



National Defence

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Défense nationale

Quartier général de la Défense nationale
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

RETURN BIDS TO: RETOURNER LES SOUMISSIONS À :

Bid Receiving - PWGSC - Réception des soumissions - TPSGC
11 Laurier St. - 11 rue Laurier
Place du Portage, Phase III
Core 0B2 - Noyau 0B2
Gatineau, Québec K1A 0S5

Attention: - Attention :
Christian Massie DLP 5-3-4-4

Solicitation Closes - L'invitation prend fin

At - à :
2:00 PM - 14:00

On - le :
January 13th, 2020 – 13 janvier 2020

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

Title - Sujet Electric Warehouse Tractor – Tracteur d'entrepôt à moteur électrique		Amendment No. - N° modif. 002
Solicitation No. N° de l'invitation W8476-206265/A	Date of Amendment Date de modification 2020/01/08	
Address enquiries to: - Adresser toute demande de renseignements à : Christian Massie Telephone No. - N° de telephone E-Mail Address - Courriel 819-939-5801 christian.massie@forces.gc.ca		
Destination See herein - Voir aux présentes		

Instructions: Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.

Instructions : Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.

Delivery required Livraison exigée See herein - Voir aux présentes	Delivery offered Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Person authorized to sign on behalf of Vendor/Firm (type or print): La personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie) :	
Name - Nom	Title - Titre
Signature	Date

THIS SOLICITATION AMENDMENT IS RAISED TO:

1. Provide clarification and answers to questions from potential suppliers;

QUESTIONS AND ANSWERS:

Question 1	Purchase Description Page 7 of 14 Performance Section 3.4 (d) Please advise if an outside turning radius of 2975 mm / 117.1 inches would be acceptable.
Answer 1	Yes – an outside turning radius of 117.1 inches is acceptable. Section 3.4(d), page 7 of the Purchase Description has been amended to reflect this change.

Question 2	Regarding subject solicitation, I appreciate it if you answer my below questions: - Refer to item 3.4 (f), a vehicle with 140 mm (5.5") ground clearance would be acceptable?
Answer 2	Yes - a vehicle with 140 mm (5.5") ground clearance is acceptable. Section 3.4(f), page 7 of the Purchase Description has been amended to reflect this change.

Question 3	Regarding subject solicitation, I appreciate it if you answer my below questions: - Refer to item 3.4 (d), a vehicle with 3,530 mm outside turning radius would be acceptable?
Answer 3	No - a vehicle with 3,530 mm outside turning radius is not acceptable for this application.

THIS SOLICITATION IS HEREBY AMENDED AS FOLLOWS:

1. DELETE the annex entitled "Purchase Description for Tractor, Wheeled, Electric Motor Driven (EMD)" dated 29 October,2019 and REPLACE with the annex entitled "Purchase Description for Tractor, Wheeled, Electric Motor Driven (EMD)" dated 06 January 2020.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.



NOTICE

This documentation has been review by the Technical Authority and does not contained controlled goods.

AVIS

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

The Canadian Forces Material Handling Equipment
**Purchase Description (PD) for Tractor, Wheeled, Electric
Motor Driven (EMD)**

File # W8476-206265

Date: 06 January 2020

OPI DSVPM 4 – DAVPS 4
Issued on Authority of the Chief of the Defence Staff
Publiée avec l'autorisation du chef d'état-major de la Défense

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1. **SCOPE**

1.1. **Scope** - This purchase description covers the requirements for electric motor powered, 4-wheel, industrial warehouse type tractors.

1.2. **Instructions** - The following instructions apply to this Purchase Description:

- (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 National Defence and require no action/obligation on the Contractor’s part;
- (c) Where “***must***”, or “will” are not used, the information provided is for guidance only;
- (d) Requirements identified by “***must***” or “***Equivalent***” are mandatory. The ***Technical Authority*** will consider substitutes/alternatives for acceptance as a ***Technical Authority*** approved ***Equivalent***;
- (e) Where a standard is specified and the Contractor has offered an ***Equivalent***, that ***Equivalent*** standard ***must*** be supplied by the Contractor, at no cost to National Defence, when requested by the ***Technical Authority***;
- (f) Where technical certification is required, a copy of the certification or an ***Equivalent must*** be provided by the Contractor upon request;
- (g) Metric measurements ***must*** be used to define the requirement. Other measurements are for reference only and may not be exact conversions; and
- (h) Dimensions stated as nominal ***must*** be treated as approximate dimensions. Nominal dimensions reflect a method by which materials or products are generally identified for sale commercially, but which differ from the actual dimensions.

