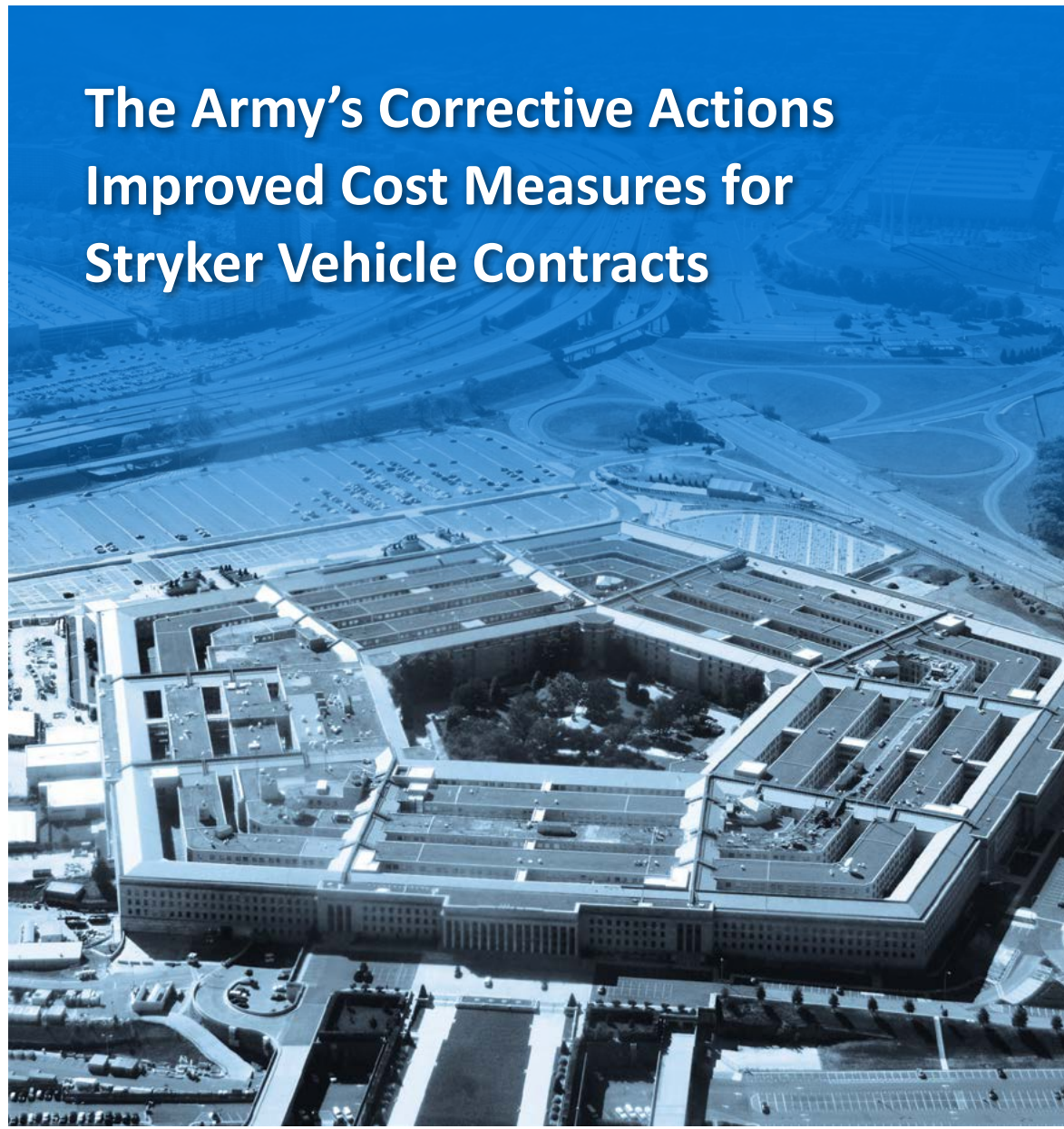




INSPECTOR GENERAL

U.S. Department of Defense

MAY 9, 2017



The Army's Corrective Actions Improved Cost Measures for Stryker Vehicle Contracts

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Results in Brief

The Army's Corrective Actions Improved Cost Measures for Stryker Vehicle Contracts

May 9, 2017

Objective

We determined whether the Program Executive Office for Ground Combat Systems effectively implemented corrective actions related to Recommendations 1.c through 1.e in DoD OIG Report No. DODIG-2012-102, "Better Cost-Control Measures Are Needed on the Army's Cost-Reimbursable Services Contract for Logistics Support of Stryker Vehicles," June 18, 2012.

Background

In previous DoD OIG Report No. DODIG-2012-102, we evaluated the effectiveness of the contractor logistics support strategy, involving contractor performance metrics and contract type, for sustainment of the Stryker vehicles. The DoD OIG determined that officials with the Project Management Office for the Stryker Brigade Combat Team and Army Contracting Command, located in Warren, Michigan, did not implement adequate cost-control procedures on a cost-reimbursable services contract for logistics support of Stryker vehicles awarded to General Dynamic Land Systems. The DoD OIG included recommendations to improve cost-control measures on service contracts for Stryker logistics support. Recommendation 1.c that stated the Program Management Office for Stryker Brigade Combat Team should define contract remedies that include both positive and negative fee measures related to the number of times inventory is used and replaced during a given period (inventory turns) and inventory accuracy metrics for Stryker vehicles.

