

What can the logistics world learn from military project management?

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Logistics project management for military customers in conflict zones like Afghanistan, Iraq, the Balkans, Sudan, and Somalia is very challenging and routinely requires formulation of multiple back-up plans in order to achieve success. Operational conditions are austere, insurgent attacks can occur frequently, transportation is difficult, supply sources are rarely reliable, and conditions can change rapidly. Murphy's Law must be taken into account at every step of project planning and implementation. Things can quickly go wrong, conditions change, and plans must often be changed on the fly.

These circumstances, while extreme, have much in common with problems faced in real-world logistics projects all over the globe. Most professional logisticians justifiably claim to have their own "been there, done that" t-shirts after years of experience in the business world. War-zone logistics project management can be viewed as a condensed, more intense version of the problems faced by professional logisticians in the business world. In general: best practice logistics operations apply in a war zone, just as in a civilian business environment.

In a military environment in a conflict zone or managing a commercial business logistics project there are common lessons to be learned through comparison of management challenges in both environments. These include:

- Understanding funding rules and priorities
- Project planning, documentation and reporting
- Human resource management
- Optimizing transportation services
- Health, Safety and Environment / Quality Assurance
- Risk management and contingency planning

Understanding Funding Rules and Priorities

What color is the money funding the project? How do the client's financial rules affect the project documentation to be submitted as evidence of progress and completion? Fully understanding these points is a key step in determining project management requirements and is often an important factor in the military as well as the commercial logistics contracting world.

Government funding, whether USA, UK, NATO, United Nations, or other sources always requires very specific administrative procedures which must comply with specific audit requirements in accordance with applicable laws of the funding nations or of the national law governing the contract (NATO or U.N., for example). Even funding from different agencies of the same nation will require differing procedures, documentation and reporting. Over the course of the past 11 years of military deployment in Afghanistan the administering agency for several major logistics services contracts have transitioned from one agency to another. For example: U.S. Department of Defense requirements, regulations and standards can vary significantly from those of the U.S. State Department.

A vivid example of differences in Government agency requirements, regulations, and standards is in the area of catering services and food supply for Afghan security agencies. The U.S. State Department was the initial administrator of these service contracts and required contractors to meet local national standards and procedures, reinforced by international norms, for food supply, hygiene and preparation. In conjunction with contract renewals the administering agency in these contracts changed in 2011 to the Department of Defense. Under the Defense Department rules all food hygiene and preparation standards were changed to TB MED 530 (Technical Bulletin Medical), the U.S. Army's comprehensive guidelines on dining facility operations, hygiene, and food safety. The result was that many operational procedures, after several years of satisfactory operations, immediately required major, immediate modification. Staff training and qualification standards needed revision, and some existing equipment and infrastructure in kitchens were declared non-compliant with the new standard. This required a significant investment in management time, replacement equipment and minor construction projects in order to meet the newly-imposed standards.

There are also very specific and differing contractual and legal requirements for cost-plus vs. Firm Fixed Price contracts. Cost-plus contracts usually result in less risk for the contractor, but have significantly more requirements for evidence and back-up documentation to support invoices. Firm fixed price (FFP) contracts can offer greater profits, as well as losses, for the winning contractor. FFP contracts funded with government resources are also subject to rules of proof after start of performance. A popular misconception holds that a FFP contract is fully "closed-book", and that any profits made can be retained without challenge, and is therefore considered to be lower risk. For all contracts funded with U.S. Government money the governing regulation is the Federal Acquisition Regulation (FAR), a New York phone book-sized publication with the force of federal law. Provisions of the FAR provide the U.S. Government the right to challenge any charges from a FFP contractor which the Government believes are not "fair and reasonable" and are not "market rates". There are several current cases in which FFP contractors in Afghanistan are being challenged, and millions of dollars in fees for services

already provided are being withheld, because the Government now states that the standards for “fair and reasonable” and “market rates” were not adequately met.

