



**RETURN BIDS TO:  
RETOURNER LES SOUMISSIONS A :**

Bid Receiving/Réception des soumissions  
Procurement & Contracting Services  
c/o Commissionaires, F Division  
6101 Dewdney Ave  
Regina, SK S4P 3K7

**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 :

THIS DOCUMENT DOES NOT CONTAIN A  
SECURITY REQUIREMENT

LE PRÉSENT DOCUMENT NE COMPORTE PAS  
UNE EXIGENCE EN MATIÈRE DE SÉCURITÉ

<b>Title – Sujet:</b> Very High Frequency (VHF) Antennas Antennes à très haute fréquence (VHF)		<b>Date :</b> May 8, 2020 8 mai 2020
<b>Solicitation No. – N° de l'invitation</b> M5000-20-5557/A - PW-20-00914165		<b>Amendment No. – N° de la modification</b> 001
<b>Client Reference No. - No. De Référence du Client</b> 202005557		
<b>Solicitation Closes – L'invitation prend fin</b>		
<b>At / à :</b>	2 :00 pm – 14h00	CST (Central Standard Time) HNC (Heure Normale du Centre)
<b>On / le :</b>	June 16, 2020 - 16 juin 2020	
<b>Incoterms 2010 "DDP Delivered Duty Paid"</b> See herein — Voir aux présentes	<b>GST – TPS</b> See herein — Voir aux présentes	<b>Duty – Droits</b> See herein — Voir aux présentes
<b>Destination of Goods and Services – Destinations des biens et services</b> See herein — Voir aux présentes		
<b>Instructions</b> See herein — Voir aux présentes		
<b>Address Inquiries to – Adresser toute demande de renseignements à</b> Rachel Sookoo, Procurement Officer / Agente d'approvisionnement		
<b>Telephone No. – No. de téléphone</b> 639-625-3291		<b>Facsimile No. – No. de télécopieur</b> 306-780-5232
<b>Delivery Required – Livraison exigée</b> N/A		<b>Delivery Offered – Livraison proposée</b> N/A
<b>Vendor/Firm Name, Address and Representative – Raison sociale, adresse et représentant du fournisseur/de l'entrepreneur:</b>		
<b>Telephone No. – No. de téléphone</b>		<b>Facsimile No. – No. de télécopieur</b>
<b>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)</b>		
<b>Signature</b>		<b>Date</b>



This amendment is raised to address the following:

- to respond to questions received during the solicitation period; and
- to revise the solicitation document accordingly.

Question 1: When RCMP says 4 dipoles, what pattern do they want. Are these all directional or omni Az pattern?

Answer 1: They are all Omni Directional Antennas.

Question 2: Also ¼ wave specification sounds like the dipoles rotate, otherwise they will run into each other?

Answer 2: No the dipoles do not rotate. They all face the same direction.

Question 3: What is the required azimuth pattern for the antenna? 360 degrees (omni), 180 degrees, or?

Answer 3: Antennas will be bi-directional.

Question 4: What is the required gain?

Answer 4: Minimum gain of 8 dB.

Question 5: Exposed dipole antennas are mentioned. Are other designs permitted? (such as antennas with fiberglass radomes)

Answer 5: No other antennas are not permitted.

Question 6: PIM is required of -150 dBc or lower. Can you tell me who manufactures PIM equipment for these frequencies?

Answer 6: No we cannot list manufacturers who can supply the antennas. It is the bidder's responsibility to source the appropriate equipment required for these needs.

As a result of these questions, the solicitation document has been modified as follows:

**Delete in its entirety:** Annex "A", Requirement

**Insert:**

**ANNEX "A"  
REQUIREMENT**

Contractor to supply and deliver VHF antennas to the Royal Canadian Mounted Police in accordance with the requirements specifications, terms and conditions detailed herein.

Delivery locations:

- |  |  |
|--|--|
| a) 115 Kress Street<br>Regina, SK<br>S4N 5X8 | b) 400 Brand Place<br>Saskatoon, SK<br>S7J 5L6 |
|--|--|

1. Objective:  
The RCMP F Division in Saskatchewan has a requirement to purchase VHF antennas for the Provincial Public Safety Telecommunications Network (PPSTN).
2. Description:  
The RCMP with its partnering agencies is responsible for the maintenance of VHF repeater systems on the PPSTN.



3. General Technical Requirements

- a. The antenna requirements are for VHF antennas with a frequency range of 125 MHz to 160 MHz.
- b. All antennas must have VSWR of 1.5 :1 or better
- c. All antennas must have a minimum power rating of 125 watts or higher
- d. All antennas must be DC ground protected
- e. All top mount antennas must have a lightning protection rod
- f. All side mount antennas must have a pigtail that is 6 feet or longer
- g. All exposed dipole antennas must have coax cable routed inside the vertical mast and the horizontal boom
- h. The black anodized coating must be as per MIL SPEC 8625F/Type UL 25 microns penetration within the aluminum and 25 microns added to surface of aluminum.
- i. The low Passive Inter-Mod PIM is defined as the 3rd order harmonic products measurements of -150 dBc or lower that result from two 20 watts signal generated into the antenna.
- j. Antennas must have a minimum gain of 8.0 dB
- k. Antennas will be bi-directional

Acronyms:

VHF – Very High Frequency

MHz – MegaHertz

VSWR – Voltage Standing Wave Ratio

DC – Direct Current

MIL SPEC – Military Specifications

UL – Underwriters Laboratories

PIM – Passive Intermodulation

dBc – decibels relative to the carrier

dB – Decibels

**Delete in its entirety:** Annex “C”, Mandatory Technical Criteria

**Insert:**

**ANNEX “C”  
MANDATORY TECHNICAL CRITERIA**

Bidders are required to indicate whether or not they comply with the mandatory specifications. Bidders must include two (2) copies of descriptive literature of the items offered in sufficient detail to clearly indicate compliance with each of the individual requirements in the specifications and cross reference where this specification is located within the descriptive literature.

Where weight, dimensions or other characteristics are shown, the minimum must be met.

The Royal Canadian Mounted Police is under no obligation to seek clarification of the bid(s) or the supporting technical documentation provided.

Failure to meet any of the following specifications will render your proposal non-compliant and will be given no further consideration.



**The antennas must have the following specifications:**

	Specification	Compliance		Comment(s)/ Cross Reference
		Yes	No	
<b>General Technical Requirements</b>				
a.	The antenna requirements are for VHF antennas with a frequency range of 125 MHz to 160 MHz			
b.	All antennas must have VSWR of 1.5 :1 or better			
c.	All antennas must have a minimum power rating of 125 watts or higher			
d.	All antennas must be DC ground protected			
e.	All top mount antennas must have a lightning protection rod			
f.	All side mount antennas must have a pigtail that is 6 feet or longer			
g.	All exposed dipole antennas must have coax cable routed inside the vertical mast and the horizontal boom			
h.	The black anodized coating must be as per MIL SPEC 8625F/Type UL 25 microns penetration within the aluminum and 25 microns added to surface of aluminum			
i.	The low Passive Inter-Mod PIM is defined as the 3rd order harmonic products measurements of -150 dBc or lower that result from two 20 watts signal generated into the antenna			
j.	Antennas must have a minimum gain of 8.0 dB.			
k.	Antennas will be bi-directional.			

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME