



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

**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

Electronics, Simulators and Defence Systems Div.
/Division des systèmes électroniques et des systèmes de
simulation et de défense
11 Laurier St. / 11, rue Laurier
8C2, Place du Portage
Gatineau
Québec
K1A 0S5

Title - Sujet Navtex Transmitters Equipment	
Solicitation No. - N° de l'invitation F7048-160040/A	Amendment No. - N° modif. 001
Client Reference No. - N° de référence du client F7048-160040	Date 2023-07-12
GETS Reference No. - N° de référence de SEAG PW-\$\$QF-120-29101	
File No. - N° de dossier 120qf.F7048-160040	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM Eastern Daylight Saving Time EDT on - le 2023-08-18 Heure Avancée de l'Est HAE	
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: Johnston, Charlene	Buyer Id - Id de l'acheteur 120qf
Telephone No. - N° de téléphone (873) 354-9869 ()	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

AMENDMENT 001 IS RAISED TO RESPOND TO THE FOLLOWING BIDDER QUESTIONS AND INCLUDE ANNEX `C` SOW BID EVALUATION AND ANNEX `D` TSOR BID EVALUATION:

#	Question	Response
1	Do you have a list of approved installation partners working for CCG?	The CCG does not have a list of installation partners.
2	The above-mentioned Solicitation includes many commercial and technical requirements which need to be addressed in full. However, national summer holidays period from 8 th July to 30 th July, means our company will be closed for 3 weeks. We therefore respectfully request an extension be granted to and including 31 st August. This extension will permit our company to complete our bid in a professional manor.	In consideration of this request CCG/Canada extends the closing date for this RFP to Friday August 18th
3	We have downloaded 2 documents from your website , one in English and one in French, but we are not sure that these 2 documents include all annexes (A to H) as indicated in the List of Attachments (pg. 2). Can you confirm ?	Annexes C,D and H will be provided under separate cover as an amendment to the RFP
4	We understood from the technical requirements that you want to receive a redundant (hot & standby) transmitter at each of the sites. The financial evaluation sheet in appendix E shows odd numbers for Item 1 "Navtex operational transmitter" that are less than twice the numbers for Item 2 "Automatic Antenna Tuning Units". Please confirm that most installations have a dual antenna configuration, e.g. when the number of transmitters is 10 and the number of AATUs is 9, we can assume that 8 transmitter/AATU pairs are connected to 8 antennas, and the remaining 2 transmitters share one AATU + antenna. Also confirm that antenna switching units are not within the scope of this tender.	<p>In reference to the distribution of quantities of equipment listed in the Financial Evaluation Chart, these represent an initial estimation of equipment quantities to be delivered in a particular year reflecting budget allocation and installation priorities and include a combination of equipment required for the College for training, operational sites, Test Lab, and sparing.</p> <p>The equipment quantities identified in Appendix B: Deliverable List included with the SOW describe the planned sector by sector location distribution of equipment.</p> <p>Each NAVTEX transmitter site will have two NAVTEX transmitters; a main and a backup transmitter. Five of the sites have two antennas; one for each of the transmitters: Those sites each require two AATUs. The other sites each have one antenna and require one AATU for the two transmitters.</p> <p>Antenna switching is not within the scope of this tender.</p>
5	We would like to receive the block diagram of each site in order to be able to understand Technical Statement of requirements	Block diagrams are provided here (see below) depicting both variances of CCG's NAVTEX site equipment configurations.

