

National Defence

National Defence Headquarters Ottawa, Ontario K1A 0K2

SOLICITATION AMENDMENT MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

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Attention: - Attention: Wo il Lee DLP 5-3-5

Défense nationale

Quartier général de la Défense nationale Ottawa (Ontario) K1A 0K2

Title - Sujet Line Truck – 14.26 m (46.8 ft) platform - Camion à plateforme élévatrice de 14,26m (46 pi)		Amendment No N° modi 004		
Solicitation No. Date of Amer N° de l'invitation Date de modi				
W8476-226500/A	January 13, 202	22 – 13 janvier 2022		
Address enquiries to: - Adresser toute demande de renseignements à : Wo il Lee Telephone No N° de telephone E-Mail Address - Courriel				
all prices quoted must include excise taxes and are to be deli to destination(s) as indicated.	all applicable Canadi ivered Delivery Duty I The amount of the G	Paid including all delivery charges oods and Services		
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Solicitation Closes - L'invitation prend fin

At - à : 2:00 PM - 14:00

On - le : January 24, 2022 – 24 janvier 2022

Time Zone - Fuseau Horaire : Eastern Standard Time (EST) Heure normale de l'Est (HNE)



Person authorized to sign on behalf La personne autorisée à signer au n	of Vendor/Firm (type or print): nom du fournisseur/de l'entrepreneur (taper
ou écrire en caractères d'imprimerie	e) :
Name - Nom	Title - Titre
Signature	Date

THIS SOLICITATION AMENDMENT IS RAISED TO:

- 1. Provide clarification and answers to questions from potential suppliers; and
- 2. Amend the solicitation (Annex A, Requirement Purchase Description) to clarify and reflect the questions received.

QUESTIONS AND ANSWERS:

Question 1	Item 3.14.1 b) This asks for an articulated over-center boom. Can you confirm that you want an over-center and not an articulated telescopic? Refer to www.versalift.com for more information. The VO series is over-center and the VST series is the articulated telescopic.
Answer 1	An articulated telescopic boom is required.

Question 2	Item 3.13 b) This asks for the body to fit a chassis with an 84" wheelbase! I assume this is meant to be CA (cab to axle)? Also, if the boom is to be an over-center design, the CA may have to be larger to at least 108".		
Answer 2	Over-center boom design is not required. A vehicle with a longer cab to axle dimension of 84 inch can be provided.		

Question 3	Item 3.15 c) asks for safety cones. Please advise how many and what size you require.
Answer 3	A minimum of five orange traffic cones, 457 mm high (18 inch) are required. The purchase description was amended to reflect this change. Please refer to Para 3.15c)

Question 4	 3.14.6 Front winch The winch must be placed at the front of the vehicle? Can the winch have less capacity? 20 000lbs being greater than the original specifications o the requested truck. 	
Answer 4	A winch at the front of the vehicle is required. The winch capacity has been reduced to a minimum capacity of 4535kg (10,000 lbs). In addition, the mandatory requirement has been changed for an electric winch instead of a hydraulic winch. The purchase description was amended to reflect this change. Please refer to Para 3.14.6.	

Question 5 3.14.6 Rear winch			
	- The winch must be placed at the rear of the vehicle?		
	- Can the winch have less capacity? 20 000lbs being greater than the original specifications of the requested truck.		
	- The arrangement of the basket basket (on a platform provided for this purpose) prevents the installation of such a large winch.		
Answer 5	A winch at the rear of the vehicle is required. The winch capacity has been reduced to a minimum capacity of 4535kg (10,000 lbs). In addition, the mandatory requirement has been changed for an electric winch instead of a hydraulic winch. The purchase description was amended to reflect this change. Please refer to Para 3.14.7.		

Question 6	Regarding the hydraulic distribution to the equipment, how do you want to proceed?		
Answer 6	The manufacturer is responsible for the design of the hydraulic distribution system.		

THIS SOLICITATION IS HEREBY AMENDED AS FOLLOWS:

 DELETE: "ANNEX A PURCHASE DESCRIPTION FOR Line Truck – 14.26m (46.8 ft) Platform dated 2021-11-26" in its entirety. INSERT: "ANNEX A PURCHASE DESCRIPTION FOR Line Truck – 14.26m (46.8 ft) Platform dated 2022-01-11" See attached.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

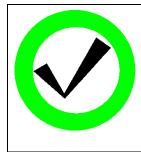


ANNEX A

PURCHASE DESCRIPTION

FOR

Line Truck – 14.26m (46.8 ft) Platform



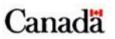
NOTICE

This documentation has been reviewed by the Technical Authority and does not contain controlled goods.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées.

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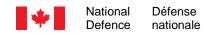
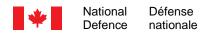


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1. SCOPE

1.1 <u>Scope</u>

a) This document describes a 4x4 articulated telescopic service platform truck.

1.2 Instructions

- a) Requirements, which are identified by the word "must", are mandatory. Deviations will not be permitted.
- b) Requirements identified with a "will" define actions to be performed by Canada and require no action/obligation on the Contractor's part.
- c) Where "*must*" or "will" are not used, the information supplied is for guidance only.
- d) In this document "provided" *must* mean "provided and installed".
- e) Where a technical certification is referred to in this specification, a copy of the certification or an acceptable Proof of Compliance *must* be supplied for the vehicle when requested by the Technical Authority.
- f) Metric measurements are used to define the requirements. Other measurements are for reference only and may not be exact conversions.
- g) Nominal dimensions reflect a method by which materials or products are generally identified, but which differ from the actual measured dimensions.

1.3 Definitions

- a) **"Equivalent**" Substitutes and alternatives that are equivalent in product, performance or a standard will be considered for acceptance by the Technical Authority where Proof of Compliance for equivalency for the respective requirement is provided for evaluation.
- b) **"Vehicle** The entire vehicle including all systems and sub-systems, in a complete manufactured state in accordance with the requirements in this Purchase Description.
- c) **"Road Legal**" Applies to a self-propelled vehicle designed for the transportation of persons, property, material or permanently or temporarily affixed apparatus on a highway.
- d) **"Gross Axle Weight Rating (GAWR)" -** The value specified by the vehicle manufacturer as the load-carrying capacity of a single axle system, as measured at the tire-ground interfaces.
- e) **"Gross Vehicle Weight Rating (GVWR) -** The value specified by the vehicle manufacturer as the loaded weight of a single vehicle.

2. APPLICABLE DOCUMENTS

2.1 <u>Applicable Documents</u>

a) The following documents form part of this Purchase Description. The dates of issue are those in effect on the date of release of the RFP. Canada will not be supplying these documents. Sources are as shown:

CAN/CGSB Standard 3.517 Automotive (On-road) Diesel Fuel

Motor Vehicle Safety Regulations (MVSR)

ANSI /SIA A92.2 Vehicle-Mounted Elevating and Rotating Aerial Devices

CAN/CSA C225 Vehicle Mounted Aerial Devices

3. **REQUIREMENTS**

3.1 Standard Design

- a) Latest Model The vehicle design *must* be the manufacturer's latest model.
- b) Industry Acceptability The vehicle design *must* have demonstrated industry acceptability by having been manufactured and sold commercially for at least two years, or be manufactured by a company that has at least five years' experience in design and manufacturing of a comparable type of equipment of equivalent or greater complexity.
- c) **Engineering Certification** Original manufacturers engineering certification *must* be provided upon request for major drive train components, and major equipment systems and assemblies, to demonstrate that assemblies are used within their design limitations.
- d) Regulations The vehicle must conform to all applicable laws, regulations and industrial standards governing manufacture, safety, noise levels and pollution in effect in Canada at the time of manufacture. International equivalent laws, regulations, and industrial standards will be accepted only if certified for equivalency by a professional engineer. The equipment must conform to all applicable laws, regulations and industrial standards in effect in Canada at the time of manufacture. The regulatory areas may include but are not necessarily limited to manufacturing, health and safety, noise levels, environment and emissions.
- e) **Published Ratings** The vehicle *must* have system and component capacities equivalent to published ratings (i.e. product or component brochures).
- f) Standard Components The vehicle *must* include all standard components, equipment and accessories for the model offered, although they may not be specifically described in this Purchase Description.
- g) **Spare Parts** The manufacturer *must* select components readily available for a minimum period of ten years from the date of manufacture.
- h) **Measurements** Values for labels and indicators provided with equipment *must* be presented in metric units, or *must* have both imperial and metric units with metric dominant.

3.2 Operating Conditions

3.2.1 <u>Weather</u>

a) The vehicle *must* operate under the extremes of weather conditions found in Canada in temperatures ranging from -40 to 37 degrees Celsius C (-40 to 99 degrees Fahrenheit).

