

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

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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), which 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.

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).

On September 3, 2013, the Army began JLTV testing at Aberdeen Proving Grounds, MD; Yuma, AZ; and Redstone Arsenal, AL. The Army then plans to select a single vendor by 2015, with the first Army brigade being equipped with JLTVs by 2018. FY2015 program plans anticipate a Milestone C (Production and Deployment Phase Approval) decision in the fourth quarter of FY2015, followed by Low Rate Initial Production (LRIP).

In June 2014, the Army issued a draft RFP for the JLTV Full-Rate Production Phase and plans to select a contract winner in July 2015. The Office of the Secretary of Defense recently conducted an interim review of the JLTV program and found it is likely to meet all eight key performance parameters. On December 12, 2014, the Army issued the final RFP for LRIP and full-rate production, with bids due February 10, 2016.

Three companies who were picked in 2012 to build prototypes—Oshkosh, Lockheed Martin, and AM General—submitted their bids for the LRIP contract by the February 10, 2015, deadline. It was also reported that none of the three competitors have said publically if they included in their proposals an option for the Army to purchase a technical data package for their vehicles.

The President's FY2016 budget request calls for \$456.9 million for Army and Marine RDT&E and Procurement funding for the JLTV.

A potential issue for Congress is the lack of operational detail in the Army's updated Tactical Wheeled Vehicle Strategy.

Contents

Background.....	1
JLTV Program.....	1
What Is the JLTV?	1
Program Structure.....	1
Program History.....	2
Technology Development Contracts Awarded	2
JLTV Contracts Protested	2
Change in Requirements, Program Schedule, and Variants.....	3
Army Issues RFP for EMD Phase	3
Revised Acquisition Quantities	3
Foreign Participation in JLTV Program.....	4
Program Activities	4
JLTV EMD Contracts Awarded	4
Army Releases Final RFP for JLTV Full-Rate Production.....	5
Bids Submitted for JLTV Low-Rate Initial Production (LRIP).....	5
Budgetary Issues.....	5
FY2016 President’s Budget Request	5
Potential Issue for Congress	6
The Army’s Tactical Wheeled Vehicle Strategy	6

Tables

Table 1. FY2016 JLTV Budget Request	6
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Contacts

Author Contact Information.....	7
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Background¹

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."²

JLTV Program

What Is the JLTV?³

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 Structure⁴

The JLTV is an Acquisition Category (ACAT) 1D program.⁵ 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,

¹ Alan L. Gropman, "Combat Vehicle Sector Could be Headed for Turbulent Times," *National Defense*, April 25, 2008, and James P. Miller, "Race is On to Replace Humvee," *Chicago Tribune*, June 21, 2008.

² Kris Osborn, "DOD's JLTV Becoming an International Effort," *Defense News*, August 4, 2008. Headquarters, Department of the Army, "Army Truck Program (Tactical Wheeled Vehicle Acquisition Strategy) Report to the Congress," June 2010, p. 5.

³ Information in this section is taken from the Army Product Manager, Joint Light Tactical Vehicle website, <http://peocss.tacom.army.mil/pmJLTV.html>, last visited March 2, 2011, and Marine Corps PEO Land Systems Joint Light Tactical Vehicle website, <http://www.marcorsyscom.usmc.mil/peolandssystems/jltv.aspx>, last visited March 2, 2011, and Tony Bertuca, "PMs: JLTV Still Too Heavy, Changing Schedule and Losing Six-Man Variant," *InsideDefense.com*, February 11, 2011.

⁴ CRS Report RL34026, *Defense Acquisitions: How DOD Acquires Weapon Systems and Recent Efforts to Reform the Process*, by Moshe Schwartz, provides an extensive discussion of the defense acquisition process.

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."⁶ On February 5, 2008, an RFP for Technology Development Phase was issued to industry.⁷ 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 TD Phase 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 Awarded⁸

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.⁹ As a result

⁶ Jason Sherman, "Pentagon Halts JLTV Competition, Directs Revised Strategy," *InsideDefense.com*, September 24, 2007.

⁷ JLTV Request for Proposal, W56HZV-08-R-0210, February 5, 2008, and Marjorie Censer, "JLTV Solicitation Calls for Three Contractors: Officials Say More are Possible," *InsideDefense.com*, February 5, 2008.

⁸ Unless otherwise noted, information in this section is taken from TACOM's JLTV Program website, <http://contracting.tacom.army.mil/MAJORSYS/JLTV/jltv.htm>, accessed March 2, 2011, and the Marine Corps PEO Land Systems JLTV website, <https://www.marcorsyscom.usmc.mil/peolandsystems/jltv.aspx>, accessed March 2, 2011.

⁹ Marjorie Censer, "Following Northrop's Lead, Boeing-Textron Team Files JLTV Protest," *InsideDefense.com*, November 12, 2008 and Ann Roosevelt, "Textron-Team Protests Army JLTV Awards," *Defense Daily*, November 13, (continued...)