6	4.5.4.2 states that the SAT must be conducted within five (5) working days after the equipment has been installed by CCG. This is extremely short, especially for companies coming from abroad. Can we foresee more time or define an acceptable planning ? Do you plan to use the same installation team for all the sites, or do you work with different installation teams in parallel ?	The installations will be performed by various CCG production teams that are located at different workshops through out the country. Equipment installations and SAT will be planned in collaboration with the vendor a number of weeks in advance
7	We are very interested to participate to this tender and would like to respond in a professional way. Given the holiday period in Europe we would like to ask for an extension of 1 month.	: Refer to previous response (Question # 2) for an extension request to accommodate the summer holiday period in Europe.
8	Appendix B, section 5.2 on the interface to the CCS, please state the tolerances on logic levels, and the shorting current that will be drawn on each line.	<p>Tolerance levels:</p> <ul style="list-style-type: none"> - Each monitored voltage from the transmitter allows for the configuration of a threshold range of $\pm X$, where X is a value between 1 and 5VDC using 0.5 increments. In the case where +5V is defined as the reference voltage, a maximum ± 2VDC threshold shall be allowed. - Control signals to the transmitter will be nominal voltage $\pm 5\%$. <p>Shorting current:</p> <ul style="list-style-type: none"> - The output logical signal from the transmitter (Transmitter Ready) will be fed to an Analog to Digital converter of high impedance. As a result, a 0V or grounded signal will sink or draw less than 1mA.
9	Appendix A, Statement Of Work. Please provide the various "Data Item Description" documents referenced "DID xxx".	Please refer to Appendix D: Contract Data Requirements List and Data Item Description Deliverables included with the SOW for the documentation describing each of the DIDs.

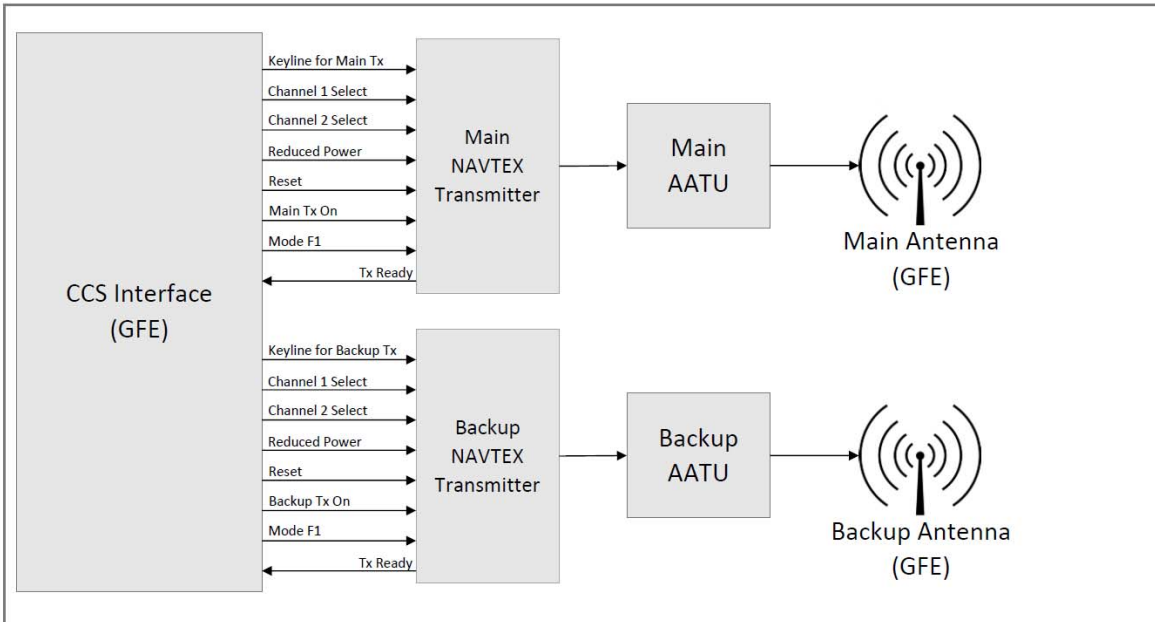


Figure 1: Block Diagram of a Typical NAVTEX Transmitter Site with Two Antennas.

