

Background

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Performance-Based Logistics: Making the Military More Efficient

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Abstract: *The military should—and can—operate more efficiently. One area that has potential for major savings is logistics. As combat capabilities grow, the logistics system must adapt. Performance-based logistics is an approach that organizes logistics around these increasing combat capabilities, offering huge savings (up to \$32 billion a year) in the process. But despite successful implementation of performance-based logistics at select military depots, there remains a bias against private contractors among some in Congress, and there is only a very limited application of the new performance-based approach, which is managed by well-functioning public–private partnerships. Heritage Foundation national security policy expert Baker Spring explains why and how Congress should support an effective and efficient military logistical system. It matters both to America’s taxpayers and to the men and women in uniform who risk their lives to defend them.*

One area in which the United States military can operate more efficiently, possibly providing large-scale dollar savings, is in logistics. The Department of Defense would be able to plow the savings into its strapped modernization accounts and build the next generation of weapons and equipment for the soldiers, sailors, airmen, and Marines that will fight the nation’s wars in the future. A report from the Aerospace Industries Association estimates that the savings could amount to as much as \$32 billion a year.¹

The more efficient approach to improving the overall effectiveness of logistics is referred to as per-

Talking Points

- Performance-based logistics can increase the efficiency and lower the cost of the military’s logistical system through well-designed partnerships between government-run depots and private contractors.
- Congress should encourage both the use of performance-based logistics and the expansion of public–private partnerships at the depots.
- Congress should hold hearings that highlight the advantages of performance-based logistics, abandon the anti-contractor bias in debates over military acquisition reform, and establish a pilot program at the Letterkenny Army Depot in Pennsylvania for identifying ways to expand the use of performance-based logistics.
- Congress and the Defense Department should recycle the savings from an improved logistics system back into the defense budget to procure the next generation of weapons systems.
- Performance-based logistics should not become an excuse for either the Obama Administration or Congress to cut the defense budget. The primary objective should be a stronger and more cost-effective military.

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formance-based logistics. It is based on forging partnerships between Department of Defense employees and defense industry staff at the military's logistical centers in the U.S. and abroad. It seeks to organize the logistics system around increasing combat capabilities.

For performance-based logistics to continue to succeed, however, Congress will need to lend its support. Specifically, Congress will need to:

- Explore opportunities for the expanded application of performance-based logistics,
- Reinforce the partnerships between contractors and the depots in the performance of logistical work for the Department of Defense,
- Establish a pilot program for identifying the barriers to expanded public-private partnerships in logistics, and
- Ensure that the realized savings are kept in the defense budget.

Performance-Based Logistics: How It Works

Performance-based logistics changes the metric by which the effectiveness of the logistics system is gauged in order to drive an alternative approach to managing the system.² The traditional approach has been to measure outcomes in the logistics system by raw industrial output, including such things as the number of weapons and platforms repaired, the tons of matériel moved, the hours of services provided, and the number of replacement parts acquired. Performance-based logistics measures the outcomes in terms of how the system meets desired performance parameters. Specifically, these performance parameters include the efficient identification of warfighter needs, the delivery of the needed matériel to the warfighters, and the timely delivery of goods and services to the warfighters.

Performance-based logistics is managed through a system of contracts called performance-based agreements. The need for such agreements is determined by program managers who conduct a business case analysis that reveals that a new support

The public-private partnerships are directed by the requirements of the performance-based agreements to focus on achieving the best performance outcome for the warfighter.

arrangement either can deliver the same level of performance to the warfighter at less cost than the existing arrangement or can increase the level of performance at the same cost as the existing arrangement. The requirement that performance goals be met is imposed on the supplier but is of sufficient duration and flexibility to permit the supplier to adapt his enterprise to meeting the goals.

Organizationally, the performance-based logistics system works best under partnerships between the government-controlled depots and logistical centers and the private contractors (usually the contractors that produced the weapons or equipment to be sustained and supported). These public-private arrangements are called outcome-based partnerships.

