



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

Bid Fax: (819) 997-9776

LETTER OF INTEREST

LETTRE D'INTÉRÊT

Comments - Commentaires

Vendor/Firm Name and Address

Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Clothing and Textiles Division / Division des vêtements et
des textiles

11 Laurier St./ 11, rue Laurier

6A2, Place du Portage

Gatineau, Québec K1A 0S5

Title - Sujet RFI - SKI MOBILITY SYSTEMS	
Solicitation No. - N° de l'invitation W6399-17JA74/A	Date 2016-08-11
Client Reference No. - N° de référence du client W6399-17JA74	GETS Ref. No. - N° de réf. de SEAG PW-\$\$PR-760-71395
File No. - N° de dossier pr760.W6399-17JA74	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-09-14	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Richard, Josette	Buyer Id - Id de l'acheteur pr760
Telephone No. - N° de téléphone (613) 462-4128 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: Specified Herein Précisé dans les présentes	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée See Herein	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	

LOI / RFI FOR SKI MOBILITY SYSTEMS
Department of National Defence (DND)

1.0 PURPOSE AND NATURE OF THE LOI / RFI

The purpose of this LOI / RFI is to solicit market information on the availability and cost of the required equipment, the ability of suppliers to provide the services, as well as to determine industry interest in submitting a bid proposal for Ski Mobility Systems. Respondents are requested to submit information that would demonstrate how their product(s) might meet or exceed requirements as detailed herein. Note that there is no firm requirement for procurement at this time.

2.0 NOTE TO INTERESTED RESPONDENTS

This LOI is neither a call for tender nor a Request for Proposal (RFP), and no agreement or contract for the procurement of the equipment or services above will be entered into solely as a result of this LOI. This announcement does not constitute a commitment by Canada. Canada does not intend to award a contract on the basis of this notice or otherwise pay for the information solicited. Any and all expenses incurred by the Respondent in pursuing this opportunity, including the provision of information and potential visits, are at the Respondent's sole risk and expense.

Any discussions on this subject with staff representing DND or PWGSC, or any other Government of Canada representative, shall not be construed as an offer to purchase or as commitment by DND, PWGSC or the Government of Canada as a whole.

Although the documents/information/data collected may be provided as commercial-in-confidence and will not be provided to a third party outside of Canada, Canada reserves the right to use the information to assist them in drafting performance specifications and for budgetary purposes. Requirements are subject to change, which may be as a result of information provided in response to this LOI. Respondents are advised that any information submitted to Canada in response to this LOI may, or may not, be used by Canada in the development of the potential subsequent Request for Proposal (RFP). The issuance of this LOI does not create an obligation for Canada to issue a subsequent RFP, and does not bind Canada legally or otherwise to enter into any agreement or to accept or reject any suggestions.

There will be no short-listing of respondents for the purposes of undertaking any future work as a result of this LOI. Similarly, participation in this LOI is not a condition or prerequisite for the participation to any subsequent RFP.

Respondents to this LOI should identify any submitted information that is to be considered as either company confidential, proprietary or if the response contains controlled goods.

3.0 BACKGROUND

The Department of National Defence (DND) has a requirement for high performance Ski Mobility Systems for use in training and operations where standard issue Canadian Forces (CF) ski equipment is unsuitable. The equipment includes a requirement for an Alpine Touring Ski system, a Flat Country Ski system, and Avalanche Safety Equipment. DND intends to procure commercial or military off-the-shelf (COTS/MOTS) systems through a competitive process to meet these requirements.

3.1 Proven Design

All ski mobility equipment must be high performance and proven in a demanding military use environment. As such, in order to ensure that the equipment is proven in service, there will be a requirement for the bidder, should a tender or Request for Proposal be promulgated in the future, to demonstrate their experience as a supplier of high performance ski mobility equipment for use in a military environment. This could include both demonstration as an established vendor, through years of

sales and in-service support, and demonstration of sales of similar equipment to Canadian allied militaries including America, Britain and Australia (ABCA) or North American Police agencies.