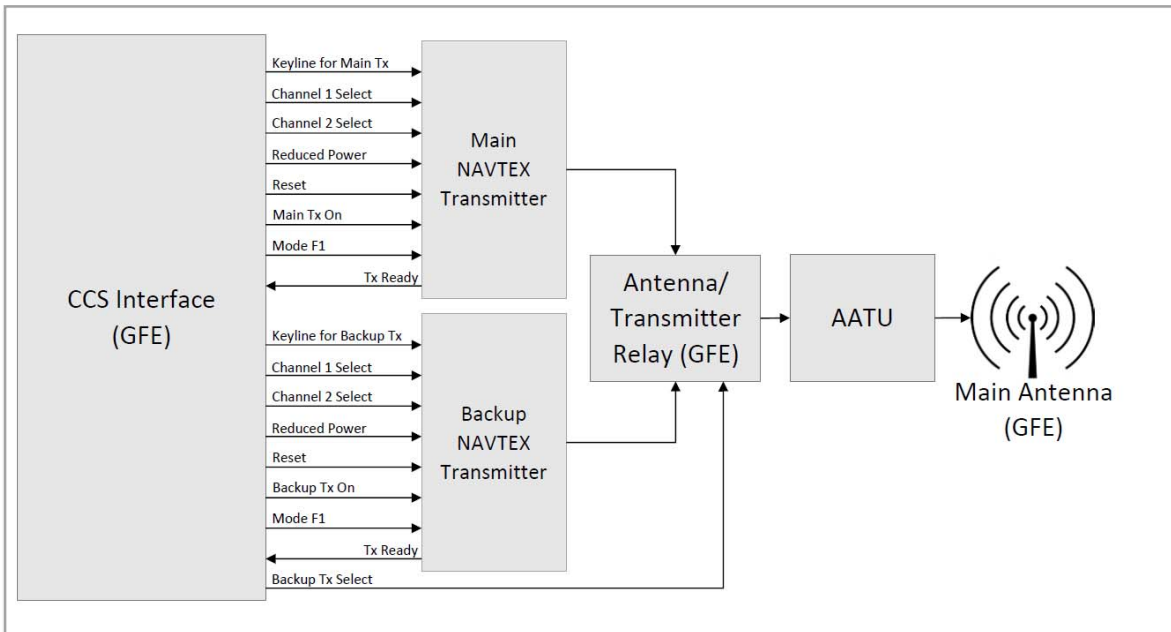


Figure 2: Block Diagram of a Typical NAVTEX Transmitter Site with One Antenna

NAVTEX TRANSMITTER PROCUREMENTS STATEMENT OF WORK

All Bidders must submit a completed NAVTEX Equipment Procurements Bid Evaluation Matrix.

This Matrix provides a list of items (headings and subheadings) contained in the specified documents. Each requirement is listed. All proposals shall be reviewed using this Matrix. Bidders must annotate if Mandatory compliance items are COMPLIANT OR NON-COMPLIANT. Bidders must annotate if Desirable compliance items are COMPLIANT, PARTIALLY-COMPLIANT OR NON-COMPLIANT.

It is the Bidders' responsibility to provide in their proposals clear references to the proof of compliance for mandatory and desirable requirements (e.g. section and page number, where the information can be located in their documentation). For INFORMATION compliance items, no response is required. This does not remove the obligation of the bidder to understand and comply with the requirement when performing the work under any resultant contract. If only a heading or subheading is used, the Bidders' proposals must comply with all requirements detailed under this heading including all sub headings and sub-sub headings etc. Any additional details for a particular section included under the COMMENTS is intended to specify particular details that must be included over and above general information to support bidders' statement of compliance.

The column titled "Compliance Demonstration Method" indicates the minimum required for demonstrating Bid compliance with a mandatory or desirable requirement. Only the Compliance Demonstration Methods (indicated in the Compliance Matrix by the following letter codes) are acceptable for supporting a Bidder's claim of compliance for each of the requirements. For some requirements, two or more Compliance Demonstration Methods can be used, in these cases, the "or" means that it is the Bidder's decision which method they choose to demonstrate compliance but only one method will be used to evaluate the compliance and not a partial evaluation of the two methods.

Letter	Compliance Demonstration Method
"A"	The Bidder must provide a compliance statement to agree that the stated work will be completed, or that the stated requirement will be met.
"D"	The Bidder must provide details as to how the work will be undertaken, or how the stated requirement will be met.
"W"	The Bidder must include the requested information with the Bid.
"S"	The Bidder must provide product specifications, manuals, or other published documentation that demonstrates that the solution(s) proposed fully complies with the requirement.
"M"	The Bidder must provide analysis or simulation predicting the performance of solution(s) proposed, that demonstrates full compliance with the requirement.

