

#	REFERENCE	INQUIRY	RESPONSE
TECHNICAL RELATED INQUIRIES			
1	ATPD, Page 7, paragraph 3.3.4 Design Interface	Does the Government currently embed and integrate the Built-In Test (BIT)/Built-In Test Equipment (BITE) diagnostic capability to the TV fleet and if so who is the common supplier to this requirement?	We do not currently "add" BIT diagnostic capability to the TV fleet. The trouble shooting for electronic controlled items such as the engine and transmission is presently accomplished via non intrusive code reading based off the Interactive Electronic Technical Manuals (IETM) (Reference ATPD 2375, paragraphs 3.4.9.1.6 and 3.4.9.1.7.).
2	ATPD, Page 16, 3.5.3.1 Centralized Lubrication System	Will this require an automatic greasing system or a centralized lube location containing 2-5 grease fittings which must be manually greased?	<p>The Centralized Lubrication System (CLS) uses five ports or less and is required and can be EITHER an automatic or manual operated system. The CLS must be capable of distributing and delivering Army-approved lubricants manually or automatically (i.e., pump and sealed lubricant reservoir) throughout the vehicle to each respective component lube points (i.e., bearings, joints, bolts, etc.). The automatic CLS delivers lubricants to individual lube points by a 5 port (T) or 2 port (O) distributor/manifold installed on the vehicle in a remote location. A manually-operated centralized lube location (with or without a sealed reservoir) must have a capability similar to that of the automatic system. An automatic CLS must include a manual override to allow for manual lubrication in the event of a pump failure, etc. The CLS access point(s) must be easily accessible by maintainers while also reducing the likelihood of damage.</p> <p>The access point for the centralized system must be easily accessible while also reducing likelihood of damage. The CLS access points must be protected using dust covers or other protection means. The operator/maintainer should not have to move/remove components or crawl around things on the truck in order to reach the access point.</p>
3	ATPD, Page 16, 3.5.3.1 Centralized Lubrication System	Must this system also provide lubrication to components on the body?	<p>The CLS should provide lubrication to components both on the dump body and chassis. If necessary, a separate individual CLS access point(s) located on the dump body is permissible.</p> <p>The contractor may include more than one centralized access points if needed to ensure proper lubrication is being provided to all areas attached to each centralized point.</p>
4	ATPD, Page 19, 3.7.1.7 Automatic Starting Aid	May the starting aid be something other than ether or similar fluid aids? For cold weather starting, is an electric pre-heater option an acceptable starting aid? We recommend that "vaporized starting fluid" be replaced with "pre-heater."	The Heavy Tactical Wheeled Vehicles fleets are comprised of vehicles equipped with Detroit Diesel, Cummins and Caterpillar engines all equipped with automatic starting fluid aids (i.e., ether). The automatic starting aid specified in ATPD 2375 remains a valid HDT requirement. The recommended pre-heater replacement is not acceptable. The HDT is neither subject to EPA Motor Vehicle Heavy Duty Diesel Exhaust emission standards nor the EPA Non-road exhaust emission standards because the HDT vehicle will contain armor protection. The HDT diesel engine must operate with JP8/F-24 as its primary fuel.
5	ATPD, Page 19, 3.7.1.9 Reusable Oil Filter	It has been our experience that commercially available cleanable, reusable oil filters are not efficient, heavier and not as cost effective as traditional filters. The cleaning procedures are more expensive than a traditional replacement filter and have caused cause catastrophic engine losses in field testing. We suggest this paragraph be removed.	Army experience with reusable oil filters over the last 12 years on the M915 FOV fleets has shown them to be fully satisfactory in terms of overall cost and performance. However, spin off disposal filters will be added to Paragraph 3.7.1.9 as an acceptable alternative to meet the HDT requirement.
6	ATPD, Page 25, paragraph 3.7.1.5 , Cab	Could you please provide the M917A2 cab dimensions so we understand what 16.0 inches in length equates to our current cab?	Paragraph 3.7.1.5 has been revised as follows: " The HDT vehicle manufacturer shall furnish a wider, heavy-duty commercial model two person with a rear window cab offering more stowage space. The new cab shall be no less than 82 inches in width and shall include a cab extension no greater than 16.0 inches in length for storage of gear behind the seats. The HDT cab shall include a Power Distribution Module (PDM) and heavy duty (longer life) chassis harnesses. During the initial twenty years of operation there shall be no perforation or other damage to the cab shell and related structural components caused by corrosion and requiring repair or replacement of parts. Such capability shall be achieved by a combination of production techniques, materials selection, corrosion prevention and proven coatings and design features. The HDT passenger door, in addition to the normal window, shall have a fresnel lens in the lower part of the door that will permit the driver to see a low height vehicle which is to the right of the vehicle. Provisions shall be provided on each side of cab to assist personnel in climbing onto the vehicle rear deck, if so equipped. Both doors will be provided with an integral heavy duty key lock. Two keys for each vehicle will be provided. The doors and ignition will utilize the same key and be interchangeable with all other HDT vehicles. The HDT hood shall be provided with a means for securing it in the open position. The HDT cab windshield, door windows and rear window shall be tinted. The cab interior and upholstery color shall be black. Sun visors for both driver and passenger shall be provided. The cab shall have fresh air vents and heater and defroster capable of providing adequate heat and frost free window visibility in climatic conditions down to 25 degrees F, with and without B-kit installed."
7	ATPD, Page 25, paragraph 3.7.1.5 , Cab	Could you please provide the M917A2 cab dimensions so we understand what 8 to 10 inches in width equates to our current cab configuration?	See Response to Question 8: " Could you please provide the M917A2 cab dimensions so we understand what 16.0 inches in length equates to our current cab?"
8	ATPD, Page 24, 3.7.13.6.2 Utility Outlets	Clarification: There is no mention of what the required amperage is for the requested outlets, please provide expected amp draw of items listed and similar electrical devices	ATPD 2375 will be revised as follows: The utility outlets maximum amperage rating shall not to exceed 30 amps.