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 Variants¹⁰

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 Phase¹²

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 Quantities¹³

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).

(...continued)

2008; and Daniel Wasserbly, "U.S. GAO Rejects JLTV Protests," *Jane's Defence Weekly*, February 25, 2009, p. 12.

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.

¹¹ DOD Briefing: "JLTV EMD Industry Day," April 26, 2010.

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

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.¹⁵ 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.”¹⁶

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

¹⁴ Email to CRS from JLTV JPO, June 11, 2013.

¹⁵ Information in this section is from U.S. Army Message, “Army Awards Three Joint Light Tactical Vehicle Engineering & Manufacturing Development Phase Contracts,” Warren, Michigan, August 22, 2012.

¹⁶ 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.

contract award.¹⁷ Reports suggest some bidders might consider continuing development of JLTV candidates for submission for production source selection.¹⁸

Army Releases Final RFP for JLTV Full-Rate Production¹⁹

On December 12, 2014, the Army reportedly released the final RFP for JLTV low-rate initial production and full-rate production and gave competitors until February 10, 2016, to refine and submit their bids. The Army—on behalf of itself and the Marines—plans to select a winner and issue a single contract award in the late summer of 2015.

The winning contractor would build approximately 17,000 JLTVs for the Army and Marines during three years of low-rate initial production, followed by five years of full-rate production. The first Army unit would be equipped with JLTVs in FY2018, and the Army's complete acquisition of JLTVs would be completed in 2040. The Marines would begin acquiring their 5,500 JLTVs at the beginning of production and would be completed by FY2022.

Bids Submitted for JLTV Low-Rate Initial Production (LRIP)²⁰

It was reported that the three companies who were picked in 2012 to build prototypes—Oshkosh, Lockheed Martin, and AM General—submitted their bids for the LRIP contract by the February 10, 2015, deadline. It was also reported that none of the three competitors have said publically if they included in their proposals an option for the Army to purchase a technical data package for their vehicles. If the Army acquired the technical data package, theoretically the Army could use that data for future production runs, which could enhance competition and possibly result in better prices for the government.

Budgetary Issues

FY2016 President's Budget Request²¹

The President's FY2016 budget request for the JLTV is as follows:

¹⁷ Tony Bertuca, "Three JLTV Winners Announced; Loosing Companies Still May Have a Shot," *InsideDefense.com*, August 23, 2012.

¹⁸ Ibid.

¹⁹ Information in this section is taken from Megan Eckstein, "Army Releases Final RFP for JLTV; Bids Due Feb. 10," *Defense Daily*, December 15, 2014.

²⁰ Information in this section is taken from Sebastian Sprenger, "Companies Submit Bids for Joint Light Tactical Vehicle," *InsideDefense.com*, February 10, 2015.

²¹ Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, United States Department of Defense Fiscal Year 2016 Budget Request, Program Acquisition Cost by Weapon System, February 2015, p. 3-2.

Table 1. FY2016 JLTV Budget Request

FY2015	\$ Millions	Quantity
RDT&E—Army	32.5	—
RDT&E—Marines	36.7	—
Procurement—Army	308.3	450
Procurement—Marines	79.4	109
Total	456.9	559

Source: Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer, United States Department of Defense Fiscal Year 2015 Budget Request, Program Acquisition Cost by Weapon System, February 2015, pp. 3-2.

Potential Issue for Congress

The Army's Tactical Wheeled Vehicle Strategy²²

On January 29, 2015, in accordance with S.Rept. 112-196 accompanying P.L. 113-6, the Army provided Congress with an updated Tactical Wheeled Vehicle Strategy. This updated strategy provides little operational detail other than the first unit will receive JLTVs no later than FY2018 and the JLTV is projected to be 77% fielded for the current 49,099 procurement quantity by the Tactical Wheeled Vehicle Strategy's end date of FY2035 (Army plans to complete its fielding of JLTVs by FY2040).²³ Additional information that might be beneficial to Congress includes the following:

- The Army's priorities for fielding JLTVs to units (overseas vs. continental United States, for example).
- Since JLTVs will not replace all HMMWVs in the Army, what is the JLTV basis of issue plan for units?
- When will specific units (division level) begin to receive JLTVs, and when will the fielding be complete?
- Will Army National Guard and Army Reserve units receive their JLTVs concurrently with Active units?
- What is the fielding plan for Army National Guard and Reserve units?

This additional information could be useful to Congress in its oversight role, not just in terms of weapon systems, but also in terms of overall readiness and force effectiveness.

²² Headquarters, Department of the Army, *Tactical Wheeled Vehicle Strategy, Report to Congress, 2014*, provided to the Chairman, Senate Armed Services Committee, on January 29, 2015.

²³ Ibid., p. 8.

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