“T”	The Bidder must provide test results or documented performance of existing equipment proposed, that demonstrates full compliance with the requirement.
“N/A”	Compliance Demonstration not applicable or not required.

Bidder Name		Receiver name or identifier				For CCG Use (Met or Not Met)		For CCG Comments	
Section	Compliance M= Mandatory D= Desirable I= Information	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)					
1	I								
2	Title								
2.1	Title								
2.1.1	I								
2.1.2	I								
2.1.3	M								This will be verified in the bid proof of performance acceptance test.
2.1.4	I								
2.1.5	I								
2.1.6	I								
2.2	Title								
2.2.1	I								
2.3	Title								
2.3.1	I								

Bidder Name		Receiver name or identifier					Bidder Enter Contractor Reference (Bid Document, section # and Page)		For CCG Use (Met or Not Met)		For CCG Comments	
Section	Compliance M= Mandatory D= Desirable I= Information	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments	For CCG Use (Met or Not Met)	For CCG Comments				
3	Title											
3.1	M	A										
3.1.1	M	A										
3.1.2	M	A										
3.1.3	M	A										
4	M	A										
4.1	Title											
4.1.1	Title											
4.1.1.1	M	A										
4.1.1.2	M	A										
4.1.1.3	I											
4.1.2	Title											
4.1.2.1	M	A										
4.1.2.2	M	A										
4.1.3	Title											
4.1.3.1	M	A										
4.1.3.2	M	A										
4.1.3.3	M	A										
4.1.3.4	M	A										

Bidder Name		Receiver name or identifier					For CCG Use		For CCG Comments	
Section	Compliance M= Mandatory D= Desirable I= Information	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Compliance Demonstration Method	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments
4.1.4.1	M	A								
4.1.5	Title									
4.1.5.1	M	A								
4.2	Title									
4.2.1	Title									
4.2.1.1	M	W								
4.2.2	Title									
4.2.2.1	I									
4.2.2.2	M	D								
4.3	Title									
4.3.1	Title									
4.3.1.1	M	A								
4.3.1.2	M	A								
4.3.1.3	M	A								
4.3.1.4	M	A								
4.3.1.5	M	A								
4.3.1.6	I									

Bidder Name		Receiver name or identifier					Bidder Enter Contractor Reference (Bid Document, section # and Page)		For CCG Use (Met or Not Met)		For CCG Comments	
Section	Compliance M= Mandatory D= Desirable I= Information	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments	For CCG Use (Met or Not Met)	For CCG Comments				
4.3.1.7	M	A										
4.3.1.8	I											
4.3.1.9	M	A										
4.3.2	Title											
4.3.2.1	M	A										
4.3.2.2	M	W										
4.3.2.3	M	A										
4.3.2.4	M	A										
4.3.3	Title											
4.3.3.1	M	A										
4.3.4	Title											
4.3.4.1	M	W										
4.3.4.2	M	W										
4.3.4.3	M	A										
4.3.4.4	M	A										
4.3.4.5	M	A										
4.3.4.6	M	A										
4.3.5	Title											
4.3.5.1	M	A										

Bidder Name		Receiver name or identifier				
Section	Compliance	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments
4.3.5.2	M	A				
4.3.5.3	M	A				
4.3.5.4	M	A				
4.3.5.5	M	A				
4.3.6	Title					
4.3.6.1	M	A				
4.3.6.2	M	A				
4.3.6.3	M	A				
4.3.7	Title					
4.3.7.1	M	A				
4.3.7.2	M	A				
4.3.7.3	M	A				
4.3.7.4	M	A				
4.3.7.5	M	A				
4.3.8	Title					
4.3.8.1	M	A				
4.3.8.2	M	A				
4.3.8.3	M	A				