In a logistics services environment, whether military or civilian, contract terms and conditions govern the specific services to be provided. The old newspaper reporter’s maxim to answer in a news article the questions “who, what, where, when, and how much?” should also be covered in a logistics contract. Governing law, reporting requirements, and documentation/performance evidence to be provided should also be clearly defined by the services contract. A proper logistics services contract should clearly describe:

- The roles and responsibilities of all parties to the contract
- The services to be provided, when and where and to what standard they are to be provided
- Which tasks and services may be accomplished by third parties and what approvals are required from whom for such an assignment of tasks to third parties to occur
- Inventory management requirements, standards, and procedures
- The procedures for transportation operations (if applicable) including roles and responsibilities
- Security and safety roles and responsibilities
- The fees for these services, and the schedule of payments
- How the services provided will be measured, required standards of performance for both parties, evidentiary documentation required, penalties for under-performance, and any incentives offered for exceeding standards.
- The procedure and venue for dispute resolution.

Project Planning, Documentation and Reporting

What are the client’s “Hot Buttons” regarding planning, documentation and reporting? As with any demanding client, these are a high priority for a military logistics project and are highly structured according to contract terms. Documentation must comply with governing legal standards. However the basic best-practice logistics 3PL standards apply equally well in a military contract environment. Project timelines, milestones, and critical path monitoring are key elements in military project management. The use of commercial project management tools, such as MS Project, is accepted by the military as standard operating procedure. Reports are required frequently and deadlines must be met. This is no different from 3PL work for a demanding client.

Professional accreditation (i.e. PMBOK, PMI/PMP, Prince2, etc.) for project managers is always an advantage. Each of the internationally recognized project management accreditation

programs provides significant value through the structured approach. However on-the-job experience is a key element to success for management of any difficult project, especially in a challenging environment, whether the location is in Europe, North America, or Afghanistan. Ideally the project manager should have both accreditation and hands-on experience. The advantage here is that he/she can apply the theoretical knowledge and disciplined methodology tempered by knowledge gained through real-world world experience, in a balanced approach. In combat zones, some project managers with excellent credentials and extensive prior military experience, but limited formal business training, have been at a disadvantage in their project management roles and the projects experienced difficulties because they forgot that they are now commercial business managers and no longer soldiers.

Human Resource Management

How effective human resources are managed - or not - is often the determining factor in whether any logistics project is ultimately successful. Employees of military contractors in combat zones are usually classified by nationality (customer nation, NATO members, TCNs: Third Country Nationals, or LNs: Local Nationals), as well as by skill qualifications. Military contractors in Afghanistan recruit unskilled/low-skilled labor in countries like India, Nepal, Bangladesh and Sri Lanka. Most of these unskilled/low-skilled staff are from rural areas. As a condition of recruitment they are required to possess basic English competency. Staff must understand simple instructions regarding workplace procedures and safety, and also to be able to react appropriately to instructions in an emergency. Experience has shown that many of these staff members are not familiar with western standards of personal hygiene and grooming. Contractors commonly conduct "basic training" for new staff members including standards and frequency of personal grooming, daily changing of clothing and undergarments, dental hygiene, and polite interaction with western supervisors. It is also common for employees in remote locations to be provided hygienic items like soap, deodorant, toothbrushes and tooth paste if these items are not readily available through other sources.

Manual labor teams in Afghanistan are usually Afghan local nationals who, depending on the security situation, may either reside on the military installation, or are permitted to enter the camp for the work shift and leave at the end of the work day. Entering and leaving secure camps at the start and end of the work shift can be very time consuming: All local workers must be thoroughly vetted by military security, having biometric scans completed and entered into the database. Most military installations do not permit Afghan laborers to spend the night on the camp. To enter the camp at the start of the workday the Afghan laborers must undergo a thorough security inspection, which can take up to two hours, and at the end of the work day they must undergo another security check lasting up to an hour and still exit the camp by the

military-imposed curfew deadline (almost always 6 p.m.). According to NATO rules, the workers must be allocated prayer time during the workday. They also are given a daily meal break as well as pauses during the workday. During the month-long Ramadan religious holiday period observant Muslims cannot eat, drink, or smoke during daylight hours. Therefore manual labor projects are reduced to half-day schedules during this period. The result is that local national laborers usually do not have a productive work day longer than 5-6 hours (best case) on projects at military installations in Afghanistan.