1.3. **Definitions** - The following definitions apply to the interpretation of this Purchase Description:

1.3.1. “***Provided***” ***must*** means “provided and installed”.

1.3.2. “***Equivalent***” - A standard, means, or component type, which has been accepted by the ***Technical Authority*** as meeting the specified requirements for form, function and performance.

1.4 **Requirements Summary Table** - Vehicles covered by this Purchase Description are represented as Configurations. The following table indicates performance and features by Configuration:

CHARACTERISTIC	CLAUSE	UNITS	CONFIGURATION
			A
DRAWBAR PULL	3.4(b)	kN	13.3
		lbs	3,000
TOW CAPACITY	3.4(c)	kg	13,600
		lbs	30,000
AUTOMATIC COUPLER	3.5(a)		✓
CAB	3.6(a)		✓
COMPANION SEAT	3.6(d)		✓
TIRES	3.12		Pneum.
BATTERY CAPACITY	3.15(a)	kWh	40
BATTERY VOLTAGE	3.15(a)		80
CHARGER 550 V, THREE PHASE	3.15(d)		✓

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2. **APPLICABLE DOCUMENTS** - The following documents are referenced in this Purchase Description. Canada will not be supplying any reference documents. Available information on the organization is supplied.
- 2.1. **CSA Standards**
CAN/CSA B335 Safety Standards for Lift Trucks
Canadian Standards Association (CSA)
5060 Spectrum Way, Mississauga, Ontario, L4W 5N6
<http://www.csa.ca/Default.asp?language=English>
- 2.2. **ANSI B56.9 Standards**
ANSI B56.9 Safety Standards for Operator Controlled Industrial Tow Tractors
American National Standards Institute
1819 L Street, NW, 6th Floor
Washington, DC, 20036
<http://www.ansi.org/>
- 2.3. **UL Standards**
UL 583 Standards for Safety, Electric Battery Powered Industrial Trucks
Underwriters' Laboratories of Canada
7 Crouse Road,
Scarborough, Ontario, M1R 3A9
<http://www.ulc.ca/>

3. **REQUIREMENTS**

3.1. **Standard Design**

- 3.1.1. The vehicle **must** be the latest model from a manufacturer who has demonstrated acceptability by manufacturing and selling this type and size class of vehicle for at least one (1) year;
- 3.1.2. The vehicle **must** have engineering certification available, upon demand, for this application from the original equipment manufacturers (OEM) of major equipment systems and assemblies;
- 3.1.3. The vehicle **must** conform to all applicable laws, regulations and industrial standards governing manufacture, safety, noise levels and emissions in effect in Canada at the time of manufacture;
- 3.1.4. The vehicle **must** have systems and components not operating at greater than their ratings published by the systems or components manufacturers; and
- 3.1.5. The vehicle **must** include all components, equipment and accessories normally supplied for the model offered, although they may not be specifically described in this Purchase Description.

3.2. **Operating Conditions**

- 3.2.1. **Weather** – The vehicle **must** start and operate under weather conditions found in Canada in temperatures ranging from -40°C to 40°C (-40°F to 104°F).
- 3.2.2. **Terrain** - The vehicle **must** operate on use-roughened concrete floors, deteriorated outdoor paved surfaces while being used for towing trailers and equipment.

3.3. **Safety Standards**

- 3.3.1. **Noise Level** – The vehicle noise levels **must** meet the requirements of legislation relative to paragraph 7.4 of Canada Occupational Safety and Health Regulations both at the operator's station and exterior to the vehicle for exposures of eight (8) hours during a twenty four (24) hour period when measured in accordance with CAN/CSA Z107.56-13.
- 3.3.2. **Vehicle Safety** – All vehicle design, construction and safety aspects **must** be in accordance with the latest edition of ANSI/ITDSF B56.9.
- 3.3.3. **"E" Safety Rating**
 - (a) The vehicle **must** be manufactured to meet the requirements of an "E" safety rating in accordance with Standard UL 583, or an ***Equivalent***;
 - (b) The UL or equivalent certification must be provided to the Technical Authority, upon request.