9	ATPD, Page 26, 3.7.15.4 i Cab Accessories and Equipment	Today's electronic engines do not use an engine shutdown valve in the cab. The ignition key is the primary method used to disconnect electrical power and turn off the engine. This seems to be a carry-over from mechanical engines which were used in the past. Is this acceptable?	Agree - the manual shutdown valve will be removed from ATPD 2375 as an HDT requirement.

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10	ATPD, Page 27, 3.7.15.8 Cab Visibility	Question: Is this device the same as 3.7.15.9 Rearview Mirrors? If so can these two be combined?	<p>The device can be the rearview mirrors, closed circuit cameras, etc., as long as the device(s) provide unrestricted visibility to the sides of the HDT (with and without B-kit installed) while seated in the operator's seat. The last sentence in Paragraph 3.7.15.9, Rearview Mirrors mentions that "Mirrors shall be suitable for installation and use with the B-kit installed." Whatever size windows are used in the HDT vehicle and related B-kit, the vehicle operator must have full unrestricted visibility to both sides of the HDT vehicle, with and without B-kit installed on the HDT.</p> <p>The intent is for the operator to have visibility to both sides of the truck no mater what size door window is used (Many of our B-kits have small side windows which limit the visibility of the operator) this system should allow the operator to have the same field of view no matter the window size.</p>
11	ATPD, Page 35, 1.2 Concept of Employment	This mentions unloading the bed by tilting the bed or using a ram ejector mechanism, the ATPD DRAFT does not call out a requirement for a ram ejector system, should it?	<p>The ram ejector system was previously considered for the HDT and rejected. The HDT's quarry mission makes the ram ejector unacceptable. It has been determined the ram ejector track system typically located at the floor along the walls inside the dump bed would be prone to damage and misalignment from repeated impacts with large boulders, etc. A second consideration that worked against the ejector ram system was the additional maintenance this type of system brings with it.</p> <p>The ejector requirement will be removed from ATPD 2375.</p>
12	Question 4, Market Survey	Is the Government asking how long it would take to go from 1 Vehicle to a rate of 126 Vehicles per year?	Yes, this is the production rate information requested.
13	ATPD, Page 6, Section 3.3.3, Computer Resource Support	Can we request information about the how this Computer Resource Support device is connected to the vehicle?	SEE RESPONSE 20 below
14	ATPD, Page 6, Section 3.3.3, Computer Resource Support	May we request the specification(s) which describes the communication between the vehicle and this device?	See RESPONSE 21 below
15	ATPD, Page 6, Section 3.3.3, Computer Resource Support	What is the bus for communication between this device and the truck?	SEE RESPONSE 20 and 21 below
16	Page 12, 3.4.9.1.7, Test Measurement and Diagnostic Equipment (TMDE)	We respectfully request additional information about the SPORT equipment and how this device is connected to the vehicle.	SEE RESPONSE 20 below
17	Page 12, 3.4.9.1.7, Test Measurement and Diagnostic Equipment (TMDE)	We respectfully request the specification which describes the communication between the vehicle and this device?	SEE RESPONSE 21 below
18	Page 12, 3.4.9.1.7, Test Measurement and Diagnostic Equipment (TMDE)	What is the bus for communication between this device and the truck as we assume that it's ISO 9141?	SEE RESPONSE 20 and 21 below
19	Page 19, 3.7.1.5 Data Storage and Retrieval	We respectfully request additional information about the Contact Test Set and how this device is connected to the vehicle?	<p>The Contact Test Set and SPORT are no longer used by the Army and have been replaced with the Maintenance Support Device (MSD) and the Dearborn Protocol Adapter 3. Code is retrieved utilizing the Interactive Electronic Technical Manual (IETM) displayed on the MSD (a laptop computer). To use the MSD, a cable is attached to the MSD and the DPA3. The DPA3 is connected to the vehicle's on-board diagnostic connector (located in the cab) via a cable having a commercial standard Deutsch 6-pin or 9-pin heavy duty vehicle connector (J1939) at one end of it which is plugged into the on-board diagnostic connector.</p> <p>The on-board diagnostic connector selected by the HDT OEM for the HDT vehicle must interface and operate with the Army standard Maintenance Support Device (MSD), through the current DPA3 and newer DPAs that support J1850 and ISO9141 communication protocols. The Dearborn Protocol Adapter (DPA) is a diagnostic tool that provides a gateway between a host computer and connected vehicle communication networks. Network protocols currently supported by the DPA are CAN, J1939, J1708, J1587, J1850 and J1922. The DPA is available as an RS-232 interface, an ISA card, or a PC/104 card.</p> <p>The on-board diagnostic connector must be capable of accepting the Deutsch 6-pin or 9-pin heavy duty vehicle connector used to interface with the MSD through the DPA3.</p> <p>ATTACHMENTS 1 and 2 of the Market Survey provide additional information for attaching the MSD to the Army's latest M915A5 Line Haul Tractor and the on-board diagnostic connector used on the M915A5.</p> <p>Note that paragraph 3.7.1.5 is revised as follows: The HDT vehicle shall be equipped with a system capable of accumulating, recording and storing (30 days) vehicle related operational data such as coolant temperature oil temperature, oil pressure, throttle position, timing, fuel pressure and vehicle speed. The data shall be retrievable with the Maintenance Support Device (MSD).</p>

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20	Page 19, 3.7.1.5 Data Storage and Retrieval	We respectfully request the specification which describes the communication between the vehicle and this device?	Communication between the vehicle engine, transmission, ABS, hydraulics, etc., should be to industry SAE standards such as the J1939, J1708, J1587, J1850 and J1922, and ISO9141. See above response and ATTACHMENTS 3, 4, and 5. Note that paragraph 3.7.1.5 of the ATPD is revised as follows: The HDT vehicle shall be equipped with a system capable of accumulating, recording and storing (30 days) vehicle related operational data such as coolant temperature oil temperature, oil pressure, throttle position, timing, fuel pressure and vehicle speed. The data shall be retrievable with the Maintenance Support Device (MSD).
