Joint Light Tactical Vehicle (JLTV):
Background and Issues for Congress

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June 19, 2013
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Summary

The Joint Light Tactical Vehicle (JLTV) is being developed by the Army and the Marine Corps as a successor to the High Mobility, Multi-Wheeled Vehicle (HMMWV) that has been in service since 1985. On October 28, 2008, awards were made for the JLTV Technology Development (TD) Phase to three industry teams: (1) BAE Systems, (2) the team of Lockheed Martin and General Tactical Vehicle, and (3) AM General and General Dynamics Land Systems. Once testing was completed and technology requirements established, a full and open competition was expected to be conducted in the late summer of 2011 for the Engineering and Manufacturing Development (EMD) Phase; the Department of Defense (DOD) planned to award two contracts for the EMD phase, which was scheduled to last 24 months.

In February 2011, it was announced the award of the EMD contract would be delayed until January or February 2012 because the Army changed requirements for the JLTV. DOD had planned to award two contracts for the EMD phase, which was scheduled to last 24 months, but instead proposed a 48-month-long EMD. There will be two JLTV variants—a Combat Tactical Vehicle (CTV) that can transport four passengers and carry 3,500 pounds and a Combat Support Vehicle (CSV) that can transport two passengers and carry 5,100 pounds.

On January 26, 2012, the Army issued the Request for Proposal (RFP) for the JLTV’s EMD phase. Up to three EMD contracts could be awarded, and contract award was scheduled for June 2012. The period of performance for EMD contracts is 27 months, with the overall EMD phase scheduled to last 33 months. Vendors would be required to provide 22 JLTV prototypes for testing 12 months after contract award. The target cost for the base vehicle is $250,000 excluding add-on armor and other kits.

On August 22, 2012, the Army announced the award of three firm-fixed price JLTV EMD contracts totaling approximately $185 million. The three companies awarded the EMD contracts were AM General, LLC (South Bend, IN); Lockheed Martin Corporation (Grand Prairie, TX); and Oshkosh Corporation (Oshkosh, WI).

The FY2014 Budget Request for JLTVs is $84.2 million for Army Research, Development, Test and Evaluation (RDT&E) and $50.4 million for Marine Corps RDT&E, for a program total of $134.6 million. The House and Senate Armed Services Committees recommended fully funding the Administration’s FY2014 JLTV Budget Request. The House Appropriations Committee recommended fully funding the Army’s FY2014 JLTV Budget Request but recommended a $1.3 million cut to the Marines’ Budget Request citing program management growth.

Potential issues for Congress include a possible examination of why there is no longer any foreign interest in the JLTV program and how the Army’s study to revise overall tactical wheeled vehicle requirements might affect the JLTV program. This report will be updated.
Background

The JLTV is an Army-led, multi-service initiative to develop a family of future light tactical vehicles to replace many of the HMMWVs used by the armed services today. HMMWVs, which first entered service in 1985, were developed during the Cold War when improvised explosive devices (IEDs) and other anti-vehicle explosive devices were not a major factor in military planning. The HMMWV’s demonstrated vulnerability to IEDs and the difficulties and costs experienced in “up-armoring” HMMWVs already in the inventory have led to renewed emphasis on vehicle survivability. DOD officials have emphasized that JLTVs are not intended to replace HMMWVs “one for one.”

JLTV Program

What Is the JLTV?

The JLTV program is a joint Army/Marine Corps effort to develop and produce both vehicles and associated trailers. Originally, there were three variants, but now there are two planned JLTV variants: a four-passenger Combat Tactical Vehicle (CTV) and a two-passenger Combat Support Vehicle (CSV). As planned, JLTVs would be more mechanically reliable, maintainable (with on-board diagnostics), all-terrain mobile, and equipped to link into current and future tactical data nets. Survivability and strategic and operational transportability by ship and aircraft are also key JLTV design requirements.

Program Structure

The JLTV is an Acquisition Category (ACAT) 1D program. The Army bears the overall responsibility for developing the JLTV through its Joint Program Office, which reports to the Program Executive Office (PEO) for Combat Support & Combat Service Support (PEO CS&CSS) in Warren, MI, which reports to the Assistant Secretary of the Army for Acquisition.


