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TPSGC
11 Laurier St. / 11, rue Laurier
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Core 0B2 / Noyau 0B2
Gatineau, Québec K1A 0S5
Bid Fax: (819) 997-9776

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

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Industrial Vehicles & Machinery Products Division
11 Laurier St./11, rue Laurier
7B1, Place du Portage, Phase III
Gatineau
Québec
K1A 0S5

Title - Sujet Tracked excavator	
Solicitation No. - N° de l'invitation W8476-185875/A	Amendment No. - N° modif. 001
Client Reference No. - N° de référence du client 6000428757	Date 2018-06-19
GETS Reference No. - N° de référence de SEAG PW-\$\$HS-651-74991	
File No. - N° de dossier hs651.W8476-185875	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-07-31	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
F.O.B. - F.A.B. Specified Herein - Précisé dans les présentes	
Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input checked="" type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Vallejo, Veronica	Buyer Id - Id de l'acheteur hs651
Telephone No. - N° de téléphone (873) 469-3357 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

Contract No. - N° du contract
W8476-185875/A

Amd. No. - N° de la modif.
001

Buyer ID - Id de l'acheteur
hs651

Client Ref. No. - N° de réf. du client
W8476-185875

File No. - N° du dossier
hs651W8476-185875

CCC No./N° CCC - FMS No./N° VME

AMENDMENT 001

This amendment is raised to release the Purchase Description and Technical Information Questionnaire as follows:

1. Purchase Description

Insert: See attached document.

2. Technical Information Questionnaire

Insert: See attached document.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.



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.

PURCHASE DESCRIPTION
TRACKED EXCAVATOR

1. SCOPE

1.1 **Scope** - This specification covers the requirements for a tracked excavator.

1.2 **Instructions**

- (a) Requirements identified by the word “**must**”, **must** be treated as 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 provided is for guidance only;
- (d) Where a standard is specified and the Contractor has offered an **Equivalent**, that **Equivalent** standard **must** be supplied by the Contractor;
- (e) Where a technical certification is referred to in this Purchase Description, a copy of the certification or **Equivalent must** be supplied, when requested by the **Technical Authority**;
- (f) While the International System of Units (SI) **must** be used as the primary system of measurement to define requirements of this Purchase Description, both the SI system and the standard system for this product may be indicated. Conversion from one system of measurement to the other may not be exact; and
- (g) 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 that differ from the actual dimensions.

1.3 **Definitions**

- (a) “**Provided**” means “provided and installed”;
- (b) “**Technical Authority**” means the official responsible for the technical content of this requirement;
- (c) “**Equivalent**” means a standard, means, or component type, that the **Technical Authority** has approved for this requirement as meeting the specified requirements for fit, form, function and performance;
- (d) “**Commercially Equipped**” means that the vehicle is provided in its standard commercial configuration with no additional government-specified requirements; and
- (e) “**Bilingual**” means both official languages; English and French.

OPI: DSVPM 4 – BPR: DAPVS 4

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



1.4 **Equipment and Accessory Table** - The following table indicates, with "✓", for each configuration the equipment or accessories that **must** be provided, with a clause reference.

EQUIPMENT/ACCESSORY	CLAUSE	CONFIGURATION	
		A1	A2
Hydraulic Quick Coupler	3.5 (a)	✓	✓
Hydraulic Thumb	3.5 (b)	✓	✓
760mm Excavating Bucket	3.5 (c)	✓	✓
1520mm Side-Tilt Ditching Bucket	3.5 (d)	✓	✓
Hydraulic Hammer	3.5 (e)	✓	
Rotary Brush Cutter	3.5 (f)		✓
Tool Compartment	3.5 (g)	✓	✓
Protection Against Vandalism	3.5 (h)	✓	✓
License Plate Holder	3.5 (i)	✓	✓

2. APPLICABLE DOCUMENTS

2.1 **Government Furnished Documents** - NOT APPLICABLE

2.2 **Other Publications** - The following documents are referenced in this specification. Canada will not be supplying reference documents. Available information on the organization is provided.