Bidder Name		Receiver name or identifier					For CCG Use		For CCG Comments	
Section	Compliance M= Mandatory D= Desirable I= Information	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments				
4.3.8.4	M	A								
4.3.8.5	M	A								
4.4	Title									
4.4.1	Title									
4.4.1.1	M	W				Bidder must identify what industry standard project management methodology they are using referring to which standard and version, and provide a description citing examples of where this has been applied and what percentage of it's work this methodology is applied to. If the Contractor is not using a formally recognized industry standard such as PMBOK®, PRINCE2® or PMI® Agile for managing it's work, then the Bidder must submit with the bid it's PM methodology and processes manuals.				
4.4.2	Title									
4.4.2.1	M	A								
4.4.2.2	M	A								
4.4.3	Title									
4.4.3.1	M	A								
4.4.4	Title									
4.4.4.1	M	A								

Bidder Name		Receiver name or identifier				
Section	Compliance	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments
4.4.5	Title					
4.4.5.1	M	A				
4.4.5.2	M	A				
4.4.6	Title					
4.4.6.1	M	A				
4.4.6.2	M	A				
4.4.7	Title					
4.4.7.1	M	A				
4.4.7.2	M	A				
4.4.8	Title					
4.4.8.1	M	A				
4.4.8.2	M	A				
4.4.9	Title					
4.4.9.1	M	A				
4.4.9.2	M	A				
4.5	Title					
4.5.1	Title					
4.5.1.1	M	A				

Bidder Name		Receiver name or identifier					For CCG Use		For CCG Comments	
Section	Compliance M= Mandatory D= Desirable I= Information	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments				
4.5.1.2	M	A								
4.5.2	Title									
4.5.2.1	M	A								
4.5.3	Title									
4.5.3.1	M	A								
4.5.3.1.a	M	A								
4.5.3.1.b	M	A								
4.5.3.1.c	M	A								
4.5.3.1.d	M	A								
4.5.3.1.e	M	A								
4.5.3.1.f	M	A								
4.5.3.1.g	M	A								
4.5.3.1.h	M	W							Provide test methodology with the bid.	
4.5.3.1.i	M	A								
4.5.3.1.j	M	A								
4.5.3.1.k	M	A								
4.5.4	Title									
4.5.4.1	M	A								
4.5.4.2	M	A								

Bidder Name		Receiver name or identifier				
Section	Compliance	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments
4.5.4.3	M	A				
4.5.4.3 a.	M	A				
4.5.4.3 b.	M	A				
4.5.4.3 c.	M	A				
4.5.4.3 d.	M	A				
4.5.4.3 e.	M	A				
4.5.4.3 f.	M	A				
4.5.5	Title					
4.5.5.1	M	A				
4.5.5.1 a.	M	A				
4.5.5.1 b.	M	A				
4.5.5.1 c.	M	A				
4.5.5.1 d.	M	A				
4.5.5.1 e.	M	A				
4.5.5.1 f.	M	A				
4.5.5.1 g.	M	A				
4.6	Title					
4.6.1	Title					

Bidder Name		Receiver name or identifier					Bidder Enter Contractor Reference (Bid Document, section # and Page)		For CCG Use (Met or Not Met)		For CCG Comments	
Section	Compliance M= Mandatory D= Desirable I= Information	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments	For CCG Use (Met or Not Met)	For CCG Comments				
4.6.1.1	M	A										
4.6.1.2	M	A										
4.6.1.3	M	A										
4.6.1.4	M	A										
4.6.1.5	M	A										
4.6.1.6	M	A										
4.6.1.7	M	A										
4.6.1.8	M	A										
4.7	Title											
4.7.1	Title											
4.7.1.1	M	A										
4.7.1.2	M	A										
4.7.1.2 a.	M	A										
4.7.1.2 b.	M	A										
4.7.1.2 c.	M	A										
4.7.1.2 d.	M	A										
4.7.1.2 e.	M	A										
4.7.1.2 f.	M	A										
4.7.1.2 g.	M	A										

Bidder Name		Receiver name or identifier				
Section	Compliance	Compliance Demonstration Method	Bidder Response	Bidder Enter Contractor Reference	For CCG Use (Met or Not Met)	For CCG Comments
	M= Mandatory D= Desirable I= Information		For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	(Bid Document, section # and Page)		
4.7.1.2.h.	M	A				
4.7.2	Title					
4.7.2.1	M	A				
4.7.2.2	M	A				
5	Title					
5.1	M	A				
5.1.1	Title					
5.1.1.1	M	A				
5.1.1.2	M	A				
5.1.2	Title					
5.1.2.1	M	A				
5.1.3	Title					
5.1.3.1	M	A				
5.1.3.2	M	A				
5.1.4	Title					
5.1.4.1	M	A				
Appendix A	I					
Appendix B	M					