Current law requires that not more than 50 percent of funds that Congress makes available for depot-level maintenance may go to private contractors. The public-private partnerships established under performance-based logistics permit greater contractor involvement in the public depots, sometimes including private investment in infrastructure upgrades in these facilities, under the requirements of the law. Most important, the public-private partnerships are directed by the requirements of the performance-based agreements to focus on achieving the best performance outcome for the warfighter.

Performance-Based Logistics in Action

In its May 2009 report, the Aerospace Industries Association identified five areas in which the concept of performance-based logistics is being applied. Each area represents a broad swath of the Department of Defense's total logistical enterprise, but the current scope of performance-based logistic activities within each one is modest. As a result, potential

1. Aerospace Industries Association, "Modernizing Defense Logistics," May 26, 2009.

2. For an overview of performance-based logistics, see Daniel Gouré, "Performance-Based Logistics: A Primer for the New Administration," The Lexington Institute, April 2009.

program improvements and cost savings would be quite large if performance-based logistics was applied more widely.

The five areas identified by the Aerospace Industries Association are as follows:

Area 1: Life Cycle Product Support. Life Cycle Product Support covers logistical activities related to maintaining the weapons and equipment already in operation. These include repairs, refurbishments, and modifications and upgrades.

The 2009 Aerospace Industries Association report identifies 18 military systems in this area where the necessary support work is being performed through public-private partnerships. The savings range from just more than 1 percent to more than 50 percent among the identified systems.³ The calculated savings fall between \$16 billion and \$21 billion annually if performance-based logistics was applied across all applicable Department of Defense weapons and equipment in the support area.⁴

Area 2: Management of Commodities. The military's logistical system is responsible for maintaining access to an enormous list of commodities that are used to perform maintenance and upgrades to weapons and equipment. Performance-based logistics improves the efficiency of the commodities supply network by insuring the rapid delivery of the needed commodities and reducing storage and inventory costs.

In this case, the potential annual savings to the Department of Defense is estimated by the Aerospace Industries Associations to range from \$2.8 billion to \$3.7 billion.⁵

Area 3: Mobility Assets and Infrastructure. Related to the management of commodities is the operation of the transportation system that delivers commodities to the places where they are needed. In the case of the military, performance-based logistics would copy the best practices of the commercial

sector in operating its transportation system to support logistics. Most of the savings in this area would result from optimizing the distribution process.

The Aerospace Industries Association estimates that the annual cost savings in this area if the reform is applied across the distribution network would be between \$1.1 billion and \$1.5 billion.⁶

Area 4: Theater Services. Theater Services are logistical capabilities to support combat and humanitarian missions that are located in the theater of operation. Their purpose is to provide the necessary nodes in theater to assure the flow of weapons and matériel to support an operation. They exclude, however, the final step in this delivery process, which is the immediate delivery of weapons and matériel to the personnel that use them directly. This step is covered under the area of Mobility Assets and Infrastructure (Area 3). Theater Services also do not extend to supporting "forced entry" operations to establish a presence in the applicable theater.

The activities that are covered under this area are the construction and manning of in-theater facilities, such as storage and delivery depots; the operation of these facilities; and the distribution of the weapons and matériel to an intermediate station. The efficiencies are achieved in this area by the pursuit of pre-planning steps with host countries and contractors, most importantly regarding the use of airfields and ports, and heavier reliance on contractors under pre-negotiated contracts.

In the case of this area, the Aerospace Industries Association estimates that savings would be between \$2.4 billion and \$3.2 billion annually.⁷

Area 5: Logistics Information Systems. Any system as far-flung and complex as the military's logistical system will operate better and more efficiently when it is supported by state-of-the-art information technology. Performance-based logistics demands that the information technology infra-

3. Aerospace Industries Association, "Modernizing Defense Logistics," p. 14.

4. *Ibid.*, p. 16.