- (a) Hazardous Products Act
Government of Canada / Department of Justice
<http://laws-lois.justice.gc.ca/eng/acts/H-3/>
- (b) International Organization for Standardization (ISO)
ISO Central Secretariat
BIBC II
Chemin de Blandonnet 8
CP 401
1214 Vernier, Geneva
Switzerland
<http://www.iso.org/iso/home.htm>
- (c) SAE Standards
SAE World Headquarters
400 Commonwealth Dr.,
Warrendale, PA, 15096-0001
<http://www.sae.org>
- (d) Canadian Standards Association
178 Rexdale Boulevard
Toronto, Ontario, Canada N9W 1R3
<http://www.csa.ca>

3. REQUIREMENTS

3.1 **Standard Design**

- (a) The vehicle **must** be the latest model from a manufacturer who has demonstrated acceptability by selling, in North America, this type and size class of vehicle for at least three (3) years;

- (b) The vehicle **must** include all components, equipment and accessories normally supplied for this application, although they may not be specifically described in this Purchase Description;
- (c) The vehicle **must** have engineering certification available for this application from the original manufacturers of major equipment, systems and assemblies;
- (d) The vehicle **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; and
- (e) The vehicle and accessories **must** operate in accordance with all original equipment manufacturers' (OEM) rated capacities and performance specifications.

3.2 **Operating Conditions**

3.2.1 **Weather** - The vehicle **must** start and operate under the extremes of weather conditions found in Canada in temperatures ranging from -35 to 40°C.

3.2.2 **Terrain**

- (a) The vehicle/equipment **must** operate on secondary roads, gravel roads, and off-road (e.g. construction sites, open fields and dirt tracks); and
- (b) Terrain conditions **must** include year round operations on snow, mud, sand and ice.

3.3 **Safety Standards**

3.3.1 **Hazardous Materials** – The contractor **must** comply with the Hazardous Products Act of Canada with regards to the use of hazardous materials, ozone depleting substances, polychlorinated biphenyls, asbestos and heavy metals used in the manufacture and assembly of the product supplied.

3.4 **Performance** – The vehicle **must** be a tracked excavator.

3.4.1 **Excavator Performance**

- (a) **Lift Capacity**
 - i The excavator **must** have a lift capacity at ground level through 360 degrees, in accordance with ISO 10567 *Earth-moving Machinery – Hydraulic Excavators – Lift Capacity* of at least 5,900 kg at a 4.5 metre radius;
 - ii The excavator **must** have a lift capacity at ground level through 360 degrees, in accordance with ISO 10567 *Earth-moving Machinery – Hydraulic Excavators – Lift Capacity* of at least 3,800 kg at a 6 metre radius; and
 - iii The excavator **must** have a lift capacity at ground level through 360 degrees, in accordance with ISO 10567 *Earth-moving Machinery – Hydraulic Excavators – Lift Capacity* of at least 2,700 kg at a 7.5 metre radius.
- (b) The excavator **must** have a reach at ground level, in accordance with ISO 7135 *Earth-Moving Machinery – Hydraulic Excavators – Terminology and Commercial Specifications*, of at least 9,100 mm;
- (c) The excavator **must** have a maximum digging depth, in accordance with ISO 7135 *Earth-Moving Machinery – Hydraulic Excavators – Terminology and Commercial Specifications*, of at least 5,900 mm;
- (d) The excavator **must** have an arm cylinder force, in accordance with ISO 6015 *Earth-Moving Machinery – Hydraulic Excavators and Backhoe Loaders – Methods of Determining Tool Forces*, using the standard excavating bucket, of at least 100 kN;

- (e) The excavator **must** have a bucket cylinder force, in accordance with *ISO 6015 Earth-Moving Machinery – Hydraulic Excavators and Backhoe Loaders – Methods of Determining Tool Forces*, using the standard excavating bucket, of at least 125 kN; and

3.5 **Equipment and Accessories** The following equipment and accessories must be provided when applicable to the Configuration as detailed in Table 1.4.