5 The 12th Edition of the Defense Acquisition University Glossary, July 2005, defines an ACAT 1D program as “a Major Defense Acquisition Program (MDAP) which is estimated by the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD (AT&L)) to require the eventual expenditure for Research, Development, Test, and Evaluation (RDT&E) of more than $365 million (FY2000 constant dollars) or the procurement of more than $2.19 billion (FY2000 constant dollars).”
Logistics, and Technology (ASA[AL&T]). Marine participation is centered on a program office under the supervision of the Program Executive Officer Land Systems (PEO LS) Marine Corps at Quantico, VA.

Program History

In November 2006, the Joint Chief of Staff’s Joint Requirement Oversight Council (JROC) approved the JLTV program. On December 22, 2007, the Under Secretary of Defense for Acquisition, Technology, and Logistics USD (AT&L) signed an Acquisition Decision Memorandum (ADM) directing the JLTV Program to move from the Concept Refinement Phase into the Technology Development (TD) Phase of the DOD System Acquisition Process. The Army and Marines had intended to issue a Request for Proposal (RFP) for Technology Development Phase as early as October 2007. Concerned with funding adequacy, technical maturity, and shifting requirements, the Pentagon’s acquisition executive, John Young, disapproved the issuance of the RFP and directed the Army and Marines to “go back to the drawing board and develop a robust technology development phase.” On February 5, 2008, an RFP for Technology Development Phase was issued to industry. The RFP stated the government desired to award three contracts for the JLTV Technology Development Phase. The RFP stipulated that proposals would be due April 7, 2008, and the TDP would last 27 months. Contractors would build four test sub-configurations during the first 15 months, followed by 12 months of testing.

Technology Development Contracts Awarded

On October 28, 2008, three awards were made for the JLTV TD Phase for a total of $166 million. The three industry teams were (1) BAE Systems Land and Armaments, Ground Systems Division, Santa Clara, CA, and NAVISTAR Defense, Warrenville, IL; (2) General Tactical Vehicles, Sterling Heights, MI—a joint venture between General Dynamics Land Systems and AM General; and (3) Lockheed Martin Systems Integration, Oswego, NY, BAE Systems, Alcoa Defense, Pittsburgh, PA, and JWF Defense Systems, Johnstown, PA.

JLTV Contracts Protested

On November 7 and November 12, 2008, protests were filed with the Government Accountability Office (GAO) against the TD contract awards by the Northrop Grumman-Oshkosh team and the Textron-Boeing-SAIC team alleging there were “unintended discrepancies” in how the government rated bids in terms of the criteria of systems maturity, logistics, and costs. As a result

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of the protest, work on the JLTV program by the three winning teams was suspended. On February 17, 2009, GAO rejected the JLTV protests and the stop work orders were lifted.

Change in Requirements, Program Schedule, and Variants\(^{10}\)

In February 2011, the JLTV Program Office announced the award of the EMD contract would be delayed until January or February 2012 because the Army changed requirements for the JLTV to have the same level of under body protection as the Mine-Resistant, Ambush-Protected All-Terrain Vehicle (M-ATV). DOD had planned to award two contracts for the EMD phase, which was scheduled to last 24 months,\(^{11}\) but instead opted for a 48-month-long EMD phase before awarding Production and Deployment contracts in the second quarter of FY2016. In addition, the Category B variant was eliminated because it proved to be too heavy to meet the required weight of approximately 15,639 pounds to make it transportable by Army CH-47F and Marine Corps CH-53K helicopters. Now there will be two variants—a Combat Tactical Vehicle (CTV), which can transport four passengers and carry 3,500 pounds, and a Combat Support Vehicle (CSV), which can transport two passengers and carry 5,100 pounds.

Army Issues RFP for EMD Phase\(^{12}\)

On January 26, 2012, the Army issued the RFP for the JLTV’s EMD Phase. Industry proposals for the EMD contract were to have been filed with the Army by March 13, 2012. The RFP stipulated that up to three EMD contracts could be awarded, and contract award occurred in June 2012. These contracts will be capped at $65 million per contract. The duration of the EMD performance period would be 27 months starting with contract award. Vendors would be required to provide 22 prototypes for testing 12 months after contract award, and the target cost for the base vehicle configuration was $250,000 (FY2011 constant dollars), excluding add-on armor kits and other kits identified in the RFP.