5. *Ibid.*, p. 19.

6. *Ibid.*, p. 22.

7. *Ibid.*, p. 26.

structure to support the logistical system be thoroughly modernized.

Further, the modernization effort must be tied to an effective administration and management structure. This can be achieved by contractors having the authority to undertake development of the applicable information technology systems, with the government contracting for the use of these systems. The government gains efficiencies by paying only for the information technology systems and services it uses.

The Aerospace Industries Association estimates that the annual savings in this area would be between \$1.9 billion and \$2.5 billion.

Potential for Savings in Operations and Maintenance Accounts

If the Department of Defense broadened the application of performance-based logistics in each of the five areas identified above, the annual direct savings to the department could be as high as \$32 billion annually, according to the Aerospace Industries Association.⁸ Achieving this level of savings requires five steps.⁹

1. The first step is to broaden the application of performance-based logistics at all levels of the logistical system, specifically the component level, the subsystem level, and the system level.
2. The second step is for the Department of Defense to expand its use of commercial supply chains.
3. The third step is for the Department of Defense to use outcome-based partnerships in order to transfer best practices for distribution from the commercial sector to the public component of the logistical system.
4. The fourth step is to expand the opportunities for establishment of outcome-based partnerships in theater-based logistics.

5. The fifth step is to expand access to commercial managed services to provide information technology to the logistical system.

The bulk of these savings would occur in the operations and maintenance accounts of the Department of Defense budget. Reducing these costs will

If the maintenance costs incurred for the support of existing weapons can be reduced, the savings can be channeled into the acquisition of new weapons that will be less expensive to maintain.

permit the Department of Defense to break the “death spiral” in the acquisition system, broadly defined to include the full life-cycle costs of weapons systems. The acquisition death spiral, as described by then-Under Secretary of Defense Jacques Gansler in 1998, is a cycle where aging weapons and inefficiencies in the support programs for existing weapons divert defense dollars to the maintenance accounts, which results in deferral of the procurement of new weapons, which in turn results in older and more expensive-to-maintain weapons.¹⁰

If the maintenance costs incurred for the support of existing weapons can be reduced, the savings can be channeled into the acquisition of new weapons that will be less expensive to maintain. While this step will require larger overall defense budgets for the core defense program, it can help to initiate a reverse dynamic that will permit the death spiral to become a recovery spiral.¹¹

Letterkenny Army Depot

It is reasonable for the Department of Defense and Congress to be cautious about promised large-scale savings in defense accounts from industry. This is why an accurate assessment of the estimated savings provided by industry requires a review of how performance-based logistics works at the local

8. *Ibid.*, p. 31.

9. *Ibid.*, p. 34.

10. George Cahlink, “Gansler: DoD in a ‘Death Spiral,’ Program Terminations Likely,” *Defense Daily*, September 3, 1998, at <http://www.defensedaily.com/articles/dd/1998/dd0903981.html> (May 3, 2010).

11. Baker Spring, “The 2011 Defense Budget: Inadequate and Full of Inconsistencies,” Heritage Foundation *Backgrounder* No. 2375, February 22, 2010, at http://thf_media.s3.amazonaws.com/2010/pdf/bg2375.pdf (May 3, 2010).

level, including the depots where most activities take place.

One example is the Letterkenny Army Depot in Chambersburg, Pennsylvania. The Letterkenny depot has undertaken a number of partnerships with defense industry in providing logistical support to the Army. Prominent among these is its partnership with Lockheed Martin to support the JAVELIN anti-tank weapon.