Background (cont'd)

Recommendation 1.d stated that the Program Executive Office for Ground Combat Systems, with the support of the Executive Director, Army Contracting Command, located in Warren, Michigan, (Army Contracting Command–Warren) requires the Program Management Office for Stryker Brigade Combat Team to use one of the basic contract forms, either: (1) a term-form contract in which the contractor is required to provide a specified level of effort for a stated period of time, with satisfactory performance or (2) a completion-form contract in which the contractor is required to deliver a specified, definitive end product and a tangible deliverable if logistics support Stryker vehicles are procured under a cost-reimbursable contract as required by the Federal Acquisition Regulation.¹

Recommendation 1.e stated that the Program Executive Office for Ground Combat Systems, with the support of the Executive Director, Army Contracting Command–Warren, requires the Program Management Office for Stryker Brigade Combat Team to determine which portions of the Stryker logistics support contract can be transitioned to lower risk firm-fixed-price or fixed-price incentive type contracts and take appropriate action.

Finding

Officials from the Program Management Office for Stryker Brigade Combat Team and Army Contracting Command–Warren effectively completed corrective actions related to Recommendations 1.c through 1.e. Specifically, the Program Management Office for Stryker Brigade Combat Team and Army Contracting Command–Warren officials:

- awarded a cost-plus-incentive-fee contract for wholesale supply services to encourage successful inventory management performance measured in terms of inventory turns and inventory accuracy; and

¹ Federal Acquisition Regulation Part 16, "Types of Contracts," Subpart 16.3, "Cost-Reimbursement Contracts," 16.306, "Cost-Plus-Fixed-Fee Contracts."



Results in Brief

The Army's Corrective Actions Improved Cost Measures for Stryker Vehicle Contracts

Finding (cont'd)

- identified cost-plus-fixed-fee line items in the sustainment services contract as either a term-form or a completion-form contract in accordance with the Federal Acquisition Regulation.

Furthermore, the Program Management Office for Stryker Brigade Combat Team performed a business case analysis that considered the benefits between a lower risk fixed-price incentive contract and cost-plus-incentive-fee contract, and determined that the use of a cost-plus-incentive-fee contract presented the least amount of schedule and performance risk to both the DoD and the contractor.

Recommendations

We did not make any recommendations in this report. The Program Management Office for Stryker Brigade Combat Team and Army Contracting Command-Warren officials effectively completed corrective actions for DoD OIG Report No. DODIG-2012-102, Recommendations 1.c through 1.e, mitigating the potential for excessive cost on performance-based logistics contracts for sustainment services and wholesale spare parts supply services to support the Stryker vehicle. Therefore, we consider recommendations 1.c through 1.e from DoD OIG Report No. DODIG-2012-102 closed.

Management Comments and Our Response

We provided a discussion draft of this report to management for review and comment. Management concurred with our conclusion and did not have any comments on the discussion draft. No written response to this report is required. Please see the Recommendations Table on the next page.

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Program Executive Officer, Ground Combat Systems	None	None	DODIG-2012-102, 1.c, 1.d, and 1.e

Note: The following categories are used to describe agency management’s comments to individual recommendations.

- **Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** – OIG verified that the agreed upon corrective actions were implemented.





**INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
4800 MARK CENTER DRIVE
ALEXANDRIA, VIRGINIA 22350-1500**

May 9, 2017

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY,
AND LOGISTICS
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: The Army's Corrective Actions Improved Cost Measures for Stryker Vehicle Contracts
(Report No. DODIG-2017-080)

We are providing this report for information and use. Officials from the Program Management Office for Stryker Brigade Combat Team and Army Contracting Command, located in Warren, Michigan, effectively completed corrective actions for DoD OIG Report No. DODIG-2012-102, Recommendations 1.c through 1.e. The officials mitigated the potential for excessive cost on performance-based logistics contracts for sustainment services and wholesale spare-part supply services to support the Stryker vehicle. Therefore, Recommendations 1.c through 1.e from DoD OIG Report No. DODIG-2012-102 are closed. We conducted this audit in accordance with generally accepted government auditing standards.

We provided a discussion draft of this report to management for review and comment. Management concurred with our conclusion and did not have any comments on the discussion draft. Therefore, no written response to this report is required.

We appreciate the courtesies extended to the staff. Please direct questions to Mr. Jerry J. Hensley at (703) 604-9069 (DSN 664-9069).

A handwritten signature in black ink that reads "Troy M. Meyer".

Troy Meyer

Principal Assistant Inspector General
for Audit

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Introduction

Objective

We determined whether the Program Executive Office for Ground Combat Systems effectively implemented corrective actions related to Recommendations 1.c through 1.e in DoD OIG Report No. DODIG-2012-102, “Better Cost-Control Measures Are Needed on the Army’s Cost-Reimbursable Services Contract for Logistics Support of Stryker Vehicles,” June 18, 2012. See the Appendix for a discussion of the scope and methodology and prior audit coverage related to the audit objective.