- (a) **Hydraulic Quick Coupler** - A hydraulic quick coupler system for attachments **must** be provided;
- (b) **Hydraulic Thumb** - A hydraulic thumb matching the supplied excavating bucket and quick coupler system **must** be provided;
- (c) **760mm Excavating Bucket**
 - i An excavating bucket matching the quick coupler system **must** be supplied;
 - ii The excavating bucket **must** be provided with bolt-on replaceable teeth; and
 - iii The bucket **must** have a nominal width of 760 mm and a heaped capacity of at least 0.5 m³;
- (d) **1520mm Side-Tilt Ditching Bucket**
 - i A hydraulic side-tilt ditching bucket matching the quick coupler system **must** be supplied;
 - ii The ditching bucket **must** have a have a bolt-on replaceable cutting edge;
 - iii The ditching bucket **must** have a nominal width of 1520 mm and a heaped capacity of at least 0.75 m³; and
 - iv The ditching bucket **must** tilt at least 30 degrees to each side;
- (e) **Hydraulic Hammer**
 - i A hydraulic hammer attachment matching the quick coupler system **must** be supplied;
 - ii The hydraulic hammer **must** be provided with amoil bit;
 - iii The hydraulic hammer **must** have an impacting energy of at least 4,000 J;
 - iv The hydraulic hammer **must** have a weight of no less than 7.5 percent and no more than 9 percent of the typical operating weight of the excavator; and
 - v The hydraulic hammer tool diameter **must** be at least 115 mm.
- (f) **Rotary Brush Cutter**
 - i A hydraulic rotary brush cutter **must** be supplied;
 - ii The rotary brush cutter **must** have a cutting swath of at least 1200 mm;
 - iii The rotary brush cutter **must** cut brush saplings of at least 150 mm diameter; and
 - iv The rotary brush cutter **must** be provided with mulching teeth;
- (g) **Tool Compartment**
 - i A tool compartment to hold all tools and loose equipment required for daily maintenance **must** be provided;
 - ii The tool compartment **must** be weatherproof; and
 - iii The tool compartment **must** be lockable;
- (h) **Protection Against Vandalism** - Protection against vandalism including provisions for locking engine covers and all filler caps **must** be provided; and

- (i) **License Plate Holder** – The vehicle **must** be provided with front and rear mounted license plate holders.

3.6 **Operator Station**

(a) **ROPS Cab**

- i A ROPS cab incorporating a certified Roll Over Protective Structure (ROPS) **must** be provided;
- ii The ROPS cab **must** be weatherproof, pressurized and insulated;
- iii The ROPS cab **must** have a heating system with ventilation and defrosting functions to keep windows free from frost and moisture;
- iv The ROPS cab **must** have the manufacturer's standard safety glass in the windows;
- v The ROPS cab **must** be provided with electrical power actuated windshield wipers for the front windows with a windshield washer;
- vi The windshield wipers **must** have no less than 2 speeds; and
- vii The ROPS cab **must** have two lockable doors, or one door and at least one visibly labelled window as an emergency escape route.

- (b) **Air Conditioning** – The vehicle **must** be provided with an air conditioning system;

(c) **Suspension Seat**

- i The vehicle **must** be provided with a driver's air suspension seat and backrest in conformance with SAE J899 or in conformance with ISO 11112;
- ii The driver's seat **must** have seat material being a breathable fabric or a mesh surface;
- iii The driver's seat **must** be provided with seat belts conforming to SAE J386;
- iv The driver's seat **must** be fore/aft adjustable without having to move from a seated position; and
- v The driver's seat **must** be heated, with a least two heat settings.

(d) **Window Guards**

- i The windshield and windows **must** be protected with removable window screen guards; and
- ii The guards **must** provide protection to the operator's station from debris.

(e) **Mirror(s)**

- i The driver cab **must** be provided with adjustable rear-view mirrors positioned for safe reverse operation; and
- ii Heated exterior mirrors **must** be provided;

(f) **Rear View Camera**

- i A rear view camera **must** be provided;
- ii The camera image **must** be displayed in the cab of the vehicle; and
- iii The camera **must** be protected by a guard or mounted in a protected location.

(g) **Radio**

- i An AM/FM radio **must** be provided;

- ii The radio **must** be blue-tooth equipped; and
- iii The radio **must** turn off automatically when the vehicle is turned off.

3.7 **Engine** - The vehicle **must** be provided with a diesel engine.