The JAVELIN program at Letterkenny provides 24-hour, seven-day-a-week support to the weapon through a subcontract derived from the JAVELIN Joint Venture office, which includes defense contractors Lockheed Martin and Raytheon. The support effort is concentrated on providing repair services for circuit card assemblies within the weapon's Command Launch Unit and maintaining the weapon's rounds of ammunition. Industry assesses the cost-benefit improvement derived from the performance-based logistics approach for the JAVELIN program to be 10 percent.¹² Both management and labor representatives at Letterkenny seem to recognize this improvement.¹³

The JAVELIN program is not the only beneficiary of performance-based logistics at Letterkenny. Another program is the Modernized Target Acquisition Designation Sight (M-TADS) program for the Apache helicopter.¹⁴ The M-TADS system is installed on Apache helicopters to permit the crew to acquire targets through a multi-sensor package for missiles carried by the aircraft. This partnership at Letterkenny has included Lockheed Martin's direct investment of \$1.5 million for repair activities on the M-TADS system. The repair activity also fosters direct interaction between the contractor and depot personnel.

The direct interaction between contractor and depot personnel is something to which Congress should pay particular attention when assessing performance-based logistics. Some Members of Congress may perceive that the relationship between contractor personnel and depot personnel is an adversarial one, based on the assumption that depot personnel view the presence of contractor staff as a threat to job security. Such an assumption is misplaced. Robert Willits, a union steward at Letterkenny, when asked about the relationships between the public staffers of the depot and those who are employed with the private contractor, stated: "This works really well here, and we can adapt to the work that the contractor does."¹⁵

The depot's own employees also find that there are few difficulties stemming from the need for the managers of the depot and the private contractor to coordinate the activities of their respective employees. Again, Willits stated:

The depot and the contractor managers coordinate things effectively so that the depot managers can instruct their employees and contractor managers can instruct their employees in a way that avoids confusions, and I have been here for almost four years and have yet to run into a conflict in this area.¹⁶

This kind of management coordination appears to extend to private-contractor investments in the public depot, particularly in the area of training. While not directly knowledgeable about the management aspects of these investment programs, Willits explained, "I did participate in a training program at a Lockheed Martin facility. The cost of the training was shared between Lockheed Martin and the depot, but I felt very welcomed at the Lock-

12. Lou Kratz and Bradd A. Buckingham, "Achieving Performance Based Life Cycle Management," Lockheed Martin Corporation, December 2008.

13. Author interview with Mark Sheffield, Manager, Letterkenny Army Depot, April 8, 2010, and author interview with Robert Willits, Union Steward, Letterkenny Army Depot, April 12, 2010.

14. Lou Kratz, Vice President for Logistics and Support, Lockheed Martin Corporation, "Partnering for Performance," September 9, 2009, and Letterkenny Army Depot, "New Workload Arrives at Letterkenny," Release No. 07-03, January 17, 2007.

15. Author interview with Robert Willits, Union Steward, Letterkenny Army Depot, April 12, 2010.

16. *Ibid.*

heed Martin facility, practically like I was one of their employees.”¹⁷

Finally, Willits recognized that there is considerable room for expanding public–private partnerships even at Letterkenny Army Depot, which

The ultimate winners in these cooperative enterprises are the soldiers, sailors, airmen, and Marines serving in the military, as well as the American taxpayers.

appears to be relatively advanced in pursuing these partnerships. It is clear from the experience at Letterkenny that the private contractors are sensitive to the views of the public employees at the depot. The union representing the depot’s employees is adapting to these structures and has acted responsibly by not seeking to put barriers between the public employees and the private contractors.

The ultimate winners in these cooperative enterprises are the soldiers, sailors, airmen, and Marines serving in the military, as well as the American taxpayers.

Where to Go from Here

Initial experience with performance-based logistics indicates that it is a well-designed approach to improving the overall effectiveness and efficiency of the military’s logistical system, particularly in the maintenance of weapons and equipment. On this basis, it is appropriate for Congress, the Department of Defense, the military services, private contractors, and the unions to consider the following recommendations.