21	Page 19, 3.7.1.5 Data Storage and Retrieval	What is the bus for communication between this device and the truck?	SEE RESPONSE 20 and 21 above
22	Page 11, Paragraph 3.4.9.1.3 and 3.17.13.6 FBCB2, Outline some 14V power requirements but not the total amps.	Is there a threshold requirement for electrical power source capability at 14V?	It is left to the HDT OEM to determine a threshold power source at 14 V having sufficient output and reserve to fully power the vehicle and all accessory equipment defined in paragraph 3.4.9.1.3 and throughout ATPD 2375. Paragraph 3.7.13 has been revised as follows: 3.7.13 Electrical System. The HDT shall be equipped with a vehicular electrical system of the commercial, heavy-duty type having a 12/24-volt system. The 12/24-volt system shall be stepped down to 12-volts from a primary 24-volt vehicle power source (T). The lighting system shall be 12 volts IAW FMVSS 108. The HDT starting system shall be 24 volts. The HDT lights and reflectors shall be located and mounted so as to preclude any damage when interfacing with other vehicles and protected from damage of terrain or natural obstacles. The HDT backup lights shall be IAW SAE J593. Hazard flashers shall be provided and the brake lights shall take precedence over the hazard flashers when used in combination. Cab interior lights shall have a variable brightness control. The circuit breakers shall not be automatic reset type. The HDT vehicle shall be equipped throughout with easily assessable and quickly replaceable modular-type electrical harnesses, if available. The HDT vehicle shall be furnished with an alternator with sufficient output and reserve to fully power the vehicle and all accessory equipment defined in 3.4.9.1.3 and related paragraphs throughout ATPD 2375. To prevent overcharge of AGM batteries, a load sensing capability and temperature compensation shall be included in the battery charging circuit, if required. The HDT shall have a receptacle assembly electrical coupling for attaching a trailer to the HDT (T).
23	Page 11, Paragraph 3.4.9.1.3 and 3.17.13.6 FBCB2, Outline some 14V power requirements but not the total amps. * Response revised on 19 June 2014.	Is there a threshold requirement for electrical power source capability at 14V?	See response 23 above: Please note that paragraph 3.4.9.1.4 has been revised as follows: 3.4.9.1.4 Auxiliary Power Connections. The HDT vehicle shall be equipped with no less than six (6) switched and unswitched auxiliary power connections with rated voltages and amperes IAW Table 3, plus additional circuits in the PDM to support emerging systems IAW Table 3. The locations of the auxiliary power connections shall be IAW Table 3.
24	Page 22, Paragraph 3.7.13, Electrical Systems. The ATPD identifies a need for a 360A alternator.	Is this requirement at engine low idle, tactical idle or some other speed?	Paragraph 3.7.13 has been revised and removes the earlier requirement for the "360A alternator." It is left to the HDT OEM to properly size and select an alternator having sufficient output to fully power the HDT vehicle and all accessory equipment defined in paragraph 3.4.9.1.3 and throughout ATPD 2375. The requirement is not meant to be "engine speed" dependant – the requirement must meet all power needs of the HDT during normal operation (peacetime and wartime) IAW the HDT Operational Mode Summary (OMS)
25	Page 22, Paragraph 3.7.13, Electrical Systems. The ATPD identifies a need for a 360A alternator.	Reference is made to a requirement for "100 percent more vehicle electrical power." One would logically assume the actual requirement is for a 720A power source. Is this correct?	Paragraph 3.7.13 has been revised and removes the earlier requirement for the "360A alternator" and "100 percent more vehicle electrical power." It is left to the HDT OEM to properly size and select an alternator having sufficient output to fully power the HDT vehicle and all accessory equipment defined in paragraph 3.4.9.1.3 and throughout ATPD 2375.
26	Page 22, Paragraph 3.7.13, Electrical Systems. The ATPD identifies a need for a 360A alternator.	The ATPD identified a need for 14V power without reference to how many amps are needed. Please clarify how many AMPs are needed?	Paragraph 3.7.13 has been revised and removes the earlier requirement for the "360A alternator" and "100 percent more vehicle electrical power." It is left to the HDT OEM to determine the total amperage AMPs required to fully power the HDT vehicle and all accessory equipment defined in paragraph 3.4.9.1.3 and throughout ATPD 2375.
27	Page 22, Paragraph 3.7.13, Electrical Systems. The ATPD identifies a need for a 360A alternator.	If a dual-voltage alternator, DC/DC converter or other means of generating 14V power from 28V is used to meet the section 3.7.13 14V requirement is it acceptable that the 360A/28V includes the power converted to 14V? For example a DC/DC will convert approx. 50A/28V to 100A/14V leaving 310A for other loads at 28V if a 360A/28V alternator is used.	DC/DC converters or other means of generating power from a higher to a lower potential is a generally accepted practice so long as the approach is safe, reliable and commercially proven and available. Note that paragraph 3.7.13 has been revised and removes the earlier requirement for the 360A alternator.
28	3.8.6 Dump Body Underbody	Can a more industry standard western style understructure be used? It would be just as strong lighter, and easier to heat the bed of the floor.	1. The western style understructure is acceptable as long as it fully complies with the HDT requirements and offers the durability to withstand the many cycles of repeated shock loads of large boulders being dropped into the dump bed IAW the HDT's quarry mission profile. 2. One method of heating dump bed floors uses engine exhaust and baffling. We are not aware of issues regarding difficulty in heating dump bed floors with the existing specifications.
29	3.8.17.3 Hydraulic Pump combination pump & valve	The combination pump and valve is no longer offered by the vendor	Market research indicates that there is more than one supplier offering automatic CLSs. The CLS requirements call for either an automatic or manual CLS. Automatic CLSs can use methods, if available, other than combination pump and valve to meet the CLS requirements.