Background

Stryker Vehicle

The Stryker vehicle is a 19-ton, wheeled armored vehicle that is designed to be easily deployable and enables the Brigade Combat Team to maneuver in urban terrain while providing protection in open terrain. There are 10 variants of the Stryker vehicle that are available in the basic flat-bottom structure, double-v hull structure, or both.² See Table 1 for the 10 variants in the Stryker family of vehicles.

Table 1. Ten Variants of the Stryker Vehicle

Infantry Carrier Vehicle* (see Figure 1)	Engineer Squad Vehicle*
Reconnaissance Vehicle	Medical Evacuation Vehicle*
Mounted Mortar Carrier Vehicle*	Anti-Tank Guided Missile Vehicle*
Commander’s Vehicle*	Nuclear, Biological, Chemical, Reconnaissance Vehicle
Fire Support Vehicle*	Mobile Guns System Vehicle

*Vehicles that are available in the basic flat-bottom structure and double v-hull structure.

² The flat-bottom hull is the base vehicle structure and is depicted by a “v-shaped” underside. The double-v hull is the upgraded vehicle structure and is depicted by a “vv-shaped” underside. The double-v hull upgrade was designed to improve vehicle suspension and passenger protection against blasts.



Figure 1. Stryker “Infantry Carrier Vehicle”
Source: U.S. Army.

Stryker Program Management

TACOM Life Cycle Management Command, located in Warren, Michigan, develops, procures, and maintains ground and support systems for joint warfighters through the integration of acquisition, logistics, and technology. TACOM Life Cycle Management Command collaborates with the Program Executive Office for Ground Combat Systems, who is also located in Warren, Michigan.

The Program Executive Office for Ground Combat Systems is responsible for modernizing, sustaining, and transforming the Army’s family of ground combat systems, which include the following.

- Stryker
- Abrams Main Battle Tank
- Bradley family of vehicles
- self-propelled Howitzer systems
- M88A1/M88A2 Recovery Vehicle (Hercules)
- Armored Knight
- Armored Security Vehicle

The Project Management Office for the Stryker Brigade Combat Team (PMO Stryker) is a subsidiary of, and co-located with, the Program Executive Office for Ground Combat Systems. PMO Stryker is responsible for the planning, program management, and budgeting during the lifecycle of the Stryker Program. In addition, the Army Contracting Command, located in Warren, Michigan, (Army Contracting Command–Warren) partners with TACOM Life Cycle Management Command by providing acquisition and contracting support for:

- multiple Army major weapon systems,
- systems and equipment supporting other services,
- depot-level maintenance services, and
- foreign military sales customers.

Sustainment Strategy for Stryker Vehicles

The sustainment strategy involves wholesale spare parts supply and maintenance services to support Stryker vehicles. The contractor provides Stryker-unique spare parts, and the Defense Logistics Agency provides common spare parts that are used on various vehicles. The contractor and the Army provide scheduled and unscheduled maintenance support. The Army purchased maintenance and wholesale supply services from General Dynamics Land Systems (GDLS) on sustainment services contract W56HZV-16-D-0025 and wholesale supply contract W56HZV-16-D-0060.

On October 29, 2015, the Army Contracting Command–Warren awarded the sustainment services contract to GDLS for maintenance services to support Stryker vehicles in garrison and deployment locations.³ The contract is cost-plus-fixed-fee with a 3-year term, including a base year and 2 option years. As of March 1, 2017, the sustainment services contract’s obligated value is \$72.5 million.

On April 1, 2016, the Army Contracting Command–Warren awarded the wholesale supply contract to GDLS for wholesale supply of Stryker-unique spare parts for all Stryker vehicles. The contract is cost-plus-incentive-fee with a 3-year term, including a base year and 2 option years. As of February 17, 2017, the wholesale supply contract’s obligated value is \$187 million.

³ According to the sustainment services contract, Garrison describes vehicles stationed at non-combat locations. Deployment refers to vehicles that are deployed in locations where they are engaging in combat activities.

Summary of DoD OIG Report No. DODIG-2012-102

The previous DoD OIG Report No. DODIG-2012-102 identified that PMO Stryker and Army Contracting Command–Warren officials did not implement adequate cost-control procedures on the cost-reimbursable services contract, valued at \$1.5 billion (\$290.6 million annually), for logistics support of Stryker vehicles with GDLS. This occurred because PMO Stryker and Army Contracting Command–Warren officials did not:

- define performance-based contract requirements in clear, specific, and objective terms with measurable outcomes. The contract included a metric for availability (90-percent operational readiness rate) but did not include essential metrics relating to cost-per-unit usage (for example, miles driven) and the logistics footprint (for example, dollars in inventory);
- establish the cost-reimbursable contract as one of the basic contract forms: either a term-form or a completion-form contract;⁴ and
- convert the high-risk, cost-reimbursable contract or portions of the contract to a lower risk, firm-fixed-price contract.⁵

As a result, the Stryker contractor logistics support contract had no tangible deliverable; neither complied with nor met the intent of Federal statute and DoD guidance⁶ as a performance-based logistics contract; and did not meet Federal Acquisition Regulation (FAR) requirements for a cost-reimbursable contract.⁷ PMO Stryker and Army Contracting Command–Warren officials were measuring the contractor’s spend rate and operational readiness rate, but had no means to measure the efficiency of the contractor’s cost performance or actual contract overruns or underruns in relation to the fixed fee. Furthermore, the sole focus on the operational readiness rate created an incentive for the contractor to spend all available funds on contractor logistics support inventory (valued by GDLS at \$676.2 million), resulting in an increased logistics footprint and little, if any, cost risk for the contractor or incentive to control costs.