3.2 Projected Initial Quantities

The Alpine Touring and Flat Country Ski systems will each include skis, bindings, boots, poles and skins, and the Avalanche Safety Equipment system will include a probe, transceiver, snow shovel and snow saw. It is anticipated that the following initial quantities will be required:

- (a) Alpine Touring:
 - i. Skis - 400 pairs;
 - ii. Bindings (with crampons) - 400 pairs;
 - iii. Skins - 400 pairs;
 - iv. Boots - 400 pairs; and
 - v. Adjustable Poles (Dual Use) - 600 pairs;
- (b) Flat Country:
 - i. Skis - 300 pairs;
 - ii. Bindings - 300 pairs;
 - iii. Skins - 300 pairs; and
 - iv. Boots - 400 pairs;
- (c) Avalanche Safety Equipment:
 - i. Probes - 300;
 - ii. Transceivers - 600;
 - iii. Snow Shovels - 600; and
 - iv. Snow Saws - 600
- (d) Miscellaneous Equipment:
 - i. Boot Moulding Ovens - 2;
 - ii. Boot Moulding Punches - 2;
 - iii. Ski Clamp Tables - 2; and
 - iv. Binding Jigs -2

The majority of the skis are to be provided with the bindings mounted; however, some will be provided unmounted. The boots are to be initially fitted to the individual users by the service provider. In addition, DND will also require initial training of personnel on binding mounting and boot fitting.

3.3 Optional Quantities

In addition to the above quantities, there will be a requirement for replacement equipment on an annual basis. It is projected that the optional quantities could include up to 15-20% of the initial quantities on a yearly basis.

3.4 In-Service Support

DND will also require support throughout the length of the contract (up to 5 years) for repair, annual/periodic maintenance (waxing/tuning), binding mounting and boot fitting services. All services are to be provided within a one hundred (100) km radius of the National Capital Region. In addition, DND would prefer to have repair and maintenance services in a broader area including Eastern and Western Canada as availability of services permit.

4.0 **PRELIMINARY REQUIREMENTS**

The preliminary set of requirements for each equipment type is detailed in Annex A.

5.0 SECURITY

There is no security requirement associated with this LOI/RFI.

6.0 DELIVERABLES

Prior to finalizing its requirements, DND would like to determine what possible solutions exist to meet their needs for ski mobility equipment and support services.

As such, Respondents are requested to:

- Provide a detailed response on how such equipment and support services would be delivered. Respondents are encouraged to be innovative in their proposed method(s) of capability delivery and support options, including commenting on feasibility as well as proposed alternate approaches/solutions to meeting some or all of the general requirements;
- Provide suggestions/insight into how DND would, in a competitive bidding process, evaluate competing systems;
- Confirm that the requirements are achievable;
- Advise if meeting the requirement will be accomplished with COTS/MOTS products or custom-built products;
- Provide a rough-order-of-magnitude (ROM) estimate of the costs associated with equipment purchase and in-service support;
- Provide details of any prior sales contracts of a similar size and scope with ABCA military forces and/or North American police agencies;
- Provide their number of years of experience in design, manufacture and support of Ski Mobility Systems;
- Provide copies of all equipment brochures, technical documentation, etc.

7.0 SUBMISSION OF RESPONSES

Although responses are not considered bids, responses shall be sent to the Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the Letter of Interest. It is expected that the following information be provided:

- 1) Respondent's name, contact information, including email, phone number and return address; and
- 2) Information required as per Section 6.0 Deliverables, above.
- 3) Two (2) hard copies of the response are requested.

8.0 ENQUIRIES

All inquiries and other communications related to this LOI shall be directed exclusively to the PWGSC LOI Authority. All inquiries must be submitted to the LOI Authority no later than fifteen (15) calendar days before the closing date. Enquiries received after that time may not be answered.