Bidder Name		Receiver name or identifier				
Section	Compliance M= Mandatory D= Desirable I= Information	Compliance Demonstration Method	Bidder Response For M indicate C = Compliant or N = Non-Compliant For D indicate C = Compliant, P = Partially-Compliant or N = Non-Compliant Shaded indicates no response required.	Bidder Enter Contractor Reference (Bid Document, section # and Page)	For CCG Use (Met or Not Met)	For CCG Comments
Appendix C	M					
Appendix D	M					
Appendix E	M					

NAVTEX TRANSMITTER PROCUREMENT TSOR BID EVALUATION MATRIX

All Bidders must submit a completed NAVTEX Equipment Procurement TSOR Bid Evaluation Matrix.

This Matrix provides a list of items (headings and subheadings) contained in the specified documents. Each requirement is listed. All proposals shall be reviewed using this Matrix. Bidders must annotate if Mandatory compliance items are COMPLIANT OR NON-COMPLIANT. If there is a choice to be made between different options, Bidders must annotate the choice made.

It is the Bidders' responsibility to provide in their proposals clear references to the proof of compliance for mandatory requirements (e.g. section and page number, where the information can be located in their documentation). For INFORMATION compliance items, no response is required. This does not remove the obligation of the Bidder to understand and comply with the requirement when performing the work under any resultant contract. If only a heading or subheading is used, the Bidders' proposals must comply with all requirements detailed under this heading including all sub headings and sub-sub headings etc. Any additional details for a particular section included under the COMMENTS is intended to specify particular details that must be included over and above general information to support bidders' statement of compliance.

The column titled "Compliance Demonstration Method" indicates the minimum required for demonstrating Bid compliance with a mandatory or desirable requirement. Only the Compliance Demonstration Methods (indicated in the Compliance Matrix by the following letter codes) are acceptable for supporting a Bidder's claim of compliance for each of the requirements. For some requirements, two or more Compliance Demonstration Methods can be used, in these cases, the "or" means that it is the Bidder's decision which method they choose to demonstrate compliance but only one method will be used to evaluate the compliance and not a partial evaluation of the two methods.

The Canadian Coast Guard has a test environment in its laboratory that replicates the CCG operational system. CCG will be connecting the proposed NAVTEX Transmitter Equipment to this test environment and verifying that each requirement listed in the 'Proof of Bid' column is met.

Bidder Name:								
Receiver Name or Identifier:								
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments
		<p>C – The Bidder must choose between available options.</p> <p>I – This is information, and no response is required.</p> <p>M – This requirement is mandatory.</p> <p>T – This is a title and no response is required.</p>	Available options are listed.	<p>A - The Bidder must provide a compliance statement to agree that the stated work will be completed, or that the stated requirement will be met.</p> <p>S - The Bidder must provide product specifications, manuals, or other published documentation that demonstrates that the solution(s) proposed fully complies with the requirement.</p> <p>M - The Bidder must provide analysis or simulation predicting the performance of solution(s) proposed, that demonstrates full compliance with the requirement.</p> <p>T - The Bidder must provide test results or documented performance of existing equipment proposed, that demonstrates full compliance with the requirement.</p> <p>N/A - Compliance Demonstration not applicable or not required.</p>	<p>C – Compliant with this requirement</p> <p>N – Non-compliant with this requirement</p> <p>N/A – This requirement is not applicable</p> <p>* In addition to Bidder Response, use this column to indicate Choice for applicable requirements.</p>	P – This requirement will be tested as part of Proof of Bid Testing		