3.7.1 **Engine Cold Weather Aids**

- (a) The engine **must** be provided with cold weather aids to enable the engine (operating with winter grade fuels/oils) to be started at temperatures down to -35° C;
- (b) The engine **must** be provided with one of the following low temperature engine starting systems: ether injection, glow plug(s), intake air preheat or **Equivalent**;
- (c) A heated fuel filter/water separator **must** be provided;
- (d) One or more 110-Volt engine heaters **must** be provided;
- (e) The engine heaters **must** have a capacity as recommended by the engine manufacturer;
- (f) The engine **must** be provided with one or more 110-volt battery heaters;
- (g) The battery heaters **must** have a wattage matched to battery size to prevent battery damage due to overheating; and
- (h) External electrical power for engine and battery heaters **must** be a cover-protected inlet(s) that is accessible without lifting a vehicle panel and includes a visual mean to indicate when power is being supplied to the 110 volt components.
- (i) **Fuel-Fired Pre-Heater**
 - i The vehicle **must** be provided with a fuel-fired engine coolant preheat system;
 - ii The fuel-fired pre-heater **must** be the size recommended by the heater manufacturer;
 - iii The fuel-fired pre-heater **must** be provided with a 7 day programmable timer;
 - iv Fuel for the fuel-fired pre-heater **must** be drawn from the vehicle fuel tank; and
 - v The fuel-fired pre-heater **must** operate without power from outside the vehicle.

3.8 **Transmission** – **Must** be *commercially equipped*.

3.9 **Suspension and Tracks**

- (a) The vehicle **must** be provided with triple grouser track shoes;
- (b) The track shoes **must** have a nominal width of 800mm; and
- (c) The vehicle **must** be provided with rock guards spanning the length of the undercarriage.

3.10 **Controls** – The boom and attachment controls **must** be of the joy-stick type.

3.11 **Instruments**

- (a) The instruments **must** include an hour-meter that displays the accumulated running time up to at least 9,999 hours.

3.12 **Lighting**

- (a) The lighting package **must** include work lights to illuminate to the front and rear of the vehicle;
- (b) The work lights **must** be activated by a separate dashboard switch; and
- (c) The work lights **must** be LED or **Equivalent**.

3.12.1 **Amber Coloured Beacon**

- (a) An amber-coloured omni-directional beacon **must** be provided;
- (b) The beacon **must** be mounted so as to provide vehicle visibility through 360 degrees; and
- (c) The beacon **must** be LED.

3.13 **Battery Solar Charger**

- (a) A Battery Solar Charging System **must** be provided;
- (b) The Battery Solar Charging System **must** be equivalent to NSN 6130-01-487-0035; and
- (c) The solar charger panel **must** be roof mounted at the rear on an angle of between 10 and 15 degrees.

3.14 **Hydraulic System** - The hydraulic system **must** be the manufacturer's standard complete with all components required for the operation of the hydraulic equipment specified.

3.15 **Lubricants and Hydraulic Fluids**

- (a) Manufacturer's synthetic non-proprietary lubricants and hydraulic fluids **must** be provided;
- (b) Lubrication fittings **must** conform to SAE J534; and
- (c) A service label, visible from inside the cab, indicating the types of fluid and viscosity delivered with the vehicle **must** be provided.

3.15.1 **Automatic Greasing System**

- (a) The vehicle **must** be equipped with an Automatic Greasing System,
- (b) The system **must** automatically provide grease to all greasing points recommended by the manufacturer including the quick coupler greasing points;
- (c) The system **must** include a telltale light indicating that the system is functioning and a low grease level alarm in the operator's station; and
- (d) The mounting location **must** not impede ingress or egress of the vehicle.

3.16 **Labels** – All written warning and instruction labels **must** be in English and French.

3.17 **Vehicle Delivery Condition**

- (a) If the vehicle requires assembly at destination, space for assembly at destination will be provided; and
- (b) Fuel tank(s) **must** be half to three quarters full on delivery.

4. **Integrated Logistic Support**

4.1 **Contractor Documentation and Logistic Items**

4.1.1 **Items Supplied to Technical Authority**

- (a) **Manuals for Approval**
 - i The Contractor **must** supply a set of manuals for each Configuration/model, in digital format, including the operator, parts and maintenance (shop repair) manuals. Manuals may cover more than one (1) configuration/model;
 - 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/equipment manuals;
 - iii Digital copies **must** be functional without the requirement for a password, an auto-run installation procedure or an Internet connection;

- iv Digital copies **must** be supplied on a CD or DVD;
- v Digital copies **must** be supplied in a searchable PDF format;
- vi The CD or DVD **must** be permanently and legibly labelled with a list of contents;
- vii Manuals will not be returned;
- viii Manual approval, requests for additional documentation and/or requests for amendments will be supplied within 15 working days of receipt;
- ix The Contractor **must** supply the additional documentation and implement the changes as requested by the **Technical Authority**; and
- x 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 two (2) digital colour photographs, one (1) left-front three-quarter view, and one (1) right-rear three-quarter view of each configuration/model;
- 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 (1) side-view line drawing showing dimensions of the vehicle/equipment **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 a bilingual data summary for each configuration/model, with vehicle/equipment data (including accessories and features) and a vehicle/equipment 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 request for amendments will be supplied within 15 working days of receipt; and
- v The Contractor **must** implement the changes requested by the **Technical Authority**.

(d) **Safety Data Sheets**

- i The Contractor **must** supply a listing, in digital format, of all hazardous materials used on the vehicle/equipment;
- ii If there are no hazardous materials used, this **must** be stated on the listing; and
- iii The Contractor **must** supply safety data sheets, in digital PDF format, for all hazardous materials in the list.

(e) **Warranty Letter**

- i The **Technical Authority** will supply 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;
 - iv Designated warranty providers **must** honour the warranty letter; and
 - v The contractor **must** supply the original warranty letter in digital format, for each vehicle/equipment delivered, to the **Technical Authority**.
- (f) **Initial Parts Kit List**
- i The contractor **must** supply a list of parts needed to perform preventive maintenance on one (1) vehicle/equipment 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** - The Contractor **must** supply a training plan for approval, for the training course listed in paragraph 4.2, to the **Technical Authority**.

4.1.2 **Items Supplied with Each Vehicle/Equipment**

- (a) **Operator's Manuals** - The Contractor **must** supply a **Technical Authority** approved bilingual operator's manual in paper and digital format with each vehicle/equipment delivered.
- (b) **Warranty Letter** - The Contractor **must** supply a copy of the warranty letter with each vehicle/equipment delivered.
- (c) **Safety Data Sheets**
 - i The Contractor **must** supply a set of material safety data sheets; and
 - ii The material safety data sheets **must** be the same as those provided to the **Technical Authority** as per paragraph 4.1.1 (d).
- (d) **Keys** – The contractor **must** supply at least two (2) sets of keys.
- (e) **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 (paragraph 4.1.1 (f)).
- (f) **Paper Maintenance Manual – English**
 - i The Contractor **must** supply the **Technical Authority** approved maintenance (shop repair) manuals in paper format and in English required for the maintenance and repair of the vehicle/equipment, features and accessories; and
 - ii The contractor may supply this deliverable as a bilingual package.
- (g) **Digital Maintenance Manual – English**
 - i The Contractor **must** supply the **Technical Authority** approved maintenance (shop repair) manuals in digital format and in English required for the maintenance and repair of the vehicle/equipment, features and accessories;

- ii The contractor may supply this deliverable as a bilingual package;
 - iii Digital copies **must** be functional without the requirement for a password, an auto-run installation procedure or an Internet connection;
 - iv Digital copies **must** be supplied on a CD or DVD; and
 - v Digital copies **must** be supplied in a searchable PDF format.
- (h) **Paper Maintenance Manual – French**
- i The Contractor **must** supply the **Technical Authority** approved maintenance (shop repair) manuals in paper format and in French required for the maintenance and repair of the vehicle/equipment, features and accessories; and
 - ii The contractor may supply this deliverable as a bilingual package.
- (i) **Digital Maintenance Manual – French**
- i The Contractor **must** supply the **Technical Authority** approved maintenance (shop repair) manuals in digital format and in French required for the maintenance and repair of the vehicle/equipment, features and accessories;
 - ii The contractor may supply this deliverable as a bilingual;
 - iii Digital copies **must** be functional without the requirement for a password, an auto-run installation procedure or an Internet connection;
 - iv Digital copies **must** be supplied on a CD or DVD; and
 - v Digital copies **must** be supplied in a searchable PDF format.
- (j) **Paper Parts Manual**
- i The Contractor **must** supply the **Technical Authority** approved parts manuals for the vehicle/equipment, features and accessories, in paper format; and
 - ii The parts manual **must** be supplied in English.
- (k) **Digital Parts Manual**
- i The Contractor **must** supply the **Technical Authority** approved parts manuals for the vehicle/equipment, features and accessories, in digital format;
 - ii The parts manual **must** be supplied in English;
 - iii Digital copies **must** be functional without the requirement for a password, an auto-run installation procedure or an Internet connection;
 - iv Digital copies **must** be supplied on a CD or DVD; and
 - v Digital copies **must** be supplied in a searchable PDF format.
- 4.2 **Training** (Location and language of instruction will be specified in the contract).
- (a) **Familiarization Course**
- i The Contractor **must** supply a familiarization course optimized for operators and technicians who are qualified on the vehicle/equipment 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 **Curriculum**
 - 1. The familiarization course **must** include operation and maintenance segments.