3.4. **Performance**

- (a) The vehicle **must** have a forward speed of no less than 24 km/h (15 mph) with no towed load and 12 km/h (7.5 mph) in reverse;

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- (b) The vehicle **must** have a rated drawbar pull at a 300 mm (12 inches) coupler height on clean dry concrete of not less than that given as “**DRAWBAR PULL**” in the Configuration Capability Table;
 - (c) The vehicle **must** have a tow capacity of not less than that given as “**TOW CAPACITY**” in the Configuration Capability Table;
 - (d) The vehicle **must** have an outside turning radius for right angle turns at the intersection of aisles 3,000 mm (118 inches) wide;
 - (e) The vehicle **must** pass easily through door openings of 1,800 mm (6 ft) in width; and
 - (f) The vehicle **must** have a minimum ground clearance of 140 mm (5.5 inches);

3.5. **Accessories**

- (a) **Automatic Coupler** – The vehicle **must** be provided with an automatic coupler.
 - i. The automatic coupler **must** have operator disengagement without leaving the operating position. An example make is Holland Model XA-T-150-AF, NSN: 2540-20-A0F-5056 or ***Equivalent***;
 - ii. The automatic coupler **must** have the height adjustable from 300 to 430 mm (12 to 17 inch) above floor level.
- (b) **Push Plates** – The vehicle **must** be provided with front and rear bumper or push plates;
- (c) **Wheel Guards** – The vehicle **must** be provided with wheel guards such as fender on wheels unprotected by vehicle body; and
- (d) **Electrostatic Straps** – The vehicle **must** be provided with electrostatic straps attached to the chassis to ground static electricity.

3.6. **Operator Station**

- (a) **Cab** – The vehicle **must** include, when specified in the Configuration Capability Table, a complete cab assembly with heater, defroster, wiper, doors, and clear windows;
- (b) **Seat** - The vehicle **must** include a padded water-resistant operator's seat and backrest equipped with seat belts;
- (c) **Mirror(s)** - The vehicle **must** include rear view mirror(s) positioned providing a full view of both sides for safe reverse operations; and
- (d) **Companion Seat** – The vehicle **must** be equipped with a padded water-resistant companion seat with backrest and seat belts beside the operator's seat.

- 3.7. **Chassis** - The vehicle chassis **must** be the manufacturer's standard for a vehicle of this type and size.

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- 3.8. **Motors** - Equipment electric motors **must** be manufacturer's standard and in accordance with applicable standards for a vehicle of this type and size.
- 3.9. **Drive Unit** - The vehicle **must** be equipped with a manufacturer's drive unit for a vehicle of this type and size.
- 3.10. **Brake System** - The vehicle **must** be equipped with manufacturer's standard braking system, which **must** conform to CSA B335.
- 3.11. **Steering** - The vehicle **must** be equipped with manufacturer's standard steering system for a vehicle of this type and size, which **must** conform to with CSA B335.
- 3.12. **Wheels, Rims and Tires** - The wheels, tires and rims **must** be the manufacturer's standard pneumatic or solid tires as indicated in the Configuration Capability Table.
- 3.13. **Controls** - The vehicle **must** have the manufacturer's standard controls for a vehicle of this type and size including a throttle control for convenient right foot operation.
- 3.14. **Instruments**
- (a) The vehicle **must** be provided with manufacturer's standard instruments; and
 - (b) The instruments **must** be provided with a numeric read-out hour-meter, which displays accumulated running time up to 9,999 hours.
- 3.15. **Electrical System**
- (a) The vehicle **must** be provided with a minimum battery capacity given as "**BATTERY CAPACITY**" and "**BATTERY VOLTAGE**" in the Configuration Capability Table;
 - (b) The vehicle **must** be provided with battery connectors colour coded to indicate the polarity;
 - (c) The vehicle **must** be provided with a CSA approved, fully automatic constant voltage heavy-duty type battery charger;
 - (d) The vehicle **must** be provided with a battery charger capable of charging the batteries from a 550 volt, three phase, 60 Hz power source; and
 - (e) When requested by DND, the vehicle must be provided with battery charger capable of charging the forklift batteries from a 208 volt/three phase or 208/Single phase, 60 Hz power source, in lieu of the charger specified in 3.15(d).
- 3.16. **Lighting**
- (a) The vehicle **must** be provided with the manufacturer's standard lighting system; and
 - (b) The vehicle **must** include back-up alarm and signal lights.
- 3.17. **Lubricants and Hydraulic Fluids** - The vehicle **must** operate using synthetic non-proprietary lubricants and hydraulic fluids.

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- 3.18. **Paint** - The vehicle ***must*** be painted using the manufacturer's commercial painting system and in the manufacturer's commercial colours.
- 3.19. **Identification** - The manufacturer's name, model and vehicle serial number ***must*** be permanently marked in a conspicuous and protected location.

4. INTEGRATED LOGISTICS SUPPORT

4.1 Documentation and Support Items

4.1.1 Items Provided to Technical Authority

(a) Manuals for Approval

- i The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a set of manuals for the Configuration/model, in digital format, including the operator, parts and maintenance (shop repair) manuals;
- ii The set of manuals **must** include manuals for all the specified accessories and features for the Configuration/model. Accessory manuals may be included as supplements to the vehicle manuals;
- iii The operator manuals **must** be supplied in a bilingual format as a package;
- iv Digital copies **must** be functional without the requirement for a password, an auto-run installation procedure or an Internet connection;
- v Digital copies **must** be supplied on a CD or DVD;
- vi Digital copies **must** be supplied in a searchable PDF format;
- vii The CD or DVD **must** be permanently and legibly marked with a list of contents;
- viii Manual approval or comments will be supplied within 15 working days of receipt;
- ix The Contractor **must** supply responses to the **Technical Authority's** (TA) comments. If comments are acceptable, the TA will approve manuals;
- x Manuals will not be returned; and
- xi Paper copies of manuals delivered under this contract **must** have the same content as the electronic format approved by the **Technical Authority**.

(b) Photographs and Line Drawings

- i The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, two (2) digital colour photographs, one left-front three-quarter view, and one right-rear three-quarter view of the Configuration/Model;

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- ii One (1) digital colour photograph of each attachment taken at the three-quarter view that best illustrates the attachment **must** be supplied;
 - iii One (1) front-view and one side-view line drawing showing dimensions of the vehicle **must** be supplied. Brochure line drawings are acceptable;
 - iv Photographs **must** have a plain background;
 - v Photographs **must** be in a JPEG (Joint Photographic Experts Group) format; and
 - vi Photographs **must** have a resolution of at least eight (8) Mega pixels.

(c) **Data Summary**

- i The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a bilingual data summary for the Configuration/model, with vehicle data (including accessories and features) and a vehicle picture;
- ii The **Technical Authority** will supply a bilingual template of a data summary to the Contractor;
- iii The Contractor **must** supply a digital copy (MS Word) of the completed data summary for approval;
- iv Data summary approval or comments will be supplied within 15 working days of receipt; and
- v The Contractor **must** supply responses to the **Technical Authority's** comments. If comments are acceptable, the TA will approve the data summary.

(d) **Safety Data Sheets**

- i The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a list, in digital format, of all hazardous materials used on the vehicle;
- ii If there are no hazardous materials used, this **must** be stated on the list; and
- iii The Contractor **must** supply safety data sheets in both official languages, in digital PDF format for all hazardous materials in the list.

(e) **Warranty Letter**

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- i The **Technical Authority** will supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a bilingual warranty letter template to the Contractor;
 - ii The Contractor **must** supply a complete description of the warranty with the requested warranty terms and any system or sub system warranty that exceeds the minimum requested;
 - iii The warranty letter **must** include the name and contact information of the closest designated warranty provider and other designated warranty providers across Canada; and
 - iv The Contractor **must** supply the original warranty letter in digital format, for each vehicle delivered, to the **Technical Authority**.
- (f) **Initial Parts Kit List**
- i The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a list of parts needed to perform preventive maintenance on one (1) vehicle for a period of one (1) year in accordance with the maintenance manual for each Configuration/Model;
 - ii A complete change of all filters and filter elements **must** be included in the list; and
 - iii The list **must** include the following elements: part description; Original Equipment Manufacturer (OEM) Part number; suggested quantity; and unit cost.
- (g) **Training Plan(s)** - The Contractor **must** supply, no later than thirty (30) days prior to the forklift(s) being shipped to their delivery destination, a training plan for approval for each of the training courses listed in this Purchase Description to the **Technical Authority**. Approval or comments will be supplied within 15 working days of receipt.

4.1.2 **Items with Each Vehicle**

- (a) **Operator's Manuals** - The Contractor **must** supply an approved bilingual operator's manual in both paper and digital format with each vehicle delivered;
- (b) **Warranty Letter** - The Contractor **must** supply a copy of the warranty letter with each vehicle delivered;
- (c) **Safety Data Sheets**
 - i The Contractor **must** supply a set of safety data sheets; and
 - ii The safety data sheets **must** be the same as those supplied to the **Technical Authority** as described in the Purchase Description.

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- (d) **Initial Parts Kit**
 - i One (1) initial parts kit **must** be supplied; and
 - ii The initial parts kit **must** include a set of parts in the approved initial parts kit list as described in this Purchase Description.
 - (e) **Maintenance Manual**
 - i The Contractor **must** supply the approved maintenance (shop repair) manuals in paper and digital format in English required for the maintenance and repair of the vehicle, features and accessories; and
 - ii The Contractor may supply this deliverable as a bilingual package.
 - (f) **Parts Manual**
 - i The Contractor **must** supply the approved parts manuals for the vehicle, features and accessories;
 - ii The parts manual **must** be supplied in English in paper and digital format;
 - iii It is desirable to supply the parts manual in French in addition to the English version; and
 - iv Digital parts manuals **must** be supplied in a searchable PDF format CD/DVD-ROM.

4.2 **Training**

- (a) **Training - Familiarization**
 - i The Contractor **must** supply a familiarization course, at the delivery destination, optimized for operators and technicians who are qualified on the vehicle type but require training on newer or unique features and sub-systems of the delivered model;
 - ii The instructor **must** be an OEM Factory Certified Training Provider;
 - iii The course **must** be delivered in the official language (English or French) specified in the contract for that delivery destination;
 - iv **Curriculum**
 1. The familiarization course **must** include operation and maintenance segments;
 2. The operation segment **must** include safety precautions to be observed while operating and servicing the vehicle, vehicle

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- operating characteristics, pre-operating and shutdown procedures and daily/weekly operator servicing procedures;
3. The operation segment **must** include sub-systems including automatic grease system and pre-heaters; and
 4. The maintenance segment **must** include diagnostics, trouble shooting and operation of any special tools and test equipment (if any).
- v The familiarization course **must** have a minimum duration of eight (8) hours, divided into four (4) hours for operators and four (4) hours for technicians;
 - vi The familiarization course **must** accommodate up to eight (8) personnel; four (4) operators and four (4) technicians;
 - vii The date for the familiarization course **must** be arranged with the **Technical Authority**;
 - viii After completion of the familiarization course, the Contractor **must** have the “**PROOF OF FAMILIARIZATION**” certificate signed by the senior course attendee; and
 - ix The **Technical Authority** will supply the “**PROOF OF FAMILIARIZATION**” document template in a digital format.

5. DELIVERY CONDITION

- 5.1. The vehicle **must** be delivered to destination in a fully operational condition (serviced and adjusted). Both the interior and exterior **must** be cleaned;
- 5.2. If the vehicle requires assembly at destination, the Contractor **must** be responsible for all manpower and equipment to perform assembly;
- 5.3. The space for assembly at destination will be provided, if required; and
- 5.4. All items such as wheel wrenches, jacks, and all other tools, equipment and accessories that are shipped loose with the equipment **must** be listed on the shipping certificate or to an attached packing note.