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30	Page 8, Requirement 3.4.6.1	<p>"The HDT vehicle shall meet the requirements for unrestricted CONUS highway transport and general unrestricted transport in most North Atlantic Treaty Organization (NATO) countries as defined in MIL-STD-1366. The HDT shall be road legal and capable of unrestricted CONUS and NATO countries' highway transport within legal limits without waivers or special permits for all countries in which the will be operated (i.e., current military installations, and deployment sites both in CONUS and abroad)."</p> <p>This requirement limits the maximum vehicle width to 96 inches for CONUS and 98.4 inches for NATO. The US Department of Transportation Surface Transportation Assistance Act of 1982 increased the maximum vehicle width from 96 inches to 102 inches for commercial vehicles. This has led the heavy truck industry to widen the truck to allow for safer trucks by gaining stability. This also allows for optimal wheel offset to decrease the turning circle of the truck, and therefore increase mobility. We assume that the current M917 has a width of 102 inches, which is generally an industry standard for this class of Dump Truck.</p> <p>In order to maintain the maximum stability, safety, and commonality with industry standards, it is recommended that the requirement be amended to allow up to the federal limit of 102 inch width. Is it acceptable to have restricted transport within CONUS and NATO, with a width not exceeding 102 inches (excluding foldable mirrors)?</p>	Paragraph 3.5.2.c. of ATPD 2375 provides guidance on vehicle width.
31	Page 19, Requirement 3.7.1.2	<p>"A diesel engine shall be furnished capable of producing a rated 525-plus horse power (SAE J1995) at 2100 RPM and 1650 ft/lb torque at 1200 RPM. The engine shall be of the latest engine technology and shall have sufficient minimum gross power to meet the performance requirements of this specification in all environmental conditions, "except arctic conditions", using JP-8 as the primary fuel, which may have up to 3,000 ppm sulfur. Pollution control technologies that are affected by the sulfur level of JP-8 fuel either in maintenance or life expectancy shall not be used, e.g., externally cooled Exhaust Gas Recirculation (EGR), NOX traps, catalytic converters, after treatment systems, etc. The HDT is neither subject to EPA Motor Vehicle Heavy Duty Diesel Exhaust emission standards nor the EPA Non-road exhaust emission standards since the HDT vehicle will contain permanent armor protection. This determination is IAW 40 CFR, Sections 85.1703, 89.908, and 1068.225. Contractor shall ensure National Security Exemption labeling requirements are met IAW EPA regulations. In addition, lubricity canisters/filters shall not be required for proper engine operation (Objective)."</p> <p>It is our understanding that the Army Petroleum Center maybe converting many JP-8 fuel contracts to F-24 (Jet A). Will the vehicle be operated on F24? If yes what additives will be included in the F24?</p>	F-24 diesel fuel is a new development that needs to be fully vetted prior to its use in Army ground vehicles.
32	Page 21, Requirement 3.7.10.2.1	<p>"The HDT shall be equipped with appropriate inter-axle differential(s) for reliable operation within the environment specified in the HDT OMS/MP (T). Forward-rear drive axles shall be equipped with automatic locking differentials. The differential(s) shall permit differential action to compensate for wheel speed differences."</p> <p>Does this requirement mean that just one rear drive axle needs an automatic locking differential or is meant to mean that two rear drives axles or all rear drive axles?</p>	The requirement for Paragraph 3.7.10.2.1, ATPD 2375, is for "all rear drive axles."
33	Page 29, Requirement 3.8.3.1	<p>"The HDT shall be furnished with a heated dump bed floor with a temperature range of 300 to 325 degrees F. The system shall be operated, and monitored from the driver's position (T)."</p> <p>To heat the dump beds, the current technology utilizes a diverter valve to route the exhaust gas through the lower portion of the body. The temperature of the exhaust gas will vary greatly depending on the load on the engine and the distance from the exhaust manifold. Generally heating of the dump bed is an on or off function, without precise temperature control. The temperature will vary greatly across the dump bed.</p> <p>We recommend a "not to exceed temperature of 350 degrees."</p>	A higher temperature limit will be considered when ATPD 2375 is finalized.
34	Page 13, HDT Central Tire Inflation System (CTIS), Requirement 3.4.10	<p>Does the government have target pressure for the various CTIS modes – Cross-country, Mud & Snow, Emergency, and Highway or is this up to the manufacturer's recommendation?</p>	The OEM must determine the appropriate HDT configuration that fully meets the ATPD 2375 specification.

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35	Page 9, Paragraph 3.6.8, High-Altitude Electromagnetic Pulse (HEMP)	What level of HEMP protection is needed?	<p>Government HDT testing will be conducted to assess the ability of the HDT Dump truck to survive (not operate through) exposure of a High Altitude Electromagnetic Pulse (HEMP) environment in accordance with the unclassified MIL-STD-464A, Appendix, A5.5 Electromagnetic Pulse (EMP) and Figure 3, Default Free-Field EMP Environment, Page 59.</p> <p>HDT survivability after an HEMP event (system upset) is required for the HDT Dump Truck in accordance with ATPD 2375, Paragraph 3.4.8. Actual operation of the HDT through a HEMP event is not required and successful recycling of the vehicle's power (i.e., circuit protection) to restore mission critical functions is acceptable to meet ATPD 2375, Paragraph 3.4.8. The HDT vehicle must be capable of self recovery after a HEMP event and system upset.</p> <p>During High Altitude Electromagnetic Pulse testing and evaluation, the HDT Dump truck will be exposed to electric field intensities of 50-, 75-, and 100-percent of the required HEMP test level, as defined in the classified MIL-STD-2169B for a minimum of 3 pulses each at each intensity level. For guidance and if necessary, MIL-STD-464A provides an unclassified version threat waveform that can be used for rough (order of magnitude) calculations.</p>
36	Page 10, Paragraph 3.4.6.8 Lifting and Tiedown Provisions	Does the vehicle need to be lifted at GVW?	During HDT test and evaluation the HDT vehicle will not be lifted at GVW; however, the lifting and tiedown provisions still must be rated for the HDT GVW in accordance with MIL-STD-209. The HDT will be lifted at curb weight with B-kit installed on the vehicle and without pintle towed load.
37	Page 9, Paragraph 3.4.6.8.f, Lifting and Tiedown Provisions	The clarification needed is: (a) says air transport is without load in dump (b) says rail impact test is at curb (c) if a & b are true then I test the tiedown provisions at curb for air and rail - confirm.	Correct - the HDT will be rail impacted and air transported at curb weight with B-kit installed on the vehicle.