In their enquiries, care should be taken by respondents to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada

may edit the questions or may request that the Respondent do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all Respondents. Enquiries not submitted in a form that can be distributed to all Respondents may not be answered by Canada.

Changes to this LOI may occur and will be advertised on the Government Electronic Tendering System (GETS) website (<https://buyandsell.gc.ca/>). It is each interested party's responsibility to verify changes, if any, on the GETS website.

9.0 ADDITIONAL INFORMATION REQUESTS

After Canada has reviewed all the responses received, additional information may be requested by the LOI Authority to individual Respondents.

10.0 LOI AUTHORITY

Public Works and Government Services Canada is responsible for the management of this LOI process. The LOI Authority is:

Josette Richard
Supply Specialist
Public Works and Government Services Canada
Clothing & Textiles Division
Place du Portage, Phase III, 6A2
11 Laurier Street
Gatineau, Quebec K1A 0S5
Telephone: 613-462-4128 Facsimile: 819-956-5454
E-mail address: josette.richard@tpsgc-pwgsc.gc.ca

ANNEX "A"

A.1 Preliminary Requirements

The Department of National Defence (DND) is looking to potentially establish a contract for Ski Mobility systems for use during training and operations in North America (Canada and the United States) and possibly anywhere else in the World where such equipment is necessary. The preliminary requirements are outlined below. Not all requirements are necessarily mandatory and the Respondent is requested to make recommendations on the feasibility of each requirement.

A1.1 Alpine Touring Equipment

The requirements for the Alpine Touring Equipment are as follows:

(a) Alpine Touring Skis:

Operational Performance Requirement	Technical Requirements
Waxable, alpine touring skis suitable to ski up and down slopes with an angle more than twenty (20) degrees for durations of up to twenty-four (24) hrs per day under the following conditions: <ul style="list-style-type: none"> – Alpine touring skins may or may not be used; and – Pulk sleds may be used to haul equipment. 	Underfoot width between 9.4 - 10.5 cm (3.7 - 4.1 in).
A range of available lengths to hold the weight of the operator with operational equipment (up to 110 kg (250 lbs)) in all snow conditions.	Weight of no more than 3.3 kg (7.25 lbs) for a pair of skis as follows: <ul style="list-style-type: none"> – Length: 180 +/- 2 cm (71 +/- 0.8 in); and – Width: 9 - 9.5 cm (3.5 - 3.75 in).
Durable scratch-resistant outer material.	Incorporate an early rise tip and tail. (Note: Twin tips are unacceptable)
Robust fracture resistant construction.	Incorporate camber with not more than semi-rocker design.
Manufactured with an all-white top sheet.	Light to moderate side cut.
Manufactured with an all-white bottom sheet.	Full length metal edges.
Incorporate cut outs at the tip and/or tail to enable skin attachment.	Wood, durable composite material or blend core.
	Have a fish scale kick zone to provide traction in all snow conditions on shallow slopes or flat surfaces, when not using skins, to allow for forward movement with minimal effect on glide efficiency, and without significant backward motion when used on a slope of 10 degrees.

(b) Alpine Touring Bindings:

Operational Performance Requirement	Technical Requirements
Suitable technical bindings for ski touring and lockable for downhill use	Weight of the binding with brake of not more than 1.5 kg (3.3 lbs) per pair.
Switchable between modes by hand with gloves on when transitioning from touring to skiing mode.	Include a ski binding crampon.
Permit the boot toe to remain connected to the binding while switching from touring to skiing mode.	Include integrated ski brakes. (Note: A leash is not acceptable)
Interface with the Alpine Touring Boots.	Have a white outer finish where possible.
Provide height adjustments for ascending steep slopes.	

ANNEX “A”

Operational Performance Requirement	Technical Requirements
Provide step in mounting with single action locking mechanism.	
Include a demo plate (one or two piece) to accommodate mounting a minimum of six (6) boot sizes and where the plate keeps the foot as close to the ski as possible.	
Enable the user to adopt the kneeling position and return to a standing position with connection to the binding retained.	
Incorporate a Din approved adjustable safety release to enable release of the user where injury is probable.	
TUV certified to DIN/ISSO 13992.	
Heelpiece with independent vertical and horizontal release mechanisms.	