3.2.2 <u>Terrain</u>

a) The vehicle *must* operate on highways, secondary roads, gravel roads, and limited off-road including construction sites, open fields and dirt tracks.

3.3 Safety Standards

3.3.1 Vehicle Safety Regulations

- a) The vehicle *must* comply with the Motor Vehicle Safety Regulations (MVSR).
- b) The completed vehicle *must* have Safety Compliance Certification Label with a National Safety Mark (NSM), as a seal of compliance or be accompanied by a Vehicle Import Form containing proof of Inspection by the Registrar of Imported Vehicles.
- c) The vehicle *must* be designed and built in accordance with the latest version of ANSI /SIA A92.2, and CSA C225.

3.3.2 <u>Human Factors Engineering</u>

a) The vehicle *must* be equipped, with warning and instruction plates, non-slip walking surfaces and heat shields, for operator safety.

3.4 Vehicle Performance, Ratings and Dimensions

3.4.1 Performance

a) The vehicle, at GVWR, *must* sustain a minimum top speed of 100 kilometers per hour (62 miles per hour) on a level paved road.

3.4.2 Weight Ratings

- a) The GVWR of the vehicle *must* not be less than the sum of the unloaded vehicle mass, the cargo carrying capacity, and the product obtained by multiplying the designated seating capacity by 68kg as defined in the *Motor Vehicle Safety Regulations (C.R.C., c. 1038).*
- b) Each GAWR *must* be equal to or less than the load rating of the weakest component in the axle system, i.e., axle housing, suspension, wheels, or tires.
- c) The total load on each axle of the vehicle *must* not exceed the GAWR for that axle.
- d) Axle loads *must* comply with all the provincial weight restrictions across Canada.

3.4.3 Dimensions

a) The vehicle *must* have road legal dimensions across Canada.

3.5 <u>Outriggers/Stabilizers</u>

- a) Stabilizers or outriggers *must* be provided in accordance with safety requirements in ANSI/SIA A92.2 or CSA 225.
- b) An indicator light within the cab *must* be provided to indicate when the stabilizers/outriggers are deployed.

3.6 Engine Requirements

a) The engine *must* operate on ultra-low sulphur diesel fuel to the CAN/CGSB Standard 3.517.

3.6.1 Engine Components

- a) Replaceable air filters *must* be provided.
- b) A combustion air cleaning system *must* be provided, with an air cleaner restriction indicator visible to the operator.
- c) A full flow replaceable oil filter *must* be installed.
- d) An engine shutdown or de-rate system *must* be provided, including a visual warning indicator visible from the operator position.

3.6.2 Cold Weather Starting Aids

- a) A low temperature engine starting aid *must* be provided.
- b) A thermostatically controlled water separator/fuel filter **must** be provided to preheat diesel fuel prior to starting (or engine block heater)
- c) A 110 Volt battery heater(s) *must* be provided.
- d) The battery *must* be housed in an insulated battery box, blanket or heated cab.

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e) All cold weather aids *must* be connected together with a single, cover-protected without lifting the cab.

3.7 Powertrain

- a) The vehicle *must* be 4x4 drive.
- b) The power train *must* include a "Park" or "Neutral" starting interlock.
- c) The power train *must* include limited slip or driver controlled locking differential(s) on the drive axle(s).

3.8 <u>Transmission</u>

- a) The vehicle *must* be equipped with an automatic transmission.
- b) The transmission *must* have an oil cooler.
- c) If an oil filter is provided it *must* be replaceable.
- d) The transmission shift control *must* clearly indicate the transmission selection status under all lighting conditions.
- e) A transmission oil dipstick or any other means to determine oil level *must* be provided.
- f) An audible back-up alarm *must* be installed to alert personnel that the vehicle transmission is in reverse.

3.8.1 Exhaust System

- a) The exhaust system *must* prevent entry of rain.
- b) If a Selective Catalytic Reduction (SCR) System is used, there *must* be manual deactivation and activation controls for the automatic regeneration of the Diesel Particulate Filter (DPF).

3.9 Braking Requirements

3.9.1 Brakes

- a) The vehicle *must* be equipped with a power assisted braking system, including a parking brake.
- b) The braking system *must* include an anti-lock (ABS) brake system.
- c) The braking system *must* include brake housing dust shields and visual brake stroke indicators on all wheels.

