

Sustainment Preparation of the Operational Environment Planning and Assessment Tool

This article provides a brief overview of a sustainment tool that provides a process for the operational-level planner to assess the capabilities and resources available in an area of responsibility prior to deployment.

By Lieutenant Colonel Bill Knight, USA, (Ret.)

Logistics preparation of the theater (LPT) is an old term for the logistics mission analysis and planning process used to prepare for providing support at the operational level. This assessment tool has been taught at the Army Command and General Staff College (CGSC) in both the Advanced Operations Course and as an elective since academic year 2005. This assessment tool was recently updated and renamed to reflect current doctrinal ideas and concepts from Field Manual (FM) 4–0, Sustainment, and Joint Publication (JP) 4–0, Joint Logistics. [FM 4–0 was replaced with Army Doctrine Publication (ADP) 4–0, Sustainment, on 31 July 2012.]

The new term we propose and currently use in the classroom is the “Sustainment Preparation of the Operational Environment Planning and Assessment Tool.” This article will expand on the ideas within these two doctrinal publications to further develop and refine this tool for sustainment planners. This planning and assessment process tool may not be all-inclusive since each decisive action (previously known as full-spectrum operation) is unique and may require different sustainment planning considerations or data collection categories or files.

Sustainment Planning and Assessment Tool

This sustainment-focused planning and assessment tool is comparable to, but not to be confused with, intelligence preparation of the battlefield (IPB), which is found in FM 2–01.3, Intelligence Preparation of the Battlefield. The sustainment assessment process is primarily initiated with open-source references, such as web-based research, documents, and commercial satellite imagery, until a formal military IPB is required. This assessment process is meant to be completed quickly. The initial findings are used before force deployment to provide the planner with

an indicator of what resources, environmental factors, and capabilities a country or area of operations (AO) has.

This process also will provide the planner with indicators of sustainment “topics of interest” that require further research once a specific mission has been designated. For example, annual climate data and terrain information collected through this process can provide excellent information that is used to tentatively identify weather and terrain hazards, potential effects on key transportation hubs and lines of communication, and sites for key sustainment support areas in the AO. This information is collected and collated; it should be retained and archived in sustainment-relevant data files for current and follow-on planning.

Follow-on actions from this sustainment assessment may include identifying requirements for preparing intermediate staging bases, selecting and improving lines of communications, projecting and preparing forward support bases, forecasting and building operational stock assets forward and afloat, and initiating talks with a foreign country’s leaders that result in future sustainment and support agreements. When a future military mission in the AO has been identified, sustainment planners would reopen the archived files and confirm or update the data previously assessed. These updated files, along with formal IPB and classified data from other sources, are used to initiate sustainment estimates to support operation plans, and follow-on development of comprehensive operational sustainment annexes to support operation orders.

Open Sources Used for Initial Assessment

Outside of the military IPB process (many of these sources being classified), many relevant informa-

CORE LOGISTICS CAPABILITIES

Core Capabilities	Functional Capabilities
Supply	-Manage Supplies and Equipment -Inventory Management -Manage Supplier Networks
Maintenance Operations	-Depot Maintenance Operations -Field Maintenance Operations -Manage Life Cycle Systems Readiness
Deployment and Distribution	-Move the Force -Sustain the Force -Operate the Joint Deployment and Distribution Enterprise
Health Service Support	-Casualty Management -Patient Movement -Medical Logistics -Preventive Medicine and Health Surveillance -Theater Medical Information
Engineering	-Combat Engineering -General Engineering -Geospatial Engineering
Logistics Services	-Food Service -Water and Ice Service -Base Camp Services -Hygiene Services
Operational Contract Support	-Contract Support Integration -Contract Management

This chart shows the relationship between core logistics capabilities and functional logistics capabilities.

tion collection sources—governmental and commercial—also collect, collate, and store “IPB-like” data on a routine basis. The information that these open sources store on the World Wide Web, to include published reports, can assist the sustainment planner in building his initial assessment database. Although some information may be suspect, it is a starting point from which the sustainment planner can further research and validate requirements.

The U.S. Department of State, with its worldwide embassies and military attaché offices, is an excellent source of detailed information on any particular country. Embassy staffs routinely do country studies that, when current, can provide detailed information on political and economic issues and potential resources to support an operation. Embassy personnel can also provide vital assistance when coordinating theater contract support for military forces, and coordinating support efforts with other Government agencies and intergovernmental, nongovernmental, and international organizations currently operating in country.

If Army Civil Affairs units have been operating in a specific country or AO, a wealth of intelligence

information (such as human intelligence) will be available to review during the sustainment assessment. These units have functional specialists who focus on particular areas such as civilian supply, public health, public safety, and transportation.

Additional web-based open sources of information include CultureGrams™ through ProQuest LLC and Brigham Young University; country studies and profiles produced by the Federal Research Division of the Library of Congress; country studies or area handbook series sponsored by the Department of the Army between 1986 and 1998; The World Factbook published by the Central Intelligence Agency; and country profiles produced by the United Nations Statistics Division. Multiple studies also are published by the Department of Defense and other Government agencies; these studies are unclassified and available on the Internet, such as can be found in the Combined Arms Research Library at Fort Leavenworth, Kansas.