(c) Alpine Touring Skins:

Operational Performance Requirement
Full length skins manufactured of a synthetic and mohair mix customized in length and width to snugly interface to the skis to prevent separation;
Provide a good balance of grip and glide such that performance: <ul style="list-style-type: none"> – Is degraded by not more than 30% when compared with ski performance without the skin when touring; and – Prevent significant backward slip when mounting a 30 degree slope.
Comprise flexible material construction to enable tight rolling for storage.
Incorporate a mechanism to keep skins securely fitted to the ski tip and tail to prevent inadvertent release.
Have a glue that securely bonds to the ski base to prevent snow build up between the skis and skin while moving forward and backwards.

(d) Alpine Touring Boots:

Operational Performance Requirement	Technical Requirements
Technical-compatible, lightweight Alpine touring backcountry boot suitable for ski touring and lockable for downhill use.	Insulated to keep feet warm in the Basic Cold (down to -32 °C) temperature range.
Customizable to the user so that it is comfortable to wear for up to twenty-four (24) hours per day.	Provide a flexion (dorsi and planter) range of motion of no less than 40 degrees.
Dual mode operation (skiing and walking) where: <ul style="list-style-type: none"> – Ski mode provides full ankle support; and – Provides maximum articulation of the ankle when unlocked for walking mode. 	Weight for a US size 9 or 9.5 boot pair, with liner, of not more than 3.5 kg (7.7 lbs).
Easily and effortlessly switch from ski to walk mode and vice versa while wearing a backpack.	Incorporate a Vibram, or Vibram-like, sole on the boot shell.
Compatible with mountaineering Crampons	Interface with Alpine Touring or Alpine Technical Touring bindings.
Include a removable and interchangeable liner that can be laced up to wear as a standalone bootie.	Have a white outer finish where possible.
Have multiple sizes to accommodate the 5-95th percentile male, in accordance with DCIEM Report 98-CR-15 Anthropometric Survey of the Land Forces (available upon request).	

ANNEX "A"

(e) Adjustable Poles (Dual Use for both Alpine Touring and Flat Country Systems):

Operational Performance Requirement	Technical Requirements
A telescopic pole usable for both Alpine Touring and Flat Country Touring skiing that provides length adjustability.	Provide an adjustable usable length to accommodate the 5-95th percentile male, in accordance with the DCIEM Report 98-CR-15 Anthropometric Survey of the Land Forces as follows: <ul style="list-style-type: none"> – Minimum usable length is no less than 95 cm (37.4 in); and – Range of adjustment is no less than 40 cm (15.7 in). <p>Note: It is acceptable to offer more than one pole length to accommodate the wide range heights of the users.</p>
Poles must not break during moderate operational use.	Have a scraper incorporated into the handle to assist with snow removal from ski's and manipulating technical ski bindings.
Collapsible for quick storage.	Be constructed of lightweight aluminum.
Incorporate a robust locking mechanism that does not collapse or release with the application of up to 110 kg (250 lbs) of force.	Minimum two (2) piece construction.
Locking mechanism can be adjusted easily with minimal tools to increase clamping pressure.	Weigh no more than 600 grams (1.3 lbs) for a pair.
Incorporate a form fit handle with a strap as follows: <ul style="list-style-type: none"> – Sufficient to go over a heavily gloved hand; – Adjustable length; – Easily releasable from the worn hand; and – Removable/replaceable from the handle and field repairable with minimal tools. 	Include replaceable metal tips.
Include a removable/replaceable basket that does not significantly penetrate snow.	Have a white outer finish where possible.