Revised Acquisition Quantities\(^{13}\)

According to DOD’s May 2013 JLTV Selective Acquisition Report (SAR), the Army plans to procure 49,909 JLTVs from FY2015 to FY2040 and the Marines 5,500 JLTVs from FY2015 to FY2021. The SAR also notes no JLTVs are planned for under Foreign Military Sales (FMS).

\(^{10}\) Information in this section, unless otherwise noted is taken from a briefing from the Project Manager Joint Combat Support Systems on the Joint Light Tactical Vehicle given on February 7 and 8, 2011 and Tony Bertuca, “PMs: JLTV Still Too Heavy, Changing Schedule and Losing Six-Man Variant,” InsideDefense.com, February 11, 2011.


\(^{12}\) Solicitation, Offer, and Award, Number W56HZV-11-R-0329, U.S. Army Contracting Command, January 26, 2012.

\(^{13}\) Department of Defense Selected Acquisition Report (SAR) Joint Light Tactical Vehicle (JLTV), May 21, 2013.
Foreign Participation in JLTV Program

As previously noted, the JLTV SAR indicates that no Foreign Military Sales are currently planned for JLTV, despite previous program participation from Australia and interest from Canada, Great Britain, and Israel. When the JLTV Joint Program Office (JPO) was asked to clarify foreign participation in the JLTV program, the following response was provided:

International cooperation in acquisition programs can substantially improve U.S. operations, and the JLTV program is no different. This important work increases military effectiveness by improving interoperability and partnership with our allies, reducing overall acquisition costs, and strengthening key relationships. Australia did participate in the Technology Demonstration phase of the JLTV program, but no international partners are currently and actively participating in the Engineering and Manufacturing Development phase. International participation or purchase remains possible and an area JPO JLTV would pursue as appropriate with interested allies and partners.14

This suggests there is no longer any foreign participation in the JLTV program. Congress might wish to examine why these countries are no longer interested in the JLTV program, as foreign participation in these types of programs not only increases interoperability but can also benefit these programs from a cost perspective.

Program Activities

Marines Might Defer JLTV Acquisition Until Late 2020s15

Marine leaders testified to the House Armed Services Subcommittee on Tactical Air and Land Forces on November 16, 2011, if significant budget cuts are enacted due to sequestration of the defense budget under the provisions of the Budget Control Act of 2011, P.L. 112-25, the Marines would defer acquisition of the JLTV until the late 2020s. The Marines would instead develop and procure the Amphibious Combat Vehicle (ACV) before acquiring any JLTVs. Experts suggest if the Marines defer until the late 2020s, the per vehicle cost for the Army’s JLTVs—which it hopes to begin procuring in 2015—would increase and possibly endanger the overall program.

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14 E-mail to CRS from JLTV JPO, June 11, 2013.
January 26, 2012, Administration Major Strategic and Budget Decision Briefings\(^\text{16}\)

On January 26, 2012, senior DOD leadership unveiled a new defense strategy, based on a review of the current defense strategy and budgetary constraints. This new strategy envisions among other things:

- a smaller, leaner military that is agile, flexible, rapidly deployable, and technologically advanced; and
- rebalancing global posture and presence, emphasizing where potential problems are likely to arise, to Asia-Pacific and the Middle East.

The Administration’s new strategy and budget priorities specifically reference the JLTV, noting DOD intends to “protect” the JLTV program and HMMWV modernization would be terminated so that resources could be focused on the JLTV. These decisions are viewed by many as highly supportive of the JLTV program and represent a commitment to developing and fielding the JLTV.

Revised Army Tactical Wheeled Vehicle Requirements\(^\text{17}\)

Given the Administration’s decision to decrease the Active Army by 80,000 soldiers and eliminate at least eight Brigade Combat Teams (BCTs), the Army is planning to reduce its tactical wheeled vehicle fleet. While details of this study have not been publically released, it was reported the Army projects it will reduce its overall tactical wheeled vehicle fleet by more than 60,000 vehicles. It is not yet known what the study will recommend in terms of numbers and types of JLTVs the Army will require in the future, but it can be assumed—based on the aforementioned DOD budgetary commitment to the JLTV—that required JLTV quantities will not be reduced significantly and might possibly increase due to de-emphasis on HMMWV modernization.

Army Delays Tactical Wheeled Vehicle Report\(^\text{18}\)

The Army will reportedly delay its Tactical Wheeled Vehicle Strategy Report to Congress by almost a year, citing DOD’s ongoing Strategic Choices and Management Review possibly creating uncertainty about the future of ground forces. Army leadership anticipates providing the Tactical Wheeled Vehicle Strategy to Congress by March 31, 2014. Congress is reportedly


concerned that Army reductions in tactical wheeled vehicles requirements could have an adverse impact on readiness as well as the U.S. defense industrial base.

**A Change to JLTV Competitors**  
Based on what is viewed as increased support by Congress and DOD, as well as changes to the JLTV program schedule, requirements, and cost, additional teams submitted bids on March 27, 2012, for the EMD phase contract. The six teams that submitted bids were

- AM General;
- a Lockheed Martin-led team including BAE Systems;
- Oshkosh;
- Navistar;
- General Tactical Vehicles (a joint venture between AM General and General Dynamics Land Systems); and
- a BAE Systems-led team including Northrop Grumman.

While increased competition for the EMD contracts could result lower per unit costs for the JLTV, one defense analyst suggests it is also indicative of fewer opportunities for defense industry to design and manufacture new Army ground vehicles in the future.

**JLTV EMD Contracts Awarded**

On August 22, 2012, the Army announced the award of three firm-fixed price JLTV EMD contracts totaling approximately $185 million. The three companies awarded the EMD contracts were AM General, LLC (South Bend, IN); Lockheed Martin Corporation (Grand Prairie, TX); and Oshkosh Corporation (Oshkosh, WI). The period of performance is for 27 months, with each contractor receiving initial funding between $28 million to $36 million per contractor, with the balance of funding up to the full contract amount being provided in FY2013 and FY2014. In 12 months, each team will be required to deliver 22 full-up prototypes and contractor support for a 14-month comprehensive government testing program, which will include blast, automotive, and user evaluation testing. The overall EMD Phase is scheduled to last 33 months. According to the Army, “the EMD Phase is designed to test and prepare the next-generation vehicles for a Limited User Test, Capabilities Production Document and Milestone C procurement decision in FY 2015.”

Unsuccessful bidders, Navistar Defense, BAE Systems, and General Tactical Vehicles (a team of General Dynamics and AM General), are permitted to continue developing JLTV candidate vehicles at their own risk and expense, if they notify the government within 30 days of the EMD

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contract award.\(^\text{22}\) Reports suggest some bidders might consider continuing development of JLTV candidates for submission for production source selection.\(^\text{23}\)

### JLTV Program After the EMD Phase\(^\text{24}\)

According to the Army, the goal at the end of the EMD Phase is for the Army and Marines to down-select to a single vendor and move into Low Rate Initial Production (LRIP) by 2015. Current plans then call for three years of LRIP, followed by five years of full rate production resulting in incremental delivery of the JLTV.

### Army Releases JLTV Market Survey\(^\text{25}\)

On March 26, 2013, the Army released a market survey intended to gauge the level of industry interest and ability to compete for a potential JLTV contract. The intent is to see what non-EMD vendors might be interested in competing for the final contract award, thereby possibly increasing competition and perhaps driving down costs. It is not known if there will be any non-EMD bidders, and Federal Acquisition Regulations prohibit the Army from disclosing the name of interested parties.

### DOD Selected Acquisition Report (SAR)\(^\text{26}\)

DOD’s May 2013 JLTV SAR has established the JLTV per-unit cost at about $400,000 per vehicle, which contrasts with service leaders’ claims that JLTV per-unit cost would be around $250,000 per vehicle. The SAR further notes that the JLTV’s total development and acquisition cost is expected to be almost $23 billion in 2012 dollars. With a planned JLTV procurement of 55,000 vehicles, DOD estimates an average per unit cost of $399,000 per vehicle and a program acquisition cost of $415,000 per vehicle. In terms of future year dollars, the unit cost is projected to reach $550,000 with a total development and acquisition cost in excess of $31 billion. The Army, in defense of its $250,000 per-unit cost estimate, noted the SAR’s cost estimates include associated vehicle hardware and other costs, such as add-on armor, fielding, new equipment training, spare parts, and managerial and technical personnel associated with the vehicle program.