Bidder Name:									
Receiver Name or Identifier:									
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments	
1	Document Management	I		N/A	N/A				
2	List of Acronyms and Initialisms	I		N/A	N/A				
3	Introduction	I		N/A	N/A				
3.1	Background	I		N/A	N/A				
3.2	Purpose	I		N/A	N/A				
3.3	Scope	I		N/A	N/A				
3.4	Definition	I		N/A	N/A				
3.5	Basic Operational Criteria and Level of Service	I		N/A	N/A				
3.6	NAVTEX Transmitter Site Locations	I		N/A	N/A				
4	General Requirements	T		N/A	N/A				
4.1	Type of Equipment	T		N/A	N/A				
4.1.1	1 kW NAVTEX Transmitter	T		N/A	N/A				
4.1.1.1	COTS Equipment	M		S					
4.1.1.2	Modular Construction to LRU	M		S					

Bidder Name:											
Receiver Name or Identifier:											
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments			
4.1.1.3	Weight for One Technician	M		S							
4.1.1.4	Solid State	M		S							
4.1.1.5	BIST capabilities	M		S		P					
4.1.2	Automatic Antenna Tuning Unit	T		N/A	N/A						
4.1.2.1	All Weather	M		S							
4.1.3	Remote Control Software	T		N/A	N/A						
4.1.3.1	Provide command set and documentation	M		S							
4.1.4	Simple Network Management Protocol	T		N/A	N/A						
4.1.4.1	BIST on SNMP v2	M		S							
4.1.4.2	MIB	M		S		P					
4.2	Applicable Documents	I		N/A	N/A						
4.3	Electrical Safety	T		N/A	N/A						
4.3.1	Canadian Electrical Code - Certified	I		N/A	N/A						

Bidder Name:											
Receiver Name or Identifier:											
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments			
4.3.2	Certification Marks	T		N/A	N/A						
4.3.2.1	Certification Mark at time of delivery	M		A							
4.3.2.2	Safety Council of Canada accredited company	I		N/A	N/A						
4.3.2.3	Provincial Authorities	I		N/A	N/A						
4.3.2.4	List of authorities	I		N/A	N/A						
4.3.2.5	Example	I		N/A	N/A						
4.3.3	Personnel Safety Requirements	T		N/A	N/A						
4.3.3.1	Incorporate safety requirements	I		N/A	N/A						
4.3.3.1.a	Protection from voltages over 30 volts	M		S							
4.3.3.1.b	Ground potential	M		S							
4.3.3.1.c	Grounding to CEC	M		A							
4.3.3.1.d	Guards and Barriers over 70 volts	M		S							

Bidder Name:											
Receiver Name or Identifier:											
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments			
4.3.3.1.e	Enclosed in excess of 300 volts	M		S							
4.3.3.1.f	Interlock switches	M		S							
4.3.4	Non-ionizing Radiation	T		N/A	N/A						
4.3.4.1	Non-ionizing Radiation to Safety Code 6	M		A							
4.3.5	Environmental Conditions (Indoor Heated and Cooled)	T		N/A	N/A						
4.3.5.1	Environmental Conditions (Indoor Heated and Cooled)	I		N/A	N/A						
4.3.5.1.a	Operational	M		S							
4.3.5.1.b	Storage and Transportation	M		S							
4.3.6	Power Transients and Interruptions	T		N/A	N/A						
4.3.6.1	Overvoltage	M		S							
4.3.6.2	Voltage Spikes	M		S							

Bidder Name:								
Receiver Name or Identifier:								
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments
4.3.6.3	Power Interruption	M		S		P		
4.3.7	Equipment Identification	T		N/A	N/A			
4.3.7.1	Nameplate Information	M		A				
4.4	Reliability and Maintainability	T		N/A	N/A			
4.4.1	CCG defines reliability as: The probability that an item will perform its intended function for a specified interval under stated conditions.	I		N/A	N/A			
4.4.2	CCG defines Mean Time Between Failures (MTBF) as: for a particular interval, the total functioning life of a population of an item divided	I		N/A	N/A			

Bidder Name:								
Receiver Name or Identifier:								
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments
	by the total number of failures within the population during the measurement interval.							
4.4.3	The Contractor must provide a NAVTEX transmitter that has an overall MTBF of at least 10,000 hours.	M		S				
4.4.4	The Contractor must provide MTBF calculations in accordance with MIL-HDBK-217F.	M, C	Choose 4.4.4 or 4.4.5	M if 4.4.4 chosen; N/A if 4.4.5 chosen.				
4.4.5	As an alternative to using MIL-HDBK-217F, MTBF calculations based on field	M, C	Choose 4.4.5 or 4.4.4	T if 4.4.5 chosen; N/A if 4.4.4 chosen.				