A1.2 Flat Country Equipment

The requirement for the Flat Country Equipment are as follows:

(a) Flat Country Skis:

Operational Performance Requirement	Technical Requirements
Wax-less skis suitable for long distance Nordic Backcountry ski touring off trail, on slopes less than twenty (20) degrees, which provides a good balance of stability, flotation and efficiency.	Underfoot width between 6.5 - 8.0 cm (2.5 - 3.1 in).
A range of available lengths to hold the weight of the operator with operational equipment (up to 110 kg (250 lbs)) in all snow conditions.	Weight of no more than 2.7 kg (5.9 lbs) for a pair of skis as follows: <ul style="list-style-type: none"> – Length: 180 +/- 2 cm (71 +/- 0.8 in); and – Width: 6.5 - 8.0 cm (2.5 - 3.1 in).
Durable scratch-resistant outer material.	Incorporate a low rise tip and flat tail.
Manufactured with an all-white top sheet.	Incorporate traditional camber with a Nordic style rocker design and a light to moderate side cut.
Manufactured with an all-white bottom sheet.	Incorporate full length metal edges.

ANNEX “A”

Operational Performance Requirement	Technical Requirements
Incorporate cut outs at the tip and/or tail to enable skin attachment.	Wood, durable composite material or blend core.
	Have a fish scale kick zone to provide traction in all snow conditions on shallow slopes or flat surfaces, when not using skins, to allow for forward movement with minimal effect on glide efficiency, and without significant backward motion when used on a slope of 10 degrees.

(b) Flat Country Bindings:

Operational Performance Requirement	Technical Requirements
Nordic backcountry style with a manual mechanism that provides maximum ski control over various terrain and all snow conditions.	Weight of the binding of not more than 1.0 kg (2.2 lbs) per pair.
Sturdy enough to firmly hold the boot so that it does not release inadvertently from the binding when used by a person weighing up to 110 kg (250 lbs).	Solid piece construction.
Enable the user to adopt the kneeling position with connection to the binding retained and return to a standing position without releasing from the binding.	
Closable, lockable single action mechanism that can be released with the ski pole	

(c) Flat Country Skins:

Operational Performance Requirement
Full length skins manufactured of a synthetic and mohair mix customizable in length and width to securely interface to the skis.
Provide a good balance of grip and glide such that performance: <ul style="list-style-type: none"> – Is degraded by not more than 20% when compared with ski performance without the skin when touring and pulling a two (2) man pulk sled; and – Prevent significant backward slip when mounting a 30 degree slope.
Comprise flexible material construction to enable tight rolling for storage.
Incorporate a mechanism to keep skins securely fitted to the ski tip and tail to prevent inadvertent release.

(d) Flat Country Boots:

Operational Performance Requirement	Technical Requirements
Durable, water proof, and breathable, Nordic backcountry touring boots comfortable for long distance backcountry touring of up to twenty-four (24) hours per day.	Insulated to keep feet warm in the Basic Cold (down to -32 °C) temperature range.
Provides suitable ankle support for users up to 110 kg (250 lbs).	Weight for a US size 8 boot pair of not more than 2.0 kg (4.4 lbs).
Enables maximum lateral control of the skis and flexible enough to provide suitable dorsi and planter flexion of the ankle.	Non gortex.
Compatible and comfortable for use with snowshoes	Removable liners.
Have multiple sizes to accommodate the 5-95th percentile male, in accordance with DCIEM Report	Have a durable Vibram or Vibram like sole that provides minimal slippage on hard surfaces and

ANNEX “A”

Operational Performance Requirement	Technical Requirements
98-CR-15 Anthropometric Survey of the Land Forces (available upon request).	rough terrain when worn off ski.
	Secured to the foot with laces or quick lace system which allows user to easily don/doff the boot.
	Incorporate a zippered lace cover to protect lacing system from wear and weather.
	Incorporate a water proof snow gaiter to a height no less then upper-calf.
	Supplied with an overbootie that can be placed over the ski boot as an added insulation layer usable when the boot is attached to the binding at temperatures down to -46 °C.
	Have a white outer finish.
	Incorporate a durable cuff fastener that is easily hand adjustable while wearing gloves.