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\(^{23}\) Ibid.

\(^{24}\) Kris Osborn, Office of the Secretary of the Army for Acquisition, Logistics, and Technology, “JLTV Program Moves into EMD Phase,” Army News Service, October 18, 2012.


Budgetary Issues

FY2013 JLTV Budget Request

The FY2013 Budget Request for JLTVs is $72.3 million for Army Research, Development, Test and Evaluation (RDT&E) and $44.5 million for Marine Corps RDT&E, for a program total of $116.8 million.


The House Armed Services Committee recommended fully funding the Administration’s FY2013 Budget Request for the JLTV program.


The Senate Armed Services Committee recommended fully funding the Administration’s FY2013 Budget Request for the JLTV program.


Committee conferees recommended fully funding the Administration’s FY2013 Budget Request for the JLTV program.

FY2013 Defense Appropriations Bill

The House Appropriations Committee has recommended fully funding the Administration’s FY2013 Budget Request for the JLTV program.

The Senate Appropriations Committee recommended cutting $5.9 million from the FY2013 Budget Request due to two-month contract award delay.

FY2014 JLTV Budget Request\textsuperscript{32}

The FY2014 Budget Request for JLTV was $84.2 million for Army Research, Development, Test and Evaluation (RDT&E) and $50.4 million for Marine Corps RDT&E, for a program total of $134.6 million.

H.R. 1960, National Defense Authorization Act for FY2014\textsuperscript{33}

The chairman’s mark of the FY2014 National Defense Authorization Act (H.R. 1960) recommends fully funding the Army and Marines FY2014 JLTV Budget Request.\textsuperscript{34}

Senate Version, National Defense Authorization Act for FY2014\textsuperscript{35}

The Senate Armed Services Committee recommended fully funding the Administration’s FY2014 Budget Request for the JLTV program.

Department of Defense Appropriations Bill, 2014\textsuperscript{36}

The House Appropriations Committee recommended fully funding the Army’s FY2014 JLTV Budget Request but recommended decreasing the Marines’ FY2014 Budget Request by $1.3 million citing “program management growth.”\textsuperscript{37}

Potential Issues for Congress

Why Is there No Longer any Foreign Participation in the JLTV Program?

With Australia no longer participating in the JLTV program and an apparent lack of interest by Great Britain, Canada, and Israel, the prospects for foreign military sales of the JLTV seem discouraging. Congress might wish to explore with DOD the reasons behind these countries’ decision to walk away from the JLTV program. Were overall per-vehicle costs too high, did the JLTV prototypes not meet their respective requirements, or are there other reasons why these countries are no longer interested in the JLTV? Beyond the JLTV program, there might be underlying issues impacting potential future foreign participation in U.S. programs.

\textsuperscript{32} Information in this section is taken from the Department of Defense FY 2014 Program Acquisition Costs by Weapon System, February 2013.
\textsuperscript{34} Ibid., pp. 343, 345.
\textsuperscript{37} Ibid., p. 213 and 218.
Army’s Revised Tactical Wheeled Vehicle Requirements

While it is not expected that the Army’s JLTV requirements will vary greatly under the Army’s forthcoming study of tactical wheeled vehicle requirements, Congress might opt to review revised Army JLTV requirements. It has been suggested the Army could eliminate as many as 13 BCTs—5 more than the DOD-mandated 8 BCTs to be cut under FY2013 budget guidelines—and an unspecified number of headquarters and support units and these cuts should be reflected in the Army’s soon-to-be-released study. It has also been reported that based on downsizing, the Army plans to reduce its overall tactical wheeled vehicle fleet by 60,000 vehicles. With the possible restructuring of Army BCTs, it is also possible there might be additional requirements for different JLTV variants and these requirements should also be reflected in the Army’s study. In addition, the Army’s study might also be scrutinized to ensure that currently planned JLTV production matches the Army’s plans to downsize and reorganize its forces.

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