning customers need? The next chapter considers the ability of technology to help.