3.9.2 Brake Interlock

- a) A brake interlock *must* be provided to prevent the vehicle from being moved in accordance with ANSI 92.2 section 4.5.5.
- b) A brake interlock *must* be provided to prevent the vehicle from being moved when the outriggers or stabilizers are activated.

3.10 <u>Steering</u>

- a) The vehicle *must* be provided with a front wheel power steering system.
- b) The steering system *must* be provided with a telescopic and tilt steering column.

3.11 Wheels, Rims and Tires

- a) Tires and rims *must* be selected in accordance with MVSR Technical Standards Documents No. 120, Revision 1R.
- b) The wheels, tires and rims *must* include valve extensions for inner tires, if used, to allow for easy access.
- c) Tires *must* be tubeless steel belted radial tires with all-weather treads.
- d) Tires *must* be balanced to preclude shimmy at all speeds.

3.12 <u>Cab</u>

- a) The vehicle *must* be equipped with a two-person weatherproof cab.
- b) A minimum of two doors *must* be provided with power locks, be keyed alike.
- c) A fully adjustable driver's seat *must* be provided
- d) A ventilation/heater and defrosting system *must* be provided, with a multi-speed fan, applicable for the operating conditions as specified in Paragraph 3.2.1.
- e) An air conditioning system *must* be provided and equipped with all components and controls required for regulation of the cab interior temperature.
- f) A powered windshield washer system *must* be provided with multi-speed wipers.
- g) The cab floor or floor mats *must* be weatherproof.
- h) Two rotating interior sun visors *must* be installed.
- i) A back-up camera system *must* be installed in the cab.
- j) An AM/FM stereo radio with an auxiliary port *must* be provided.
- k) Two powered and heated exterior side mirrors, with convex section, *must* be provided with in-cab controls.

3.13 Service Body and Storage Cabinets

- a) The vehicle *must* be equipped with weatherproof fiberglass storage cabinet.
- b) The service body *must* be equivalent to the BrandFX model 84DLS.
- c) All compartments *must* be equipped with:
 - i. Stainless steel or cadmium plated hinges, pins, and hardware;
 - ii. Mechanism designed to hold the horizontal compartment doors open at a minimum of 110 degrees;
 - iii. Mechanism designed to hold the vertical compartment doors open at a minimum of 110 degrees;
 - iv. Shelves/bottom lined with non-slip safety matting to prevent shifting of tools while in motion;
 - v. Cabinet doors that are locking and keyed alike;
 - vi. Removable shelves with a minimum of 45 kilograms (100 pounds) load capacity; and
 - vii. Maximum load capacity for all drawers and shelves clearly marked on the inside of the compartment doors.
- d) The vehicle *must* have a removable vise holder complete with a 150 millimetre (6 inch) vise mounted on rear deck.
- e) The vehicle *must* be equipped with a storage compartment for a telescopic hot stick.

f) All cabinets *must* have led strip lightning such as Grote 61G01 or equivalent.

3.14 Equipment Requirements

3.14.1 Aerial Device

- a) The vehicle *must* be equipped with an articulated telescopic aerial device.
- b) The aerial device *must* be certified category "C" according to ANSI /SIA A92.2 standard.
- c) The aerial device *must* have a minimum height of 14.26 meters (46.8 feet), measured from the ground to the bottom of the platform;
- d) The aerial platform *must* be equipped with a lower boom lift eye with a minimum lifting capacity of 180 kilograms (400 lbs).
- e) The aerial platform *must* have a minimum 350 degree rotation about the vertical axis.
 - i. If continuous 360 degree rotation is supplied, a worm gear complete with side load protection to protect against rotation damage **must** be provided.
 - ii. If non-continuous is used, the rotation stop **must** be at forward centre of turret to allow free rotation at rear of vehicle.

3.14.2 Aerial Device Controls

- a) Upper and lower controls *must* be provided.
- b) Upper controls *must* be one hand, one-lever, pistol grip type controls.
- c) Upper and lower controls *must* include:
 - i. Two-speed throttle control; and
 - ii. A bucket dump feature, manual or hydraulic.

3.14.3 Emergency Aerial Device Operation

- a) An emergency 12 Volt system *must* be provided to:
 - i. Allow an operator in the bucket to lower himself to safety if the engine or hydraulic system become inoperative; and
 - ii. Retract the outriggers (if provided) if the engine or main hydraulic system becomes inoperative.

3.14.4 Platform

- a) One one-man, fibre-reinforced bucket with integral external access steps *must* be provided.
- b) The platform *must* be equipped with an insulating liner constructed from non-conductive material certified category "C" (46 kV and below).
- c) The platform *must* have a minimum rated payload capacity of 180 kilograms (400 pounds).
- d) The platform *must* have an automatic hydraulic bucket levelling system.
- e) The platform *must* have a mount to include a hydraulic bucket rotator to provide bucket rotation from the stowed position to the boom tip.
- f) The platform *must* rotate a minimum of 90 degrees about the boom tip.
- g) The platform *must* have anchorage for fall protection.
- h) The platform *must h*ave a bucket covering system.
- i) The platform *must* have removable tool trays suitable for the bucket and liner provided.

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3.14.5 Jib Winch

- a) A hydraulic jib winch *must* be provided.
- b) The minimum bare drum rated jib winch capacity *must* be at least 454 kilograms (1000 pounds).
- c) The jib winch *must* be equipped with a minimum 21 meter (70 feet) nylon rope.
- d) The jib winch cable *must* be supplied with a mechanical spliced eye at the end.

3.14.6 Front Winch

- a) An electric front winch *must* be provided.
- b) The front winch *must* have a minimum capacity of 4535 kilograms (10,000 pounds).
- c) The front winch cable *must* be supplied with a mechanical spliced eye at the end, of equal or greater strength than the cable.
- d) The front winch *must* operate using a wireless remote control unit, powered in both directions.
- e) The front winch *must* include a snatch block rated to withstand a double line pull capacity of the winch.

3.14.7 Rear Winch

- a) An electric rear winch *must* be provided.
- b) The rear winch *must* have a minimum capacity of 4535 kilograms (10,000 pounds).
- c) The rear winch cable *must* be supplied with a mechanical spliced eye at the end, of equal or greater strength than the cable.
- d) The rear winch *must* operate using a wireless remote control unit, powered in both directions.
- e) The rear winch *must* include a snatch block rated to withstand a double line pull capacity of the winch.

3.15 Miscellaneous Equipment

- a) Two safety harnesses and fall arrest shock absorbing type lanyards *must* be provided.
- b) Two sets of two tow hooks *must* be provided one at the front and one rear of the truck. Rear towing hooks can be combined with rear safety chain towing shackles.
- c) A minimum of five (5) safety cones of 457 mm high (18 inches) and a cone holder *must* be provided.
- d) First aid kit *must* be provided.
- e) Two stone deflectors *must* be incorporated under the rear wheel wells.
- f) One certified fire extinguisher with a minimum capacity of 2.3 kilograms (5 pound), mounted firmly in place under all operating conditions, with quick release type latching for accessibility and suitable for low temperature use *must* be provided.

3.16 <u>Towing</u>

- a) The vehicle *must* have a minimum towing capacity of 7250 kg (16 000 lbs).
- b) The vehicle *must* be equipped with a rear pintle hook complete with appropriate chassis frame reinforcement.
- c) The vehicle *must* be equipped with two safety chain towing shackles located on either side of the pintle hook.

d) A 7-pin electrical trailer socket *must* be provided in accordance with SAE J560.

3.17 Accessories

- a) Front licence plate holder *must* be provided.
- b) Rear licence plate holder with LED light *must* be provided.
- c) Mud flaps *must* be provided.

3.18 Hydraulic System

- a) A hydraulic oil cooler *must* be provided.
- b) Hydraulic filter change indicators *must* be provided.
- c) Hydraulic hoses should be grouped together and *must* be clearly identified.
- d) If test ports are available, they **must** be clearly marked.
- e) If there is a hydraulic pressure test gauge to monitor for hydraulic pressure, applicable fittings and hoses *must* be provided.

3.19 Electrical System

- a) The vehicle *must* be equipped with a 12 Volt electrical system.
- b) Wiring *must* be protected by insulating grommets, where passing through metal.
- c) A master disconnect switch, accessible from the ground, *must* be provided.
- d) A 2 500 Watt inverter *must* be provided.
- e) A grounding reel and a minimum of four (4) grounding studs *must* be provided.
- f) Three 120 Volt, 60 Hertz power outlets *must* be provided with protective covers and positioned at:
 - i. One flush mounted at the rear of the vehicle.
 - ii. One flush mounted behind the cab at the curb side of the vehicle.
 - iii. One on the vehicle storage cabinet or equivalent in proximity of the vise.