38	Page 26 , Paragraph 3.7.15, Cab	What is the intended use of the cab? Is it typical day cab or extended cab?	<p>The intended use of the cab is to offer safe and comfortable crew accommodations while operating the HDT Dump truck. The HDT cab is a commercial standard day cab or similar, and with a 16 inch or greater cab extension. The purpose of the 16" cab extension is to offer the crew additional stowage space for crew gear and ancillary types of small equipment. The HDT day cab with 16 inch extension is not and should not be a conventional sleeper cab, nor should it be as large as a sleeper cab.</p> <p>Paragraph 3.7.15. was recently revised to: The HDT original vehicle manufacturer OEM shall furnish a heavy-duty commercial model two person with a rear window cab. The new cab shall be the widest OEM cab available for maximizing driver and passenger space (T) or a commercially available cab between 83 inches and 94 inches wide from door to door outside dimension (O). The cab shall include a cab extension no less than 16.0 inches in depth/length for stowage of crew gear behind the seats.</p>
39	Page 19 , Paragraph 3.5.1.3.1, Air Quality	Clarification is needed. Here it states EPA regulations and in other sections it states no emissions.	<p>The language contained in Paragraph 3.5.1.3.1 is required by the EPA with respect to engine exhaust emissions and must be listed in ATPDs that support Military vehicles. The HDT will be armored and as such falls under the National Security Exemption listed in Paragraph 3.7.1.2 as follows:</p> <p>"The HDT is neither subject to EPA Motor Vehicle Heavy Duty Diesel Exhaust emission standards nor the EPA Non-road exhaust emission standards because the HDT vehicle will contain armor protection. This determination is IAW 40 CFR, Sections 85.1703, 89.908, and 1068.225. Contractor shall ensure National Security Exemption labeling requirements are met IAW EPA regulations."</p>
40		What is the Heavy Dump Truck classified annex document name? Is the document title ATPD 27 Annex C? Heavy Dump Truck Classified Annex? Or MRAP CPD v1.1?	The Classified Annex contains the MRAP CPD v1.1 along with several other classified documents and is referred to as the ATPD 2375 Classified Annex. All documents are mailed together with an approved request for the ATPD 2375 Classified Annex.
41		Are vendors required to submit a separate request for Appendix E, ATPD 2352T (Transparent Glass Class 3A)?	No, The Transparent Glass Class 3A, Appendix E reference, will be included with the Classified Annex Request.
42	3.7.1.9 Reusable Oil Filter	Respectfully request clarification of response to previous question regarding reusable vs. disposable oil filters. Previous response suggested disposable filters would be an acceptable alternative and would be added to the ATPD. The current ATP (dated 26 Feb) did not include this change. Has the government reconsidered this position?	The Government has not changed its position with respect to the use of disposable engine oil filters. The use of disposable engine oil filters remains an acceptable alternative to meeting the requirement for a reusable engine oil filter and will be included in the final approved ATPD 2375. The disposable filters must be rated for and compatible with the HDT engine.

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43	3.4.6.2 Overall Clearances	Is there a standard as to how the government desires to define ground clearance? Is it the highest point at the centerline of the axle? or, Is it the lowest object between the tires, going straight up from the sidewalls?	ATPD 2375 lists the following revised requirement: "The HDT minimum ground clearance shall not be less than 13.0 inches under the lowest point of the axles." Determining minimum ground clearance is in accordance with the following: With the HDT vehicle parked on flat level ground at curb weight, ground clearance is measured from the lowest point of the vehicle, typically under the center of the front drive axle housing (i.e., lowest point on the outside of the differential housing (pumpkin)), to the flat ground.
44	3.7.1.5 Data Storage and Retrieval.	1. What physical connection does the MSD currently use to retrieve stored data? Or is this done via 9141? 2. How does the laptop currently request stored data to start the download?	1. Army wheeled vehicle fleets utilize the 6 or 9 pin Deutsch connector, and the Dearborn Protocol Adapter (DPA-4). The DPA-4 allows J1587 and J1939 fault retrieval, intrusive troubleshooting, and fault clearing. DPA-4 also allows retrieval of on board data such as odometer, engine hours, and fuel economy, etc.. 2. The laptop does not request the codes. This is a function of the Interactive Electronic Technical Manual IETM that the contractor is required to develop. The Government provides the MSD and DPA-4 hardware. As part of the LOG development portion of the HDT contract, the contractor will be required to develop an Interactive Electronic Technical Manual IETM (software package/programming) that interfaces and operates with this military hardware. The contractor IETM will be developed in accordance with applicable Army MIL STDs and will utilize intrusive diagnostic capabilities.
45	3.4.9.1.6 Vehicle Computing System (VCS) 3.4.9.1.7 Test Measurement and Diagnostic Equipment (TMDE)	1. For what purposes will this data bus be used? Diagnostics, maintenance, or development? 2. Does the government desire real-time communication or is it a buffer bus to read information? 3. How many messages does the government intend to have on this data bus?	1. The Onboard Diagnostic II (OBD II) data bus will be used primarily for Diagnostic and maintenance capabilities, and when required utilized for development. 2. Data will need to be available as stored information such as faults, and it will be required to provide real time information during troubleshooting and fault isolation. 3. The data bus is a gateway to the vehicle ECUs/ECMs and does not actually hold any messages. The data bus allows messages to be transmitted between the Electronic Control Modules ECMs and the IETM. The numbers of messages contained on any ECU is determined by the component OEM, (i.e., engine OEM; transmission OEM, etc.) working with the vehicle OEM. Any component controlled by the ECM will be required to communicate using the OBD II (industry standard)/DPA-4. Message requirements would be active as well as stored codes. IETM will require the capability of clearing active and stored codes. Government will not require access to OEM password protected log performance codes as long as they do not require dealer action to render the vehicle to full functionality.
46	3.7.13.6.2 Utility Outlets	1. Request clarification of "A grounding circuit autonomous and separate from the vehicle chassis shall be provided." 2. Will the government consider allowing utility outlets with grounding connected to the vehicle chassis? 3. What style of outlet is desired and by what specification (SAE, MILSPEC, etc)?	1.The ATPD is referring to a circuit with a floating ground, one that is not connected to the main ground such as a vehicle chassis. A floating (autonomous) ground can help reduce the amount of noise in an electrical system, or isolate and protect power supplies and vehicle components. 2. It is acceptable to ground the utility outlets at the vehicle chassis. The autonomous ground was removed from the ATPD 2375 and is no longer a valid requirement for the HDT. 3.Current commercially available automotive heavy duty 12V and 24V receptacles with weather proof cover w/chain, and environmentally sealed are acceptable for this requirement.