⁴ A term-form contract describes the work in general terms and obligates the contractor to devote a specified level of effort for a stated period. Under this contract, the Government pays the fixed fee at the end of the stated period if performance is determined to be satisfactory. A completion-form contract describes the scope of work by stating a definite goal or target and specifying the delivery of an end product normally within estimated cost as a condition for payment of the entire fixed fee.

⁵ FAR Part 16, “Types of Contracts,” subpart 16.1, “Selecting Contract Types,” 16.103, “Negotiating Contract Type” states that a firm-fixed-price contract should be used when risk is minimal.

⁶ Section 2330a, title 10, United States Code; DoD Directive 5000.01 “The Defense Acquisition System,” section E1.1.17, “Performance-Based Logistics;” and Under Secretary of Defense for Acquisition Technology, and Logistics memorandum, “Performance Based Logistics: Purchasing Using Performance Based Criteria,” August 16, 2004.

⁷ FAR subpart 16.3, “Cost-Reimbursement Contracts,” 16.306, “Cost-Plus-Fixed-Fee Contracts.”

The cost risk to the Army could be reduced further by converting the high-risk, cost-reimbursable contract or portions of the contract to a lower risk, firm-fixed-price contract. We calculated that \$335.9 million used to accumulate inventory could have been put to better use. During the previous audit, PMO Stryker identified \$152.4 million in excess inventory that would be used to reduce Program Year 2011 (October 2011 through February 2012) and Program Year 2012 (March 2012 through February 2013) contract requirements.

Recommendation 1.c and Agreed Upon Action

Recommendation 1.c stated that PMO Stryker should define contract remedies that include both positive and negative fee measures related to inventory turns, or rate at which inventory is used and replaced during a period, and inventory accuracy metrics for Stryker vehicles.

The Deputy Program Executive Office for Ground Combat Systems agreed to direct PMO Stryker to establish appropriate metrics, which included incentives for inventory turns and inventory accuracy.

Recommendation 1.d and Agreed Upon Action

Recommendation 1.d stated that the Program Executive Office for Ground Combat Systems, with the support of the Executive Director, Army Contracting Command–Warren, should require PMO Stryker to use one of the basic contract forms, either term or completion, and define a tangible deliverable if logistics support Stryker vehicles are procured under a cost-reimbursable contract as required by the FAR.⁸

The Deputy Program Executive Office for Ground Combat Systems agreed with the recommendation, stating PMO Stryker would perform a business case analysis to determine whether to use a performance-based logistics strategy moving forward. Additionally, the Deputy Program Executive Office stated that if a cost-reimbursable contract is used, the contract will be either the term or completion form in accordance with the FAR.

Recommendation 1.e and Agreed Upon Action

Recommendation 1.e stated that the Program Executive Office for Ground Combat Systems, with the support of the Executive Director, Army Contracting Command–Warren, should require PMO Stryker to determine which portions of the Stryker logistics support contract can be transitioned to lower risk firm-fixed-price or fixed-price incentive type contracts and take appropriate action.

⁸ FAR subpart 16.3, “Cost-Reimbursement Contracts.”

The Deputy Program Executive Office for Ground Combat Systems agreed, stating that PMO Stryker would perform a business case analysis to determine whether to use a performance-based logistics strategy moving forward. Furthermore, he stated that the business case analysis would determine whether a cost-reimbursable contract type is appropriate for the performance-based logistics strategy and whether portions of the performance-based logistics contract can transition to firm-fixed-price.

Review of Internal Controls

DoD Instruction 5010.40 requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls.⁹ We determined that PMO Stryker and Army Contracting Command–Warren internal controls over contract administration and management were effective as they applied to the audit objectives.

⁹ DoD Instruction 5010.40, “Managers’ Internal Control Program Procedures,” May 30, 2013.

Finding

PMO Stryker Took Appropriate Actions to Address Performance Metrics and Basic Contract Form and Contract Type Risks

The PMO Stryker and Army Contracting Command–Warren officials effectively completed corrective actions related to Recommendations 1.c through 1.e, as agreed. Specifically, the PMO Stryker and Army Contracting Command–Warren officials:

- awarded a cost-plus-incentive-fee contract for wholesale supply services to encourage successful inventory management performance measured in terms of inventory turns and inventory accuracy; and
- identified cost-plus-fixed-fee line items in the sustainment services contract as either: (1) a term-form contract in which the contractor is required to provide a specified level of effort for a stated period of time, with satisfactory performance or (2) a completion-form contract in which the contractor is required to deliver a specified, definitive end product within the estimated cost as criteria for earning the fixed fee in accordance with the FAR.¹⁰

Furthermore, PMO Stryker performed a business case analysis that considered the use of a lower risk fixed-price incentive contract and determined that a cost-plus-incentive-fee contract presented the least amount of schedule and performance risk to both the DoD and the contractor.