3.20 Lighting

- a) The vehicle *must* be equipped with LED lights, where possible.
- b) Lights *must* be recessed or otherwise protected from damage with all components accessible for servicing.
- c) One amber coloured beacon light mounted *must* be provided with 360 degree view.
- d) In-cab instrument panel lights *must* be dimmable.
- e) At least three adjustable work lights *must* be provided, mounted to illuminate the rear of the vehicle and each of the sides.
- f) The adjustable work lights *must* be LED Betts Work light Part number 325503 or equivalent.
- g) All controls for the lights *must* be in the cab

3.21 Controls

- a) Each control *must* be permanently marked to identify the function, in both English and French or international symbols as defined by SAE J1362.
- b) Vehicle controls *must* be grouped together in the cab

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- c) Controls *must* not restrict the operator's field of view.
- d) Control panel lights *must* be provided for adequate lighting for night-time operations.

3.22 Instruments

- a) A boom stowed position indicator mounted in the cab *must* be included.
- b) An hour-meter with numeric display, which accurately records accumulated engine running time up to at least 9 999 hours *must* be provided.

3.23 Paint

- a) All metal surfaces *must* be protected.
- b) The prime coating *must* be a high durability, corrosion resistant type, such as an epoxy.

3.24 Corrosion Protection

- a) The vehicle *must* be designed and manufactured to prevent galvanic corrosion.
- b) The materials used in the vehicle manufacturing *must* resist damage or deterioration as a result of cleaning with hot or cold water, steam, or detergents.
- c) Rust protection must be applied to the vehicle such as Krown rust control or equivalent.

3.25 Warning, Markings and Instruction Plates

- a) All identification, instructional, and warning labels *must* be bilingual or International symbols defined in SAE J1362.
- b) All identification, instructional, and warning labels *must* be within view of the operator.
- c) All indicators and controls *must* be permanently labelled.

3.26 Vehicle identification

- a) The vehicle identification information *must* be permanently affixed in a conspicuous and protected location.
- b) Identification information *must* include the cab and chassis manufacturer's name, model number, serial number, and model year.
- c) Identification information *must* include the body manufacturer's model and serial number.
- d) Identification information *must* include the equipment manufacturer's model and serial number.
- e) Identification information *must* include the GVWR and GAWR ratings.

4. INTEGRATED LOGISTIC SUPPORT

4.1 <u>**ILS Deliverables**</u> - The following table indicates the ILS elements that the Contractor **must** deliver, including the medium (paper or digital), the expected means of delivery and the reference paragraph.

Element	Format/Medi um	Delivered to TA	Supplied with each vehicle/ equipment	Reference Paragraph
Set of Manuals	Digital Paper	Х	X X	4.2
Warranty Letter	Digital	Х	X	4.3
Data Summary	Digital	Х		4.4.1
Photographs	Digital	Х		4.4.2
Line Setting Ticket	Digital	Х	Х	4.4.3
Dimensioned Drawing	Digital	Х	Х	4.4.4
Special Tool List	Digital	X		4.4.5Error! Reference source not found.
Recommended Spare parts List (RSPL)	Digital	Х		4.4.6

4.2 <u>Vehicle Manuals</u>

a) All manuals required for the description, operation, maintenance and repair of the complete equipment, including sub-systems, *must* be provided in English and French.

4.2.1 Operator's Manuals

- a) The operator's manuals *must* be in English and French.
- b) The operator's manuals *must* include instructions for the safe operation of the vehicle.
- c) The operator's manuals *must* include daily operator maintenance instructions/checks (including lubrication).
- d) The operator's manuals *must* include safety warnings.
- e) The operator's manuals *must* include hand signals (as necessary).

4.2.2 Parts Manual(s)

- a) The parts manual(s) *must* be in English (bilingual is desirable).
- b) The parts manual *must* have illustrations showing all components of the vehicle including equipment and accessories from other manufacturers that are supplied to meet the requirements of the contract, with numbers for the itemization of the parts.
- c) The parts manual *must* have a listing for all itemized parts showing the Original Equipment Manufacturers (OEM) part number, the part name and a brief description of the item.

- d) The parts manual *must* cross reference the OEM part number to the correct illustration and item number.
- e) The parts manual *must* have a representation of bilingual warning signs and identification labels delivered on the equipment.