47	3.9.7 B-kit Protection	Is it correct to assume the statement regarding battery backup only pertains to those energy attenuating seats (blast seats) that require power to function? If not a correct assumption, what is the purpose of the battery backup?	That is correct. A separate (stand alone) battery power backup is required for the energy attenuating (blast) seats, where a complete loss of vehicle main power can occur during a blast event.
48	3.7.1 Power Train	We assume the AWD requirement reflects the government's desire to have a driven front axle and rear axles for mobility. Does this requirement mandate that ALL axles are to be drive axles or is a non-driven drop axle/tag axle allowed? Additionally, we understand the inherent advantages to having a single tire/wheel on all axles. However, this creates compromises in suspension design on a commercial chassis that may not allow the best solution to be presented. Will the government consider allowing tires/wheels sized appropriately to the application?	1. For mobility the HDT shall be equipped with all driven axles, with the following exception: For managing weight distribution a single non-drive drop/tag/pusher axle is acceptable to use. 2. Tires/wheels sized appropriately that meet the ATPD 2375 requirements for Wheels/Rims/Tires and the HDT Operational Mode Summary (OMS) (ATPD 2375, Appendix A) is permissible. ATPD 2375 will be updated accordingly to allow for this change.
49	3.7.13.8 Electromagnetic Emission Interference (EMI)	Will the government provide a list of the tests from MIL-STD-461 and MIL-STD-464 that will be performed on the vehicle?	The Government has no plans to release to contractors a list of the tests from MIL-STD-461 and MIL-STD-464 that will be performed on the vehicle.
50	3.6.7.2 LEUT Type II Companion Trailer.	The military trailer plug (compliant with STANAG 4007) does not address ABS. Which model of trailer plug does the government desire to use for ABS?	A single 24 volt/12 pin receptacle MS75021 (STANAG 4007) with blackout light circuitry shall be provided at the rear of truck chassis for the pintle/lunette towed trailers. The MS75021 receptacle shall also have a 24V energized K-pin to deliver power to the pintle/ lunette trailer ABS. NOTE: For newer military pintle/lunette trailers equipped with 12V ABS have converter boxes to step down the truck's 24 volts at the K-pin to 12 volts for trailer ABS operation, the contractor is responsible for ensuring that the HDT MS75021 receptacle has an input of constantly live 24 volt DC to the K-pin for powering the pintle/lunette trailer 12V ABS.
51	3.7.3 Fuel Tanks	Our latest fuel tank technology uses a side-draw fuel tank instead of a top draw fuel tank. As both types reach down to a point near the bottom of the tank, they offer the same performance. The side draw system has been found to be equivalent in terms of service and accessibility. Will the government accept a side-draw tank?	The use of side draw or top draw fuel tanks are both permissible for meeting the ATPD 2375 requirement for the HDT fuel tanks.

#	REFERENCE	INQUIRY	RESPONSE
52	No reference cited	Will the government provide credit for performance above threshold but below objective targets? Will this credit be limited to Key Performance Parameters (KPP) or as a general rule for all (T) vs. (O) requirements? Additionally, will the government provide tiered performance requirements (e.g. KPP, Tier 1, Tier 2, etc) prior to the release of the RFP?	The Government will not provide credit for hitting targets between threshold and objective, nor will "Tier" performance requirements be provided to contractors prior to release of the RFP/solicitation.
53	3.7.13.7 Secure Lighting.	MIL-STD-1179E paragraph 4.5.2.5 states "...shall be restricted to less than ten percent relative to that measured in the visible region (380 to 700 nanometers) for any given secure blackout light source. The change from one percent to ten percent occurred during the revision from MIL-STD-1179D to MIL-STD-1179E. Will the government change the requirement in ATPD paragraph 3.7.13.7 to reflect the most current reference?	The latest change to draft ATPD 2375, page 2, states that "While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all "the most current/latest revision specified requirement documents cited in sections 3 and 4 of this specification, whether or not the most current revisions are listed herein. The latest versions of the documents listed below and throughout this specification can be obtained from the following links." The intent of this overarching statement is to accommodate the most current types of revisions/changes to military and commercial standards/specifications and others that can and do occur during military acquisition programs, even though the "most current revision(s)" may not be listed in the purchase documents and specification. In this way, MIL-STD-1179F for example, as well as others are implied as the most current references up to the time of contract award through to initial vehicle delivery. The reference to MIL-STD 1179E was recently removed from ATPD 2375 and replaced with the most current reference MIL-STD 1179F.
54	Paragraph 3.4.1.4	In the middle of this requirement the statement... "shall not connect to the braking system of towed vehicle", the word "not" should be removed	Correction applied to Draft ATPD 2375
55	Paragraph 3.4.6.8	The lift and tie down provisions "will be tested at GVWR" is not necessary, since the vehicle will/should not be lifted or tied down in this condition.	The reference "GVWR" will not be removed nor changed. The HDT lifting and tie-down provisions shall be in accordance with (IAW) MIL-STD-209. The HDT lift and tie-down provisions shall be sized for full GVW and shall be proofed tested to verify that they have been designed IAW MIL-STD-209 and sized accordingly.
56	Paragraph 3.5.1.1.1	Two levels of maintenance are called out in paragraph 3.2.5, to which level(s) of maintenance does this requirement (3.5.1.1.1) refer?	The PMCS in Paragraph 3.5.1.1.1 only applies to Field Level maintenance.
57	Paragraph 3.6.5.2	This is a non-standard dynamic maneuver that is described in detail. The trailer is included in this maneuver; there are too many unknowns and variables with a trailer that introduce significant risk to meeting such a requirement. Why not test to the standard NATO lane change?	Government automotive testing include both Safety and NATO Lane Change evaluations. A specific safety evaluation assesses "emergency" lane changes, which includes the trailer. Similarly, NATO Lane Change evaluations are performed at GVW and GCVW (includes fully payloaded trailer), as well.