Corrective Actions Taken to Address Recommendation 1.c

We determined that PMO Stryker completely implemented Recommendation 1.c. Specifically, the PMO Stryker established performance metrics in the wholesale supply contract that included inventory turns and inventory accuracy to incentivize the contractor to provide satisfactory performance. Additionally, PMO Stryker established incentives that included positive and negative fee measures that related to contractor performance.

¹⁰ FAR subpart 16.3, “Cost-Reimbursement Contracts.”

Inventory Turns Was Being Measured

PMO Stryker's implementation and surveillance of the inventory turns performance standard has been effective. Inventory turns is calculated by dividing the cost of used spare parts for 12 months by the cost of the average on-hand inventory level for 12 months. Based on the wholesale supply contract, GDLS is required to submit an inventory turns data report every 6 months. The performance standard for the inventory turns rate for FY 2016 is 50 percent or greater; for FY 2017 is 52 percent or greater; and for FY 2018 is 54 percent or greater.

According to the December 2016 inventory turns data report, the total cost of used spare parts was \$418.8 million, and the average on-hand inventory was \$662.0 million. This calculated to an inventory turns rate of 63 percent, which met the FY 2016 performance standard of 50 percent or greater.

Inventory Accuracy Was Being Measured

PMO Stryker's implementation and surveillance of the inventory accuracy performance standard was effective. Inventory accuracy is the percentage of the on-hand inventory quantity at the warehouse facilities compared to the on-hand inventory quantity shown in the contractor's inventory management system based on a random sampling of line items. According to the quality assurance surveillance plan, the Government performs an audit twice a year at two warehouse locations, which are in Sumner, Washington, and Anniston, Alabama. Inventory accuracy is calculated using the percentage of randomly sampled items' on-hand inventory quantity in the contractor's inventory management system reconciled to the quantity counted at the physical location.

The performance standard for inventory accuracy for FYs 2016, 2017, and 2018 is 98 percent. According to PMO Stryker's FY 2016 audits, dated April 2016 and October 2016, the Anniston warehouse inventory was 100 percent accurate. At the Sumner location, the inventory accuracy was 99.6 percent for the first audit, dated May 2016, and 100 percent for the second audit, dated November 2016. We determined that the contractor met the 98-percent performance standard for inventory accuracy.

Adjustable Incentive Fee Defined in the Contract

PMO Stryker established positive and negative fee measures for the cost-plus-incentive-fee wholesale supply contract to incentivize the contractor performance in accordance with the FAR. The FAR states that incentive contracts will include a target cost, a target profit or fee, and a profit or fee adjustment formula.¹¹ Additionally, the FAR states that performance incentives should

¹¹ FAR Subpart 16.4, "Incentive Contracts," 16.402-1(b), "Cost Incentives."

relate profit or fee to the results delivered by the contractors.¹² Furthermore, the FAR states that positive and negative incentive measures should relate to contractor performance.¹³

The wholesale supply contract established a formula that adjusted the fee upward or downward based on GDLS performing within the target cost and achieving certain performance standards, which included inventory turns, inventory accuracy, overall on-time delivery, back order, and on-time delivery for not mission capable supply.¹⁴ See Table 2 for a detailed explanation of how fees are earned.

Table 2. Incentive Fee Guidelines for Stryker Wholesale Supply Contract W56HZV-16-D-0060

Fees	Fee Formula	Satisfactory Performance Required				
		Inventory Turns	Inventory Accuracy	Overall OTD	NMCS OTD	Back Order
Minimum Fee	Target fee will decrease by 60 cents for every dollar that the allowable cost exceeds the target cost, but no less than 5 percent of the target cost.					
Mid-Target Fee	Target fee will increase by 60 cents for every dollar that the allowable cost is less than the target cost, but no greater than 13 percent of the target cost.			X		X
Maximum Fee	Target fee will increase by 30 cents for every dollar that the allowable cost is less than the mid-target cost, but no greater than 14 percent of the target cost.	X	X	X	X	X

LEGEND

OTD On-Time Delivery

NMCS Not Mission Capable Supply

¹² FAR subpart 16.4, Paragraph 16.402-2(a), "Performance Incentives."

¹³ FAR paragraph 16.402-2(b).

¹⁴ Overall on-time delivery is the percentage of filled supply orders that were completed by the required delivery date. Back order is any supply order that is not filled by the required delivery date. On-time delivery for not mission capable supply is the percentage of supply orders critical for Stryker vehicle mission readiness that are filled by the required delivery date.

For example, in FY 2016, the GDLS can earn the maximum fee (\$24.0 million) if the contract costs are less than \$154.3 million and they achieve all 5 of the metrics show in Table 2. The GDLS will earn the minimum fee (\$8.6 million) if the contract costs are greater than \$182.9 million, regardless of whether the contractor achieves satisfactory performance of the metrics.

Corrective Actions Taken to Address Recommendation 1.d

We determined that PMO Stryker completely implemented Recommendation 1.d. In October 2016, the Assistant Secretary of Defense (Acquisition) approved the Stryker business case analysis, which determined that a performance-based logistics strategy was the preferred sustainment strategy. The Army Contracting Command–Warren contracting official awarded a cost-plus-fixed-fee contract that identified:

- maintenance and field service representative¹⁵ labor for garrison and deployment vehicles as term-type tasks; and
- spare parts without national stock numbers and other maintenance-related tasks¹⁶ as completion-type tasks.