4.2.3 <u>Maintenance Manuals</u>

- a) The maintenance manual *must* be in English and French.
- b) The maintenance manual *must* include a troubleshooting guide, showing the steps and tests required to determine the exact cause of a problem and an explanation of the steps required to correct a problem.
- c) The maintenance manual *must* include a listing of the necessary tolerances, torque levels, fluid volume, and special tools (including item part numbers).
- d) The maintenance manual *must* include information on the order of disassembly and assembly of the systems and components of the vehicle.
- e) The maintenance manual *must* include special tools list as per 4.4.5.

4.2.4 Manual Delivery to Technical Authority

- a) Sample manuals *must* be submitted to the Technical Authority (TA) prior to the delivery of the vehicle/trailer for each model and or sub-system for approval. Sample manuals will not be returned. The TA will provide approval or comments on the manuals within a reasonable period.
- b) One (1) complete set of approved manuals (Operator's, Maintenance, and Parts) in electronic format *must* be delivered to the Technical Authority.

4.2.5 Manual Delivery with Vehicle

- a) One (1) complete set of manuals (Operator's, Maintenance, and Parts) *must* accompany each vehicle, shipped to each location.
- b) The manuals *must* be in paper and electronic format.

4.2.6 <u>Electronic Format</u>

- a) Approved copies of the electronic format manuals *must* be delivered on CD/DVD-ROM.
- b) CD/DVD-ROM *must not* require installation, password and/or Internet connection to be accessed and be an unlocked PDF in a searchable format.

4.2.7 **Provisional Manuals**

- a) In the event that approved manuals are not available at the time of delivery of the equipment, manuals marked "Provisional" *must* be supplied with the equipment.
- b) The contractor *must* deliver replacement approved manuals to all destinations where Provisional manuals were delivered.

4.2.8 Manual Supplements

- a) The contractor *must* supply manual supplements (Operator's, Maintenance and Parts) to support dealer-installed equipment not covered in the Vehicle Manuals.
- b) Manual supplements *must* be delivered in accordance with 4.2.4 and 4.2.5.

4.2.9 Translation and Reproduction Rights

a) The Canadian Government *must* reserve the right to translate and reproduce, for Government use only, all or any part of the publications supplied, including the training packages delivered against the contract agreement.

4.2.10 Changes to Manuals

- a) During the period of the contract, changes to equipment, which affect the contents of manuals, *must* be reflected in the revision of the electronic and paper version of the manuals.
- b) Changes to the manuals *must* conform to the same format and presentation requirements as the original manuals.
- c) The revised electronic version of the manual *must* be sent to the TA by the Contractor.

4.3 Warranty Letter

- a) The warranty letter **must** include a list of all Canadian designated warranty service providers that will honour the warranty for the equipment and attachments (if applicable) procured under this contract, including the contact person and phone number at each warranty service provider.
- b) The warranty letter **must** include additional warranty coverage of sub-systems and a copy of the warranty letter from each sub-system's Original Equipment Manufacturer (OEM).
- c) The warranty letter *must* include warranty period as negotiated in the contract.
- d) The warranty letter *must* include Contractor contact information, name and phone number, for warranty support.

4.3.1 Warranty Letter Delivery

a) The Contractor *must* provide a bilingual warranty letter to the Technical Authority and with each vehicle. If the Technical Authority requires the letter to be in DND format, then they will provide the Contractor a template for the DND acceptable format of the warranty letter.

4.4 Other ILS Deliverables to Technical Authority

4.4.1 Data Summary

a) The Contractor *must* provide a bilingual Data Summary for each make/model/configuration of vehicle by completing Technical Authority's template with data and a vehicle picture.

4.4.2 Photographs

- a) The Contractor *must* provide photographs in colour, taken against a plain background, and in digital JPEG format with a minimum 10 megapixel resolution.
- b) One left front three-quarter view of a completed unit *must* be provided.
- c) One right rear three-quarter view of a completed unit *must* be provided.

4.4.3 Line Setting Ticket

a) The contractor must provide the chassis manufacturer's Line Setting Ticket, or equivalent, describing the components provided on the cab and chassis *must* be provided.

4.4.4 Dimensioned Drawing

a) One side and front view sketch showing the dimensions *must* be provided. Brochure sketches are acceptable.