58	Paragraph 3.7.1	Contains the statement "HDT shall be all wheel drive..." Since the 8x8 requirement was removed, this phrase should also be removed. The offeror should be able to meet mobility performance requirements without this design specification.	For mobility the HDT shall be equipped with all driven axles, with the following exception: For managing weight distribution a single non-drive drop/tag/pusher axle is acceptable to use.
59	Paragraph 3.7.10.2.1	This numbering is repeated twice: 3.7.10.2.1 Suspension and 3.7.10.2.1 Differential(s)	The referenced paragraph numbering has been corrected.
60	Paragraph 3.7.10.2.1	This paragraph specifies a design requirement of the natural frequency of the sprung mass. This should be the option of the offeror to ensure appropriate vehicle ride and handling.	The reference to the natural frequency of the sprung mass was removed from Paragraph 3.7.10.2.1.
61	Paragraph 3.7.12	This paragraph only specifies steel wheels. This removes the option for aluminum wheels. Can aluminum wheels be used?	The requirement for the HDT to be produced and delivered with steel wheels remains unchanged.
62	Paragraph 3.7.13.6	Utility lights called out are specified as "sealed beam floodlamps". Why specified as sealed beam?	The use of LED type work lamps is an acceptable alternative to meet the Paragraph 3.7.13.6 requirement for Work Lamps. The LED work lamps shall provide no less than 1800 candle power

#	REFERENCE	INQUIRY	RESPONSE
63	Paragraph 3.9	<p>The A-cab / B-kit descriptions, as written, will limit design solutions to a very specific configuration that may be neither the most survivable nor the most cost-effective. Paragraphs 3.01, 3.9 and portions of 3.9.6, 3.9.8 and 3.9.9 specifically define the HDT force protection requirements. It is our opinion that the majority of all the remaining content in 3.9 is a discussion of HOW to design the armor to meet the requirements. This prescription is not necessary and can conflict with the performance and cost concerns of both the customer and the potential offeror. It should be sufficient to simply state the required level of protection and leave the details of achieving this to the offerors. By doing this, the customer would receive the most cost effective solution for the level of protection being sought. It would also not prematurely rule out solutions that would have benefits to the customer. For example in paragraph 3.9.2, the statement: "The HDT OEM standard cab will be used with the B-Kit and is not removed from the vehicle when the B-kit is installed onto the A-cab" can be construed to prevent the offeror from removing certain components (e.g. doors) from the vehicle to replace with up-armored components. Another example is in paragraph 3.9.3, Item 1. states: "An armored firewall between the engine and crew compartments (permanently installed at vehicle production)" This specifies the design solution and manufacturing processes for the offeror. Both of these examples preclude the offeror from proposing a more cost effective, more survivable, field installable solution.</p> <p>Also, the cost effectiveness of the design concept of a A-cab/ B-kit solution depends on the number of required armored HDTs (B-Kits).</p> <p>How many armored HDTs or B-Kits are envisioned to be required for this program?</p>	<p>The A-cab and B-kit portion of requirement, starting with Paragraph 3.9 remains a valid requirement for the HDT and is not expected to change, although related follow-on paragraphs to Paragraph 3.9 remain under review prior to release of the final approved ATPD 2375.</p> <p>In accordance with the Tactical Wheeled Vehicle Strategy, 30% of all tactical vehicles are to be armored. HTV is projected to procure Armored Heavy Dump Trucks at a 1:1 rate until the 30% Armored requirement is achieved at which point all further systems procured will be armor ready.</p>
64	Paragraph 3.9.4	<p>This paragraph specifies a threshold requirement of 25 year corrosion performance for the cab. This appears to conflict with paragraph 3.4.3 which states the vehicle must have a threshold requirement of a 20 year corrosion performance.</p>	<p>No changes required. Paragraph 3.4.3 is specific to the basic unarmored HDT vehicle. Paragraph 3.9.4 only applies to the HDT armored systems and associated components.</p>
65	Section 3.4.1.1	<p>The threshold requirements of CPD1.1 include those for EFP and RPG. EFP protection adds a great amount of weight and cost to the B-Kit and also to the base truck. The increase weight will require a twin-steer front axle arrangement and significantly impact decisions WRT body mounts, hinges, door assist systems, etc. Is it your intention to have the B-Kit provide threshold or objective level protection IAW the EFP and RPG requirements of CPD 1.1?</p>	<p>The Threshold and Objective levels of protection for EFP and RPG defeat have been removed and are longer required for the HDT. The contractor will be responsible for providing the specified levels of protection for the HDT IAW the final approved ATPD 2375 and its amended classified MRAP CPD v1.1 (Annex C) and ATPD 2352T (Appendix E).</p>
66	Section 3.4.1.1	<p>The 5X objective protection requirement appears to increase the underbody protection requirement and not all the requirements of CPD 1.1. What is the reference section that the "5X" is multiplying and is it applicable to the (T) or (O) level of that specific section?</p>	<p>The reference to the 5X Objective is no longer applicable to the HDT B-kit design and was removed from ATPD 2375.</p>
67	Section 3.4.6.1	<p>According to published information and as a general rule, road weight limits for all States are set to 80,000 lbs as the Max legal gross weight, without special permits. (See also Bridge limitations.)(See the web link below.) However, section 3.6.3, calls for the current max payload of 22.5 to 27 tons (O & T) as well as, a GVWR limit not to exceed 100,000lbs (section 1.1.1.) The impact of these requirements on the vehicles potential weight appears to be in direct conflict with section 3.4.6.1, that outlines a requirement for unrestricted travel on CONUS highways without waivers or permits (at a max weight of 80,000lbs.) Can the USG please explain or comment on the apparent conflict? Is there to a planned Military waiver to exceed this commercial standard of 80,000 lbs for all trucks? http://www.cargoagents.net/resources/stateroadweightsizelimitations.htm</p>	<p>The required GVWR is simply a target for the truck manufacturer to meet and make sure the design of the vehicle is such that it can handle that amount of weight, when necessary. The requirements of the allowed weight on CONUS public roads and bridges is really determined state to state and is up to the operator and loader of that HDT vehicle to make sure the vehicle meets the road and bridge weight limits. In CONUS and OCONUS during peacetime the M917A3 HDT while operating is not expected to be in an armored configuration, and thus its payloaded configuration is expected to be below 80,000 lbs.</p>