Maintenance and Field Service Representative Labor Were Term-Type Tasks

The maintenance and field service representative labor tasks for garrison and deployment vehicles were identified as term-type tasks. In accordance with the FAR, the sustainment services contract obligated the contractor to devote a level of effort in the form of estimated labor hours to deliver satisfactory performance in exchange for earning the fixed-fee.¹⁷ According to the sustainment services contract, satisfactory contractor performance was measured in the following areas.

- Maintenance Readiness:
 - The percentage of time that vehicles are not being used because they are waiting for maintenance, excluding the time waiting for spare parts to be delivered.
 - Is calculated by dividing the total maintenance hours by the total hours available in the quarter.

¹⁵ Field service representatives are contractor employees who provide technical assistance and advice to the Army users and maintainers of Stryker vehicles.

¹⁶ Other tasks incidental to the performance of maintenance services include transportation, travel, lodging, communication equipment, office supplies, and commercial licensing.

¹⁷ FAR subpart 16.3.

- The standards for FYs 2016 and 2017 are 96 and 97 percent, respectively.
 - The standard for FY 2018 has not been determined.
- Field Service Representative Support:
 - Field service representatives are required on a monthly basis to summarize all technical support activities provided to the Stryker fleets in a report.
 - The technical support activities may consist of troubleshooting, performing diagnostic analysis, and recommending alternative maintenance procedures.
- Operational Readiness Rate:
 - A measure indicating the percentage of vehicles that are fully-mission capable.
 - Calculated by dividing the total number of fully-mission capable vehicles by the total number of vehicles in the fleet.
 - The standard operational readiness rate for FYs 2016 through 2018 is 90 percent.

PMO Stryker Took Corrective Action to Expand the Maintenance Readiness Requirement

We determined that, because of an oversight in the contract scope of work, PMO Stryker was not adequately evaluating maintenance readiness for all Stryker vehicles on which GDLS was performing scheduled and unscheduled maintenance. According to the sustainment services contract, GDLS was only required to track and report maintenance readiness for the Stryker vehicle fleet in Kuwait.¹⁸ During the followup audit, we identified that GDLS also performed scheduled and unscheduled maintenance on Stryker vehicles for the Training and Doctrine Command and special operations forces fleets. Therefore, maintenance readiness on those vehicles should also be evaluated.

A PMO Stryker official acknowledged that the omission of the maintenance readiness report requirement for the Training and Doctrine Command and special operations forces fleets in the contract scope of work was an oversight. On February 23, 2017, as a result of our followup audit, the PMO Stryker and Army Contracting Command–Warren officials modified the sustainment services contract to expand the maintenance readiness requirement and require GDLS to submit

¹⁸ According to the quarterly maintenance readiness reports for Kuwait vehicles during the periods of June 2016 through August 2016 and September 2016 through November 2016, GDLS met the 96-percent performance standard with 100-percent maintenance readiness rate.

maintenance readiness reports for all Stryker vehicles that receive scheduled and unscheduled maintenance. As a result of the corrective action taken during our audit, we will not make a recommendation to PMO Stryker and Army Contracting Command–Warren.

Field Service Representative Reporting Was Satisfactory

We reviewed nine field service representative reports from the periods of March through November 2016 to verify that GDLS was providing the technical support activity information. The GDLS monthly reports summarized the field service representative activities for each Stryker unit, as required by the sustainment services contract.

PMO Stryker Took Corrective Action to Delete the Operational Readiness Rate Requirement

We determined that PMO Stryker was not monitoring the operational readiness rate as required by the sustainment services contract and the quality assurance and surveillance plan. The sustainment services contract required operational readiness rate reporting for vehicles maintained in Kuwait. According to PMO Stryker officials, GDLS could not be measured in terms of operational readiness because sustainment for the Stryker vehicles was a joint effort between the Army, Defense Logistics Agency, and GDLS. Specifically, the Defense Logistics Agency’s supply of spare parts and GDLS’ scheduled and unscheduled maintenance support impacted Stryker fleet operational readiness.

PMO Stryker officials explained that the operational readiness rate was erroneously retained in the contract. On March 2, 2017, as a result of our followup audit, PMO Stryker and Army Contracting Command–Warren officials appropriately modified the sustainment services contract and the quality assurance and surveillance plan to delete the operational readiness rate requirement. As a result of the corrective action taken during our audit, we will not make a recommendation to PMO Stryker and Army Contracting Command–Warren.

Spare Parts and Other Maintenance-Related Tasks Were Completion-Type Tasks

The contracted tasks to supply spare parts without national stock numbers and other tasks related to the performance of maintenance were identified as completion-type tasks. For a completion-form contract, the FAR requires the contractor to deliver an end item within the estimated cost.¹⁹ In accordance with the FAR, the sustainment services contract requires GDLS to deliver monthly consumed items reports, which consist of a list of spare parts placed on Stryker vehicles by the contractor during maintenance. We reviewed the consumed items report as of October 2016 and determined that GDLS consistently reported spare parts used during maintenance.