4.4.5 Special Tools List

- a) If applicable, the Contractor *must* provide an itemized list of specific special tools required for the servicing and repair of the vehicle and include:
 - i. Item name;
 - ii. Contractor's part number;
 - iii. Manufacturer's part number (OEM);
 - iv. Quantity recommended per delivery location;
 - v. Unit price; and
 - vi. Unit of issue.

4.4.6 Recommended Spare Parts List (RSPL)

- a) The Contractor *must* provide a list detailing the spare parts deemed necessary to maintain the vehicle for a period of 12 months exclusive of any warranty period, and include:
 - i. Item name;
 - ii. Contractor's part number;
 - iii. Manufacturer's part number (OEM);
 - iv. Manufacturer's NATO Supply code (NCAGE) or name and address;
 - v. NSN (NATO Stock Number) (if known);
 - vi. Quantity per equipment;
 - vii. Quantity recommended;
 - viii. Unit price; and
 - ix. Unit of issue.

4.5 Safety Recalls and Servicing Data

a) Safety recalls, and manufacturer's technical service bulletins, or equivalent *must* be provided to the Technical Authority and the final delivery locations on a continuing basis, throughout the life expectancy of the vehicle or for no less than 10 years.

4.6 <u>Training</u>

4.6.1 <u>Training Deliverables</u>

a) The following table indicates the ILS Training elements that the Contractor *must* deliver, including the expected means of delivery and the reference paragraph.

Element	Format/ Medium	Delivered to TA by E-mail for approval	Remarks	Reference Paragraph
Course Curriculum	Digital	Х	-	4.6.3 & 4.6.54.6.2d)

Element	Format/ Medium	Delivered to TA by E-mail for approval	Remarks	Reference Paragraph
Maintenance Training	-	-	Delivery in person, at the location specified in the contract.	4.6.2
Operator Training	-	-	Delivery in person, at the location specified in the contract.	4.6.4

4.6.2 <u>Maintenance Training</u>

- a) The Contractor *must* provide a maintenance training course.
- b) The course *must* be given at the delivery destination and be available in both official languages.
- c) The course *must* have a minimum duration of one day to provide training of up to eight maintenance personnel and have the final dates arranged with the Technical Authority.
- d) The course *must* have a syllabus or course outline and schedule available for review seven days prior to the course commencement date.
- e) After completion of the course, the Contractor **must** have a "*PROOF OF MAINTENANCE TRAINING*" certificate signed by a Canada Representative for the destination. The Technical Authority will supply this document in an electronic format.

4.6.3 <u>Maintenance Training Curriculum</u>

- a) Operator's training detailed in Paragraph 4.6.4 below *must* be included in the curriculum.
- b) Operation and maintenance safety precautions *must* be included in the curriculum.
- c) Preventive maintenance including servicing schedules *must* be included in the curriculum.
- d) Trouble shooting, testing, and adjustments *must* be included in the curriculum.
- e) Special tools and test equipment *must* be included in the curriculum (if applicable).

4.6.4 Operator Training

- a) The Contractor *must* provide an operator training course.
- b) The course *must* be given at the delivery destination and be available in both official languages.
- c) The course *must* have minimum duration of one day to provide training for up to eight (8) operators and have the final dates arranged with the Technical Authority.
- d) The course *must* have a syllabus or course outline and schedule available for review seven (7) days prior to the course commencement date.
- e) After completion of the course the Contractor **must** have a "*PROOF OF OPERATOR TRAINING*" certificate signed by a Crown Representative for the destination. The Technical Authority will supply this document in an electronic format.

4.6.5 Operator Training Curriculum

- a) Safety precautions to be observed while operating and servicing the vehicle *must* be included in the curriculum.
- b) Vehicle operating characteristics *must* be included in the curriculum.

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- c) Vehicle operating procedures *must* be included in the curriculum.
- d) Pre-operating and pre-shutdown procedures *must* be included in the curriculum.
- e) Daily/weekly operator servicing procedures *must* be included in the curriculum.
- f) A minimum of two (2) hours practical operating experience, per operator, *must* be provided.

4.6.6 <u>Training Materials</u>

- a) Training materials *must* be provided to each attendee, in French for locations in Quebec.
- b) Training materials *must* include a list of topics to be covered;
- c) Training materials *must* include an approximate timetable showing when topics are scheduled to be covered and how much time is scheduled for each topic;
- d) Training materials *must* list any reference material; and
- e) Training materials *must* make available any reference material used.