A1.3 Avalanche Safety Equipment

The requirement for the Avalanche Safety Equipment are as follows:

(a) Probes:

Operational Performance Requirement	Technical Requirements
Purpose-built light weight collapsible probe designed for finding persons or equipment buried in snow.	Have an extended length of no less than 3 m (9.8 ft).
Segments lock in place such that they will not collapsed when in use.	Have a collapsed (folded) length of no more than 45 cm (17.7 in).
Permit segment locking/unlocking quickly wearing gloves.	Have a tip diameter that is greater than the pole diameter.
	Non-corrosive metallic (aluminum) construction.
	Incorporate visual graduations on the exterior in 1 cm (0.4 in) increments for measuring snow depth.
	Weigh no more than 0.4 kg (0.88 lbs).

(b) Transceivers:

Operational Performance Requirement	Technical Requirements
Compact, rugged location device used to identify/locate persons buried in snow.	Provide a search range no less than 50 m (55 yds).
Compliant to ASTM F1491-93 (2002) for Avalanche Transceivers.	Incorporate both digital and analog modes of operation.
Automatically and manually switches from transmit to receive mode, and incorporates a safety feature to automatically revert back to transmit mode in the event the searcher becomes buried in a secondary avalanche.	Includes an LCD display with backlight feature that can be turned on and off for night use.
Provides a digital readout that accurately displays distance and direction to the identified buried object.	Support the attachment of an earpiece for search signal playback.
Mark and identify multiple burials including an	Incorporate at least three (3) antennas.

ANNEX "A"

Operational Performance Requirement	Technical Requirements
advanced feature that can de-conflict multiple signals in a mass burial scenario when two (2) or more persons are buried together.	
Support coarse and fine search approaches to zero in on buried persons as quickly as possible.	Weigh no more than 0.25 kg (0.55 lbs).
Include a group check feature to easily ensure all transceivers are working and assigned the correct frequency.	Permit software update and testing by the user (does not require return to the manufacturer).
Incorporate a self-test feature to ensure device is functioning normally.	
Straightforward and easy to operate while wearing gloves.	

(c) Snow Shovels:

Operational Performance Requirement	Technical Requirements
Extendable/retractable multifunctional and durable shovel suitable for uncovering buried persons and equipment in all snow conditions.	Fully extended length of no less than 90 cm (35 in).
All segments of the shovel (blade, handle and shaft) must be easily separated for storage but do not separate when in use.	Collapsed (separated) length of no more than 45 cm (17.5 in).
Permits blade attachment in a secondary location so the shovel can be used like a hoe for moving snow downhill.	Blade surface area of 600 - 700 square-cm (93 - 108.5 square-in).
Must not break or collapse while digging in all snow conditions.	Weight no more than 0.8 kg (1.8 lbs) for a shovel with a surface area of 700 square-cm (108.5 square-in).
Incorporate suitably placed holes in the shovel blade to enable its use as a snow anchor.	Non-corrosive metallic (aluminum) construction.
	Have a strengthened blade front edge that will not bend when used in moderate to heavy snow conditions.
	Blade leading edge not sharpened to prevent damage to users backpack when stowed.
	Have a strengthened blade collar where the shaft attaches that extends through the length of the shaft attachment collar and neck.

(d) Snow Saws:

Operational Performance Requirement	Technical Requirements
Lightweight multi-use snow saw with an aggressive tooth design suitable for cutting snow, ice and wood.	Have a blade length no less than 35 cm (13.8 in).
Suitable to cut through a tree branch of approximately 7.5 cm (3 in) diameter.	Weigh no more than 0.25 kg (0.55 lbs).
Have offset teeth designed to widen a cut to reduce binding while cutting.	One-piece lightweight stainless steel construction.
Have a non-slip handle.	Include a snow science graph engraved onto the side of the saw that will not wear off and is easily readable.
	Include a lightweight, durable sheath.