Additionally, GDLS is required to deliver monthly fund and expenditure reports of spare parts, other direct costs, and travel. We reviewed the funds and expenditure reports from September through November 2016. According to the reports, GDLS efficiently maintained expenditures for spare parts and other direct costs and travel within 36.6 percent and 102.4 percent of the estimated cost, respectively.²⁰

Corrective Actions Taken to Address Recommendation 1.e

We determined that PMO Stryker completely implemented Recommendation 1.e. In October 2016, the Assistant Secretary of Defense (Acquisition) approved the business case analysis, which analyzed alternatives to identify the Stryker product support strategy with the best value over the long term. Among five alternative product support strategies reviewed, the business case analysis considered the use of a cost-plus-incentive-fee contract or a fixed-price incentive contract and determined that a cost-plus-incentive-fee contract presented the lower risk.

According to the business case analysis, the fixed-price-incentive contract strategy and a cost-plus-incentive-fee contract strategy had the lower risk scores; however, the fixed-price incentive contract strategy showed significant amount of risk for the Army in regards to contract negotiations and contract funding. According to the analysis, DoD budget reductions are expected in future fiscal years, which impact schedule and performance. When the availability of future funds is unknown, fixed-price incentive contracts pose a greater risk to the Army and the contractor.

¹⁹ FAR subpart 16.3.

²⁰ The expenditure percentage of estimated cost was calculated by adding the actual expenditures and the estimated expenditures to complete, divided by the total estimated costs. The costs for spare parts and other direct costs were combined on the funds and expenditure report; therefore, the combined costs were within 64.3 percent of the estimated costs. Travel expenditures exceeded the estimated cost by 102.4 percent, but the total expenditures, including labor, spare parts, other direct costs, and travel, were 80.9 percent within the total estimated cost.

For the Army, the lack of funding would result in work stoppage that adversely impacts schedule and military operations. For the contractor, future business and earnings would be jeopardized if DoD budget reductions prevent the Army from awarding future contract option years. However, a cost-plus-incentive-fee contract provides more flexibility when future funding is unknown. Specifically, cost-plus-incentive-fee contracts allow the Army to work with the contractor to reprioritize program requirements and scope of work to address budget shortfalls with minimum impact to schedule.

Additionally, the structure of a fixed-price incentive contract was the second most expensive option for the Army because it included increases to GDLS' profit and higher general and administrative costs for GDLS to take ownership of the Stryker spare-part inventory. According to the business case analysis, the contractor was not willing to assume those risks because the possibility of a contract termination would expose them to significant financial loss, in part, due to assuming the spare-part inventory. As a result of the higher risks associated with contract negotiations and contract funding, the Army questioned using a fixed-price incentive contract.

The cost-plus-incentive-fee contract structure involved the contractor making material purchase decisions for the Army, which exposes the Army to inventory accountability and control risks. However, the business case analysis identified that inventory control incentives established in the cost-plus-incentive-fee contract would minimize those risks to the Army. The inventory control metrics provided assurance to the Army that its inventory will be accurately accounted for and also that the inventory will not become excessive. As a result of the business case analysis, Army Contracting Command–Warren officials issued the wholesale supply contract as a cost-plus-incentive-fee contract with performance incentive-based fees.

Conclusion

The PMO Stryker and Army Contracting Command–Warren officials established inventory turns and inventory accuracy metrics with incentive fees in the wholesale supply services contract that motivated the contractor to provide satisfactory performance, as agreed for Recommendation 1.c. In addition, the PMO Stryker and Army Contracting Command–Warren officials identified contract line items in the sustainment services contract as either term or completion form in accordance with the FAR.²¹ Furthermore, the PMO Stryker and Army Contracting Command–Warren officials established the required deliverable for the term and completion-type tasks in order for the contractor to earn the fixed fee, as agreed for Recommendation 1.d. PMO Stryker also obtained Assistant Secretary of Defense (Acquisition) approval of the Stryker business case analysis in October 2016. In the business case analysis, PMO Stryker considered alternative product support strategies, which included the use of a fixed-price incentive contract, as agreed for Recommendation 1.e. Based on our review of the business case analysis’ assessment of risks for fixed-price incentive and contracts, we determined that the Army’s use of a cost-plus-incentive-fee contract for product support was appropriate.

²¹ FAR subpart 16.3, “Cost-Reimbursement Contracts.”

Appendix

Scope and Methodology

We conducted this performance audit from November 2016 through April 2017 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We conducted interviews with personnel from the Program Executive Officer for Ground Combat Systems, PMO Stryker, TACOM Life Cycle Management Command, and Army Contracting Command–Warren.

We reviewed wholesale supply contract W56HZV-16-D-0060 and sustainment services contract W56HZV-16-D-0025 that supported the Stryker family of vehicles. Specifically, for contract W56HZV-16-D-0060, we reviewed and analyzed:

- inventory turns data report, dated December 2016; and
- Government inventory audit documentation, dated April 2016, May 2016, October 2016, and November 2016.

For contract W56HZV-16-D-0025, we reviewed and analyzed:

- maintenance readiness rate reports for the period of June through November 2016;
- field service representative reports for the period of March through November 2016;
- funds and expenditure reports as of November 2016; and
- consumed items report for the period of March through October 2016.