1. Congress should provide avenues for expanding the application of performance-based logistics. As described earlier, the Aerospace Industries Association has estimated that the potential savings from an expansion of performance-based logistics could be as high as \$32 billion a year. This estimate derives from the assessment that performance-based logistics was applied rather narrowly across the logistical system, involving less than 10 percent of all work performed. The estimated sav-

ings are based on more than doubling the percentage of the total work across the logistical system that is performed under the performance-based approach.

Congress needs to encourage the Department of Defense to explore options for expanding the application of performance-based logistics and increasing the level of savings. This is not to say that Congress should simply mandate an expanded application of this approach to an arbitrary percentage of logistics programs. Congress must adopt a more careful approach because needless errors will only serve to undermine performance-based logistics.

This more careful approach starts with hearings by the House and Senate Armed Services Committees on the status of the performance-based effort. During the hearings, Members of Congress should seek to learn whether the reach of the performance-based approach extends to the components and subsystems of weapons systems. It is not sufficient to apply performance-based logistics at the system level alone. Rather, the effectiveness of the approach will be enhanced if it is extended to component and subsystem levels and to the services extended in support of weapons systems through the logistical system.

Accordingly, the hearings should serve to encourage the Department of Defense to expand the application of performance-based logistics vertically. Witnesses at these hearings should include depot managers, representatives of private contractors, and union representatives.

2. Congress should reinforce the partnerships between contractors and the depots in the performance of logistical work for the Department of Defense. The success of performance-based logistics stems from healthy working partnerships between private defense contractors and public servants operating the depots that support the military. In the vast majority of cases, the weapons systems and equipment that are being maintained and improved through the logistical system were built by private contractors who understand these weapons systems and pieces of equipment from the inside out. Performance-based logistics is designed

17. *Ibid.*

to bring the contractors inside the depots in order to provide their considerable expertise, complementing organic depot capabilities.

A political bias against private contractors, whether in the context of the initial procurement of weapons, equipment, and services or in the context of logistical support, will undermine the necessary public-private partnerships that make performance-based logistics work. Defense contractors are not, as some Members of Congress seem to believe, parasites feeding off the Department of Defense. They are businesses trying to run successful and prosperous enterprises in a market that happens to be dominated by the government on the consumer side. They should be rewarded, not punished, for servicing the government's defense needs as long as they provide top-quality goods and services at affordable prices.

Combating the anti-contractor bias is another reason for the House and Senate Armed Services Committees to hold hearings on performance-based logistics. The witnesses should come from both the contractor community and depots in order to explain how they use the performance-based approach to work together to rationalize and make more efficient the broader logistical system.

The hearings would serve to inform Members of Congress and the public about how the public-private partnerships work within the logistical system. More important, they would serve to help Congress identify the barriers that continue to stand in the way of strengthening these partnerships.

3. Congress should establish a pilot program for identifying the barriers to expanding public-private partnerships in logistics. The existing performance-based logistics approach is designed from the outset to be consistent with the requirements of Title 10 of the United States Code and the regulations derived from these statutes. Title 10 is the portion of the code that is devoted to organizing the armed forces. Accordingly, provisions within Title 10 necessarily serve to regulate the logistical system.

More regulation, however, does not necessarily mean better regulation. In fact, certain provisions of Title 10 and its accompanying regulations may obstruct the very public-private partnerships that

make performance-based logistics succeed. Identifying these barriers, however, is not easy and must be done carefully.

Exploring where the statutory and regulatory barriers to expanded performance-based logistics may reside is best done on a limited and tentative basis. Further, it must be done in a way that from

Certain provisions of Title 10 and its accompanying regulations may obstruct the very public-private partnerships that make performance-based logistics succeed.

the beginning requests input from defense contractors, the depot managers, depot union representatives, and senior management from the Department of Defense. The best approach for Congress is to include a provision in the fiscal year 2011 Department of Defense Authorization Bill to establish a pilot program for this purpose.