68	Section 3.7.10.2	<p>The suspension shall limit actual axle loads to 120% of their rated capacity when either one side or one axle row travels over a 10 x 10 inch (25.4 cm) square block, and a 10 inch deep x 36 inch wide (25.4 x 91.44 cm) ditch at 3 mph (4.827 km/h). The suspension design shall limit vertical natural frequency of the spring mass to within 1.5 to 2.0 hertz at gross vehicle weight. Will PM Heavy consider changing the restrictive language so that a potentially more affordable, COTS solid axle suspension might be selected to meet this requirement? Two alternative wordings are below. i. Alternative 1.Suspension. The suspension shall be capable of either one side or one axle row travels over a 10 x 10 inch (25.4 cm) square block, and a 10 inch deep x 36 inch wide (25.4 x 91.44 cm) ditch at 3 mph (4.827 km/h). ii. Alternative 2.Suspension. The suspension shall limit actual axle loads to 120% of their rated capacity when either one side or one axle row travels over a 6 x 6 inch (25.4 cm) square block, and a 6 inch deep x 36 inch wide (25.4 x 91.44 cm) ditch at 3 mph (4.827 km/h).</p>	<p>The Government has accepted the suggested language and revised ATPD 2375 as follows: 3.7.10.2.1 Suspension. The truck suspension shall limit actual axle loads to 120% of their rated capacity when either one side or one axle row travels over a 6 x 6 inch (15.24 cm) square block, and a 6 inch deep x 36 inch wide (15.24 x 91.44 cm) ditch at 3 mph (4.827 km/h). The truck suspension shall withstand static and dynamic loads without misalignment, malfunction, damage or permanent deformation; and shall provide a stabilized ride without hazardous handling characteristics. A load cushioned spring type or walking beam type suspension on the rear is acceptable to ensure stability.</p>

#	REFERENCE	INQUIRY	RESPONSE
69	Section 3.7.12.6	Limp Home Capability. The loss of the function of one wheel (T), (two wheels (O)) shall not impede the HDT from driving 30 miles (T) (60 miles (O) with speed reduction (T), without speed reduction (O) over the OMS/MP terrain. This capability shall be for emergency operation only in case of wheel bearing failure, damaged wheel, inability to change wheel/tire. Does this requirement pertain to the rear axles only?	Paragraph 3.7.12.6, Limp Home Capability was applicable to both front and rear axles. Paragraph 3.7.12.6 was previously removed from ATPD 2375 and is no longer an HDT requirement.
70	Section 3.7.15.1	is a potential cost savings if the rear window called out in section 3.7.15.1 this is a dump truck, might potentially be eliminated. Given that rear-ward vision will be limited by the dump body and the driver can see the dump bed, from the side mirror, what is the potential that need for a rear window is eliminated? Please comment.	The Army requirement for a rear window in the unarmored cab remains unchanged - the rear window rear will not be removed. The rear window allows for greater situation awareness of potential hazards with the dump body raised and is found on all military M917 dump trucks.
71	Section 3.9.7	Can you please explain why does the requirement in section 3.9.7, B-KIT Protection, call out the need for a battery backup power supply for a seat? Why is this necessary?	Experience has shown that certain types of blast events can instantaneously (milliseconds or less) sever power connections from the vehicle's main battery source to the electrically-operated blast seats, thus the need for a stand-alone redundant electrical power source for the blast seats (i.e., battery backup). The blast seats have a seat recovery system with a reset function capable of producing a second range of usable attenuation for the secondary 'slam down' event after the initial blast. While the occupants are weightless, the attenuation unit automatically reloads for the secondary event when the vehicle 'slams down.' ATPD 2375 is revised as follows: To address the associated blast and impact shock waves that pass through the crew and the secondary slam down event when the vehicle "slams down", the B-kit shall be furnished with MRAP level blast seats or equivalent with MRAP equivalent crew harness/restraint systems. During all blast scenarios, the blast mitigation seat solution must maintain peak operating performance regardless of power interruption or loss of power from the vehicle's primary electrical system. Degradation to performance characteristics during loss power from the vehicles primary electrical system is not acceptable. This requirement may be achieved by means of a standalone battery or capacitor backup system or other proven and effective solution for the blast mitigation seat solution.
72	Section 3.4.6.1	Is it a requirement to conduct highway and bridge transport in an armored (A-cab w/ B-kit) configuration?	No, the ability to conduct travel without waivers or special permits in CONUS and NATO operations pertains only to the Unarmored configuration (A-cab only)
CONTRACT RELATED INQUIRIES			
1		Current planning only Estimate is approx 900 units over 10 years is what I understand... is this correct?	The number of Heavy Dump Trucks that will be procured over the next 10 years will based upon future funding authorizations. The only current plan in place is for five years starting upon contract award.
2		We understood from FY14 Budget planning docs to USG for Program that Production builds for first three years might look like this...FY16: 42; FY17: 61; FY18: 88 Total: 191...But Currently, I understand for planning purposes FY17 as first build year... Is this correct?	Production will occur upon successful completion of all testing and production review processes which is anticipated to occur as early as FY 17.
3		Could you help us understand build volumes for planning estimated purposes only of FY17-FY21?	Actual requirements will be detailed in the solicitation. Build quantities will be based upon unit cost which is undetermined at this time.
4	* Response revised on 21 May 2014.	I understood planning only that say approx. 60 units/yr as after build the initial build stabilizes, say year 6 through yr 10 or so...correct?	This HDT solicitation is applicable for years 1-5 only. The requirements for years 6-10 of the HDT are not able to be further defined at this time.
5		What estimated percentage of the 900 total units (over 10 years) would need to be supported by armored B-KITS?	In accordance with the Tactical Wheeled Vehicle Strategy, 30% of all tactical vehicles are to be armored. HTV is projected to procure Armored Heavy Dump Trucks at a 1:1 rate until the 30% Armored requirement is achieved at which point all further systems procured will be armor ready.

Revised responses are identified with an asterisk (*).