We reviewed the FAR subparts 16.3 and 16.4 for guidance related to contract type and incentive fees. In addition, we reviewed the PMO Stryker performance-based logistics business case analysis, dated December 2015. We also used the Electronic Document Access system to obtain and review specific contract delivery orders and modifications to the current Stryker support contract.

Use of Computer-Processed Data

We did not use computer-processed data to perform this audit.

Prior Coverage

During the last 5 years, the U.S. Government Accountability Office (GAO) issued one report and the DoD Office of Inspector General (DoD OIG) issued six reports related to either the Stryker program or performance metrics. Unrestricted GAO reports can be accessed at <http://www.gao.gov>. Unrestricted DoD OIG reports can be accessed at <http://www.dodig.mil/pubs/index.cfm>.

GAO

Report No. GAO-15-226, "Defense Logistics, Improvements Needed to Accurately Assess the Performance of DOD's Materiel Distribution Pipeline," February 2015

The GAO recommended that the Secretary of Defense direct the Under Secretary of Defense for Acquisition, Technology, and Logistics, in conjunction with the U.S. Transportation Command, to revise guidance to ensure that the three distribution performance metrics incorporate cost. The GAO also recommended that the Under Secretary of Defense for Acquisition, Technology, and Logistics and U.S. Transportation Command, in collaboration with the geographic combatant commands, address the limitations of existing distribution performance metrics and gain visibility over the last tactical mile.

DoD OIG

Report No. DODIG-2016-116, "Navy Needs to Establish Effective Metrics to Achieve Desired Outcomes for SPY-1 Radar Sustainment," August 1, 2016

The DoD OIG recommended that the Commander, Naval Supply Systems Command, require the Naval Supply Systems Command, Weapon Systems Support to follow DoD guidance when developing the performance metrics incorporated in future performance-based logistics contracts used to sustain the SPY-1 radar.

Report No. DODIG-2015-052, "Air Force Life Cycle Management Center's Management of F119 Engine Spare Parts Needs Improvement," December 19, 2014

The DoD OIG recommended that the Director, Air Force Life Cycle Management Center, review the mean time between maintenance and the cost management metrics for 2010 to verify that the incentive fees were accurate and, if they were not, take appropriate action to correct any potential underpayments or overpayments.

Report No. DODIG-2014-119, "Excess Inventory Acquired on Performance-Based Logistics Contracts to Sustain the Air Force's C-130J Aircraft," September 22, 2014

The DoD OIG recommended that the Chief, Tactical Airlift Division, establish and monitor C-130J aircraft spare parts inventory control metrics on the performance-based logistics contracts with Lockheed Martin and Rolls-Royce.

Report No. DODIG-2013-104, "DoD Oversight Improvements Are Needed on the Contractor Accounting System for the Army's Cost-Reimbursable Stryker Logistics Support Contract," July 16, 2013

The DoD OIG recommended that the Program Executive Office, Ground Combat Systems, direct the PMO Stryker with support from the Director, Army Contracting Command–Warren, to require General Dynamics Land Systems-Canada to retroactively apply its revised billing procedures to delivery order 0019 and apply actual costs to the appropriate project task and reconcile actual cost to contract line items numbers based on costs that were actually incurred during that period.

Report No. DODIG-2013-025, "Accountability Was Missing for Government Property Procured on the Army's Services Contract for Logistics Support of Stryker Vehicles," November 30, 2012

The DoD OIG recommended that the Program Executive Officer, Ground Combat Systems, require the PMO Stryker to accept delivery of all contractor acquired property that was not used during the contract period of performance on a contract line item in accordance with Defense Federal Acquisition Regulation Supplement, Procedures, Guidance, and Information 245.402-70. Additionally, the DoD OIG recommended that all Stryker inventory be accepted as Government property before the award of the follow-on Stryker contractor logistics support contract.

Report No. DODIG-2012-102, "Better Cost-Control Measures Are Needed on the Army's Cost-Reimbursable Services Contract for Logistics Support of Stryker Vehicles," June 18, 2012

The DoD OIG recommended that the Program Executive Office Ground Combat Systems, with the support of the Executive Director, Army Contracting Command–Warren, require the PMO Stryker to:

- define contract remedies that include both positive and negative fee measures related to inventory turns and inventory accuracy metrics for Stryker vehicles;
- use either term or completion contract forms and define a tangible deliverable if logistics support for Stryker vehicles are under a cost reimbursable contract as required by the FAR;²² and
- determine which portions of the Stryker logistics support contract can be converted to lower risk firm-fixed-price or fixed-price incentive type contracts.

²² FAR subpart 16.3, "Cost-Reimbursement Contracts."

Acronyms and Abbreviations

FAR Federal Acquisition Regulation

GDLS General Dynamics Land Systems

PMO Program Management Office

Whistleblower Protection

U.S. DEPARTMENT OF DEFENSE

The Whistleblower Protection Ombudsman's role is to educate agency employees about prohibitions on retaliation and employees' rights and remedies available for reprisal. The DoD Hotline Director is the designated ombudsman. For more information, please visit the Whistleblower webpage at www.dodig.mil/programs/whistleblower.

For more information about DoD OIG reports or activities, please contact us:

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