The applicable provision should permit the senior official at a specific depot to request a waiver from one or more specifically identified statutes under Title 10, as well as regulations applied through Title 10 exclusively for expanding opportunities for establishing public-private partnerships at the depot. The waiver request could be directed to the Deputy Under Secretary of Defense for Logistics and Matériel Readiness, but only after consultation by the senior manager of the depot with the relevant defense contractors and union representatives of depot employees.

The pilot program should extend for no more than five years, although already approved waivers could extend beyond this period. The presumption should be that the Deputy Under Secretary of Defense will grant the waivers as long as the specifics of how the waiver will expand the opportunities for public-private partnerships at the depot are provided, an explanation of how the waiver will increase efficiency and lower costs is included with the request, and the request certifies that the necessary consultations have been completed.

Because of the progress it has made in applying performance-based logistics, the logical location for

undertaking this pilot program is the Letterkenny Army Depot. Given its experience, Letterkenny is likely to be ahead of other depots in terms of identifying the statutory and regulatory barriers to more productive public-private partnerships and the expanded application of performance-based logistics. Further, the existing relationships between the depot's senior management, the contractors, and depot employees seem quite solid. These solid relationships will provide a good foundation for the pilot program as long as the program continues to strengthen and reinforce these relationships.

At the end of this pilot program, Congress will be in a better position to make informed decisions about adopting broadly applicable changes in Title 10 to enhance the efficiency of the logistics system by applying the performance-based logistics approach. It will not be legislating blindly on the matter.

4. The Defense Department and Congress should plow savings from the logistical system back into procurement. The military logistical system for sustaining the weapons and equipment already in use should not be viewed apart from the broader defense acquisition system. Even a properly organized logistical structure that operates efficiently and effectively cannot sustain aging weapons and equipment. At some point, the cost of maintenance will become unsupportable as the weapons and equipment age. These older systems must be retired and new systems brought in to meet necessary military requirements.

It is in the context of the need for a healthy acquisition system that Congress must understand the limits of the performance-based approach to logistics. Specifically, Congress needs to recognize that if the savings are removed from the defense budget, the defense acquisition system cannot escape the death spiral described by Under Secretary of Defense Gansler in 1998. Rather, the savings should be retained within the defense budget and channeled to fund the procurement of the next generation of weapons and equipment. Ultimately, the new weapons and equipment will provide an additional benefit to the logistical system because they

will be easier and less costly to maintain than the aged systems they replace. This need to reinvest in weapons was recognized by Roger Willits as a union steward at Letterkenny.¹⁸

The central purpose of adopting the performance-based logistics reforms within the Department of Defense should be to transform the death

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spiral of defense acquisition into a recovery spiral. The recovery spiral will use the savings from the adoption of performance-based logistics to fund new purchases of weapons and equipment that will in turn relieve long-term cost growth pressures within the logistical system.

Performance-based logistics should not become an excuse for either the Obama Administration or Congress to cut the defense budget. The primary objective should be to create a stronger and more cost-effective military.

Conclusion

The Department of Defense, the military services, and the taxpayers need a military logistical system that works effectively and efficiently. Experience suggests that the performance-based logistics that have been applied through public-private partnerships and pursued selectively at some of the nation's military depots can lead to marked improvements in the military logistics system. Nevertheless, the application of performance-based logistics remains limited.

Accordingly, Congress needs to reinforce the movement toward adoption of performance-based logistics. This starts with highlighting the successes that have been achieved to date. It continues with Congress recognizing that an anti-contractor bias does not serve the public interest. It concludes with Congress authorizing a limited pilot program for identifying provisions in the law and in regulations that are barriers to the expansion of performance-

18. *Ibid.*

based logistics and permitting the applicable laws and regulations to be waived under a careful process that involves the depot managers and employees, the private contractors, and the Defense Department leadership.

The efficiency and effectiveness of the military logistical system *can* be improved. Performance-

based logistics offers promising opportunities that Congress should recognize.

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