Doctrine Updates

FM 4–0 introduced the new term “sustainment preparation of the environment” and described it as

SUSTAINMENT				
Joint Sustainment Function	Joint Logistics Capabilities	Supply Deployment and Distribution Maintenance Logistics Services Operational Contracting Engineering	Supply Transportation and Distribution Maintenance Field Services Operational Contracting General Engineering	Logistics
		Health Services	Army Health Systems Support Hospitalization Dental Treatment Behavioral Health Laboratory Services CBRNE* Treatment Medical Evacuation Medical Logistics	Army Health Services
	Personnel Services	Personnel Legal Chaplain Finance	Human Resources Support Legal Support Religious Support Financial Management Band Support	Personnel Services
*Chemical, biological, nuclear, radiological, and high-yield explosive				

This chart from FM 4–0, *Sustainment*, provides a simplified explanation of the crosswalks of the subfunctions between the joint sustainment function and Army sustainment warfighting function.

the “analysis to determine infrastructure, environmental, or resources in the operational environment that will optimize or adversely impact a friendly force’s means to support and sustain the commander’s operations plan.” This doctrinal manual stressed that a thorough assessment will assist logisticians (sustainment planners) in developing the most effective method of providing flexible and responsive support.

The original doctrinal manuals, published from 1993 to 1995, named six factors associated with the LPT process of data collection, categorization, and analysis. These six factors—geography, supplies and services, facilities, transportation, maintenance, and general skills—remain under the sustainment preparation of the environment concept. FM 4–0 defined each factor and its associated information as follows.

Geography. This includes information on climate, terrain, and endemic diseases in the AO. Use this information to determine the type of equipment

needed and when it is needed. Use water information to determine the location of ground water, drainage, run-off areas, and the need to deploy well-digging assets and water production and distribution units.

Supplies and Services. This includes information on the availability of supplies and services in the AO. The most common supplies are subsistence items, bulk petroleum, and barrier materials. The most common services include laundry and bath, sanitation, and water purification.

Facilities. This includes information on warehousing, cold storage facilities, production and manufacturing plants, reservoirs, administrative facilities, sanitation capabilities, and hotels.

Transportation. This includes information on road and rail networks, inland waterways, airfields, truck availability, bridges, ports, cargo handlers, materials-handling equipment, traffic flow, choke points, and control problems.

Maintenance. This includes information on host-

nation maintenance capabilities. Collecting information on contract maintenance facilities, the commonality or standardization of major end items and repair parts across the force, and the host nation's internal capacity for fabricating repair parts would also be key in planning support of coalition operations.

General Skills. This includes information on general skills such as translators and skilled and unskilled laborers. Some of the more common skills to be looked for are drivers, administrative clerks, dockworkers, materials-handling equipment operators, food service personnel, security guards, and mechanics.

FM 4-0 also emphasized the importance of understanding the link between sustainment as a joint function and as an Army warfighting function. It stated, "Sustainment is inherently joint in the U.S. Armed Forces." (See chart at left.)

The assessment process tool currently published in student texts at CGSC expands this linkage from the original 6 logistics factors to 15 data collection categories that better align sustainment with the current operational environment. The additional categories published in the student text are combat health support, personnel services support, field services and sanitation, special operations forces support, joint and multinational operations support, mission command, government, training, and "other" factors. When operational planners research the proposed 15 categories and analyze or assess the data collected, they will be in a better position to develop their initial conclusions and impact sustainment operations for the mission being planned. This assessment should tentatively identify any future sustainment challenges that may affect the mission(s) in an AO.

JP 4-0 and the JP 4-x series of joint publications provide a doctrinal framework for joint logistics planning and execution across a range of military operations. JP 4-0 also introduces a new term, "the joint logistics environment," which "consists of the conditions, circumstances and influences that affect the employment of logistic capabilities . . . and includes the full-range of logistic capabilities, stakeholders, and end-to-end processes."

After reading both FM 4-0 and JP 4-0, I interpret both sustainment preparation of the environment and the joint logistics environment as similar concepts and doctrinal ideas that support sustainment-logistics assessment. However, these two concepts and ideas have not been combined and published in a single tactics, techniques, and procedures publication to assist the planner in thinking through this detailed process. The CGSC publication, Student Text 4-1, Sustainment in the Theater of War, provides a detailed and simplified process—a standard tool—to conduct this assessment in preparation for future

sustainment and support operations. (After comparing FM 4-0 and ADP 4-0, I find that the doctrinal information in this article is still accurate.)

The Purpose of the Tool

The intent of the assessment tool described in this article is to provide an initial sustainment assessment tool for a planning staff to execute before developing a sustainment estimate for a designated operation or specific mission. An operational-level sustainment planner may be tasked to provide a brief overview of the resources and capabilities that a specific country has within the combatant command's area of responsibility.

A sustainment planner must identify gaps in these capabilities or resources available in country (potential host-nation support) and in surrounding countries within the area of responsibility. This process provides some key sustainment and operational environment planning hints that directly or indirectly affect support of a future operation. This assessment tool, published in a checklist format, is a starting point for sustainment planning for joint, interagency, and multinational operations.

Based on Executive Agent, Title 10, and common user logistics responsibilities across the Armed Forces and Department of Defense, much of an operational-level planner's initial assessments and considerations for sustainment of forces are joint in nature. Those unique sustainment and support requirements that specifically apply to the sister services, other Department of Defense agencies, Government organizations, and multinational partners, although important, are not specifically addressed in this article.

If your unit would like to further discuss this process, provide comments to improve the process and further refine the data collection categories, or receive a complete copy of the 16-page sustainment planning and assessment tool, please either email the author at bill.knight1@us.army.mil or call him at DSN 552-4425 or (913) 684-4425.

Lieutenant Colonel Bill Knight, USA (Ret.), is an assistant professor in the Directorate of Logistics and Resource Operations at the Army Command and General Staff College. He holds a B.A. degree in biology from Wichita State University and an M.B.A. degree from Baker University. He is a graduate of the Infantry Officer Basic Course, the Rotary Wing Aviator and Aircraft Maintenance Officer Courses, the Transportation Officer Advanced Course, the Army Force Management School, and the Army Command and General Staff College.