All military contractors are required to comply with national laws and international treaties dealing with the prevention of human trafficking. In the case of U.S. Government-funded contracts the contractors are held to the strict TIPs (U.S. State Department Office to Monitor Trafficking in Persons) standards, which also establish requirements for accommodation standards, hygienic facilities, medical examinations, and morale & welfare facilities.

U.S. Military contractors are required to provide medical insurance for all employees. The Defense Base Act (DBA) was enacted by the U.S. Congress in 1941, and has undergone numerous revisions in recent years. The DBA covers persons employed at under U.S. military contracts overseas and requires provision of medical treatment and compensation to employees of defense contractors injured in the scope and course of employment. Military medical clinics in combat zones will not normally treat contractor employees except in cases of risk to life, limb, or eyesight. Therefore contractors must make provision for private emergency medical evacuation for serious cases.

In Afghanistan, unskilled laborers have a very low literacy rate. In a provincial area like Helmand Province with a workgroup of 50 local national laborers it is quite common to find only one or two who can read and write. It is not uncommon to find that none of the local laborers have even most basic skills in reading and writing their own language. The literacy rate in Kabul, capital of Afghanistan, is only somewhat better. This means that translators/interpreters must be regularly employed, even for such routine work procedures as giving daily health and safety briefings.

Optimizing Transportation Alternatives

Almost every logistics project has a transportation element. On-time delivery of the correct product at the correct location at costs meeting budget requirements is key to achieving success. Failure to meet any one of these universal transportation performance standards can mean disaster in a logistics project. For logistics project management in a conflict zone, underperformance in any of these transportation measurement standards can result in severe

hardship for customers, contractors and employees. Conflict zone transportation management provides some extreme examples for dealing with transportation difficulties.

Afghanistan is a landlocked country. There is only one recently-opened 80-kilometer railway line from Uzbekistan to Mazar-i-Sharif in the far north of the country. As a consequence of the Great Game in the late 19th century, the ruler of Afghanistan banned railroad construction in his country in order to deny the Russians and British an invasion route. In the past 120 years almost no progress has been made to resolve this missing link in Afghanistan's transportation infrastructure. All roads through Iran are now closed to NATO military traffic. This ban applies to military contractors as well.

The most frequently employed alternatives for cargo movement into Afghanistan are either by air (the most expensive option by far) or by ship to Pakistan and then by road into Afghanistan. The closest commercial seaport to Afghanistan is Karachi in Pakistan, and then cargo is transported by truck through the "PAK GLOC" (Pakistan Ground Line of Communication) over the Khyber Pass to depots in Kabul or Kandahar. A shorter travel route would be traveling via the city of Quetta on the Afghani border, but convoys using this route are frequently subject to insurgent attacks. During the course of the past 11 years of Afghanistan conflict there have been several periods of increased tension between the government of Pakistan and NATO or individual NATO members (especially the USA), resulting in slow-downs or outright stoppages for port clearance in Karachi and onward truck movement into Afghanistan. After an extremely unfortunate accident involving U.S. forces in November 2011 resulting in the deaths of 24 Pakistan soldiers in a border region, the Pakistani government completely closed the borders to Afghanistan. After more than seven months of border closure there were thousands of NATO containers marooned in the Karachi port or stranded at various roadside truck stops in Pakistan along the 1,500-km road to the Khyber Pass border crossing into Afghanistan.

After an official apology by U.S. Secretary of State Clinton to the Pakistani Foreign Minister NATO ISAF announced that the land route through Pakistan would be opened. An estimated 75-90 days will be required to clear the thousands of trucks detained in Pakistan. However, in the meantime, the transportation priority will be to maintain alternate routes in case another incident occurs and NATO must once again avoid Pakistan. NATO began in 2009 to test use of a more than 5,000 km long Northern Distribution Network (NDN) by road and rail originating in Lithuania, Estonia, or Latvia, transiting Russia and ending in Uzbekistan shortly before the Afghan border. As a result of ongoing difficulties with Uzbek government officials the alternate routes terminating in Turkmenistan and Tajikistan have also been tested.

Currently, approximately 50% of NATO cargo travels via the NDN to the Afghan border and then by truck into Afghanistan. Transport to the major troop concentration regions of Kabul, Kandahar and southern Afghanistan must cross over the Hindu Kush mountain range through

the 3,350-meter elevation and 1.5 km-long Salang tunnel. In winter it is not unusual for a truck convoy to require, assuming good weather, more than two weeks for the Afghan portion of this trip. This can extend to well over a month when the weather worsens. Insurgent activity is quite common in Southern Afghanistan, and has caused a high number of contractor casualties. In a single Taliban attack on a NATO contractor-operated convoy in December 2011 in Helmand Province 21 drivers were killed and over 50 were wounded. A key NATO contractor recently announced that more than 150 convoy drivers have been killed during the past two years.

Health, Safety, Environment, and Quality Assurance

HSE/QA always should have an important place in the business environment. There is never an excuse to ignore these subjects. Military contractors are contractually bound to meet accepted international standards in all of these areas and must document training, audit reports, and incidents. This is especially challenging in an environment where these standards are unknown for the local populace, and when many of the employees have and now training in Health and Safety, Environment and Quality Assurance. Waste disposal must meet international environmental standards. It is the responsibility of each military contractor to verify and document that any subcontractors engaged are fully in compliance with international practice standards. Operational practices need to be reviewed from the ground up. Step by step procedures must be implemented and, in early stages, constantly monitored in order to ensure required standards are being met.

This situation is similar to challenges faces by manufacturers considering outsourcing to a 3rd Party Logistics (3PL) service provider, especially for the first time. It is not uncommon to find that the manufacturer has developed an operating environment in which required legal standards, especially in HSE, are intertwined with the operational culture. When a new 3PL business partner, who may have different operational practices to achieve the goal of meeting HSE standards, enters the picture it is necessary for both parties to actively cooperate in development of accepted procedures to achieve the necessary standards.

Risk Management and Contingency Planning

Every project plan should consider procedures for dealing with risks and contingencies. In the above discussion several actual examples have been mentioned requiring hands-on management of unplanned difficulties in the course of project execution. A logistics project manager should be prepared to deal with unplanned circumstances. Field Marshall von Moltke, the 19th century Prussian general staff chief, wrote “No plan survives first contact with the

enemy". This wise saying also holds true for logistics planners and project managers. Therefore a good project manager should expect to deal with contingencies in the course of a project. Project risk management and contingency planning points to consider are:

- Including frequent status meetings with the client in the project contract to discuss progress, as well as potential problems, which may drive adjustments to the project planning.
- Conducting frequent project staff situation updates: Ensure that the project staff members understand that prompt and accurate communication regarding problems and potential problems is vital to the project success. Bad news does not get better with age. Early intervention can minimize, and often avoid, the impact of problems in a project. Encourage frank and honest communication. Never shoot the messenger bringing bad news.
- Ensuring that the communications network for the project (external to the client and internally up, down, and laterally within the project) is solidly in place. Make sure that key personnel can be reached in an after-hours emergency situation.
- Carefully checking supply chain progress and timing. Ask probing questions about HR status and IT services required. Make sure that key players understand how actions outside of their specialty area affect their part of the project, and how their area of specialty affects other departments.
- In the planning phase, considering alternative actions (the Murphy's Law scenario) to mitigate possible problems with deliveries, assembly, staffing, etc.
- Conducting research on similar projects which have been successfully completed in order to gain insight into key decisions which supported the project completion.
- Obtaining intelligence information on similar projects which have not proceeded according to plan, or have failed. Try to identify what went wrong and determine how the root problems could have been avoided.
- Including succession planning in the project plan in case of absence of a key project team member due to illness, or other unforeseen circumstances. Ensure that the second-level functional area managers are sufficiently well-versed in project specifics and progress so that they can step into the role in case the manager is not available.

"The line between disorder and order lies in logistics..."

Sun Tzu

A logistics project manager faces many challenges in the successful completion of his or her assigned tasks. The basic elements of these challenges are the same, whether the stage of performance is in a conflict zone or a commercial business environment. A solid foundation for logistics project management should include: a full understanding of operating requirements, thorough planning, clear and timely communications, effective management of people and resources, optimization of transportation, and inclusion of contingency awareness. The goal is to create order out of disorder.

About the author:

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