2. The operator's familiarization segment **must** include safety precautions to be observed while operating and servicing the vehicle/equipment, vehicle/equipment operating characteristics, pre-operating and shutdown procedures and daily/weekly operator servicing procedures.
3. The operator's familiarization **must** include sub-systems including automatic grease system and pre-heaters.
4. The technician's familiarization **must** include diagnostics, trouble shooting and operation of special tools and test equipment (if any).
- iv 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.
- v The familiarization course **must** accommodate up to eight (8) personnel; four (4) operators and four (4) technicians.
- vi After completion of the familiarization course, the Contractor **must** have the "**PROOF OF FAMILIARIZATION**" certificate signed by the senior course attendee.
- vii The **Technical Authority** will supply the "**PROOF OF FAMILIARIZATION**" document template in a digital format.

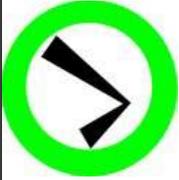
4.3 **ILS Data Deliverables Summary.** This table is for quick reference only. All detailed requirements to be met are contained under Paragraph 4: Integrated Logistics Support.

Item	Format	Delivered to TA by E-mail	Delivered to TA by mail/courier	Copy with Vehicle	Remarks
Photographs and Line Drawings	Digital	x	-	-	
Data Summary	Digital	x	-	-	TA will provide template
Training Plan/Curriculum	Digital	x	-	-	
Proof of Familiarization Course Certificate	Digital	x	-	-	Procurement Authority will provide templates
Initial Parts Kit List	Digital	x	-	-	
Warranty Letter	Digital	x	-	-	TA will provide template
	Paper**	-	-	x	
Listing of HAZMAT and Safety Data Sheets French and English	Digital	x	-	-	
	Paper**	-	-	x	
Operator's Manual Bilingual	Digital		x	x	On CD/DVD *
	Paper**			x	
Maintenance (shop repair) Manual English	Digital		x	x	On CD/DVD *
	Paper**			x	

Item	Format	Delivered to TA by E-mail	Delivered to TA by mail/courier	Copy with Vehicle	Remarks
Maintenance (shop repair) Manual French	Digital		x	x	On CD/DVD *
	Paper**			x	
Parts Manual	Digital		x	x	On CD/DVD *
	Paper**			x	

Notes: * If possible e-manuals should be on a single CD/DVD

** Paper copy must be identical to the electronic approved by the TA.



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.

APPENDIX 1

TECHNICAL INFORMATION QUESTIONNAIRE
TRACKED EXCAVATOR

This questionnaire covers technical information, which **must** be provided for evaluation of the configuration(s) of the vehicle(s) offered.

Where the specification paragraphs below indicate “**Substantial Information**”, the “**Substantial Information**” describing completely and in detail how the requirement is met or addressed **must** be supplied for each performance requirement/specification.

Bidder is required to indicate the document name/title and page number where the **Substantial Information** can be found.

Definitions for **Equivalent** is found in the DEFINITIONS section at the end of this document.

CONTRACTOR INFORMATION

Contractor Name: _____

Address: _____

Proposal Date: _____

Substitutes/Alternatives

Are any equipment substitutes/alternatives offered as **Equivalent**? YES NO

If yes, please identify all equipment substitutes/alternatives offered as **Equivalents** below:

OPI: DSVPM 4 – BPR: DAPVS 4

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



PD Reference	Requirement	Substantial Information required	Value	Location of Substantial Information in Bid Proposal
3.4	The vehicle must be a tracked excavator.	Vehicle Make Vehicle Model Vehicle Model Year		
3.4.1 (a) i	The excavator must have a lift capacity at ground level through 360 degrees, in accordance with ISO 10567 <i>Earth-moving Machinery – Hydraulic Excavators – Lift Capacity</i> of at least 5,900 kg at a 4.5 metre radius;	Lift at 4.5m in kg	kg	
3.4.1 (a) ii	The excavator must have a lift capacity at ground level through 360 degrees, in accordance with ISO 10567 <i>Earth-moving Machinery – Hydraulic Excavators – Lift Capacity</i> of at least 3,800 kg at a 6 metre radius;	Lift at 6m in kg	kg	
3.4.1 (a) iii	The excavator must have a lift capacity at ground level through 360 degrees, in accordance with ISO 10567 <i>Earth-moving Machinery – Hydraulic Excavators – Lift Capacity</i> of at least 2,700 kg at a 7.5 metre radius	Lift at 7.5m in kg	kg	
3.4.1 (b)	The excavator must have a reach at ground level, in accordance with <i>ISO 7135 Earth-Moving Machinery – Hydraulic Excavators – Terminology and Commercial Specifications</i> , of at least 9,100 mm	Reach in mm	mm	
3.4.1 (c)	The excavator must have a maximum digging depth, in accordance with <i>ISO 7135 Earth-Moving Machinery – Hydraulic Excavators – Terminology and Commercial Specifications</i> , of at least 5,900 mm;	Max dig depth in mm	mm	
3.4.1 (d)	The excavator must have an arm cylinder force, in accordance with <i>ISO 6015 Earth-Moving Machinery – Hydraulic Excavators and Backhoe Loaders – Methods of Determining Tool Forces</i> , using the standard excavating bucket, of at least 100 kN	Arm cylinder force in kN	kN	
3.4.1 (e)	The excavator must have a bucket cylinder force, in accordance with <i>ISO 6015 Earth-Moving Machinery – Hydraulic Excavators and Backhoe Loaders – Methods of Determining Tool Forces</i> , using the standard excavating bucket, of at least 125 kN	Bucket cylinder force in kN	kN	

		Tech data/brochure for thumb		
3.5 (b)	<p>Hydraulic Thumb - A hydraulic thumb matching the supplied excavating bucket and quick coupler system must be provided.</p>			
3.5 (c)	<p>760mm Excavating Bucket</p> <ul style="list-style-type: none"> i An excavating bucket matching the quick coupler system must be supplied; ii The excavating bucket must be provided with bolt-on replaceable teeth; and iii The bucket must have a nominal width of 760 mm and a heaped capacity of at least 0.5 m³. 	760mm Bucket Width in mm	mm	
3.5 (d)	<p>1520mm Side-Tilt Ditching Bucket</p> <ul style="list-style-type: none"> i A hydraulic side-tilt ditching bucket matching the quick coupler system must be supplied; ii The ditching bucket must have a have a bolt-on replaceable cutting edge; iii The ditching bucket must have a nominal width of 1520 mm and a heaped capacity of at least 0.75 m³; and iv The ditching bucket must tilt at least 30 degrees to each side. 	760mm bucket Heaped Capacity in m ³	m ³	
3.5 (e)	<p>Hydraulic Hammer</p> <ul style="list-style-type: none"> i A hydraulic hammer attachment matching the quick coupler system must be supplied; ii The hydraulic hammer must be provided with amoil bit; iii The hydraulic hammer must have an impacting energy of at least 4,000 J; iv The hydraulic hammer must have a weight of no less than 7.5 percent and no more than 9 percent of the typical operating weight of the excavator; and v The hydraulic hammer tool diameter must be at least 115 mm. 	1520mm Bucket width in mm	mm	
3.5 (f)	<p>Rotary Brush Cutter</p> <ul style="list-style-type: none"> i A rotary brush cutter must be supplied; ii The rotary brush cutter must have a cutting swath of at least 1200 mm; iii The rotary brush cutter must cut brush saplings of at least 100 mm diameter; and iv The rotary brush cutter must be provided with mulching teeth. 	1520mm Bucket Heaped Capacity in m ³	m ³	
		Hydraulic Hammer Impact Energy in joules	J	
		Excavator Typical Operating Weight in kilograms	kg	
		Hydraulic Hammer Weight in kilograms	kg	
		Hydraulic Hammer Tool Diameter in millimeters	mm	
		Rotary Brush Cutter Swath in mm	mm	
		Rotary Brush Cutter Maximum Sapling Cut in mm	mm	

DEFINITIONS

The following definitions apply to the interpretation of this Technical Information Questionnaire:

- a) "Equivalent" - A standard, means, or component type, which has been accepted by the Technical Authority as meeting the specified requirements for form, fit, function and performance.