Bidder Name:								
Receiver Name or Identifier:								
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments
4.4.6	failure rates may be submitted. The Mean Time to Repair (MTTR) for any equipment must be less than or equal to 60 minutes.	M		S				
4.5	NAVDAT Compatibility	T		N/A	N/A			
4.5.1	Canada may decide at a later date to use the NAVDAT system, so the Transmitter and AATU must be capable of transmitting NAVDAT signals at a frequency of 500 kHz, according to ITU Rec. ITU-R M.2010-1. A	M		A or S				

Bidder Name:									
Receiver Name or Identifier:									
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments	
	NAVDAT modulator may be used to attain compliance with this section, but the NAVDAT modulator is not part of this TSOR requirement.								
4.6	Electromagnetic Requirements	T		N/A	N/A				
4.6.1	The transmitter must meet the requirements of ISED "RSS-Gen — General Requirements for Compliance of Radio Apparatus"	M		A					
5	Technical and Functional Specifications	T		N/A	N/A				
5.1	NAVTEX Transmitter Specifications	T		N/A	N/A				

Bidder Name:											
Receiver Name or Identifier:											
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments			
5.1.1	The solid state transmitters must meet or exceed the following specifications:	I		N/A	N/A						
5.1.1.a)	Frequency Range:	M		S		P					
5.1.1.b)	Frequency Resolution:	M		S		P					
5.1.1.c)	Frequency Temperature Stability:	M		S							
5.1.1.d)	Frequency Time Stability:	M		S							
5.1.1.e)	Emission Mode:	M		S		P					
5.1.1.f)	Keying Rate:	M		S		P					
5.1.1.g)	Channel Memory:	M		S		P					
5.1.1.h)	Power Output:	M		S		P					
5.1.1.i)	Harmonic Suppression:	M		S							
5.1.1.j)	Hum and Noise:	M		S							
5.1.1.k)	RF Output Connector:	M		S		P					
5.1.1.l)	VSWR Protection:	M		S		P					
5.1.1.m)	Remote/Local Interface:	M		S		P					

Bidder Name:									
Receiver Name or Identifier:									
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments	
5.1.1.n)	Control Software:	M		S					
5.1.1.o)	Transmitter local control/readback:	M		S		P			
5.1.1.p)	Transmitter remote control/readback:	M		S		P			
5.1.1.q)	Processor	M		S		P			
5.1.1.r)	Maintainability:	M		S					
5.1.1.s)	Transmitter Mounting:	M		S					
5.1.1.t)	Mean Time Between Failures:	M		S					
5.1.1.u)	AATJ Controls:	I		N/A					
5.1.1.v)	Interlock:	M		S					
5.1.1.w)	Supply Voltage:	M		S		P			
5.1.1.x)	Power Failure Recovery:	M		S		P			
5.2	Interface to the Communications Control Systems Choose one of Interface A or B.	T		N/A	N/A				
5.2.1	INTERFACE A	C	Choose Interface A (5.2.1) or	Indicate choice					

Bidder Name:								
Receiver Name or Identifier:								
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments
			Interface B (5.2.2)					
5.2.1.1	Transmitter Ready	M, C		S if Interface A chosen; N/A if Interface A chosen.		P		
5.2.1.2	Transmitter On	M, C				P		
5.2.1.3	Transmitter Keying	M, C				P		
5.2.1.4	Channel 1 Selected	M, C				P		
5.2.1.5	Channel 2 Selected	M, C				P		
5.2.1.6	Reduced Output Power	M, C				P		
5.2.1.7	F1 Mode	M, C				P		
5.2.1.8	Reset	M, C				P		
5.2.1.9	Ground	M, C				P		
5.2.2	INTERFACE B	C	Choose Interface A (5.2.1) or Interface B (5.2.2)	Indicate choice				
5.2.2.1	Transmitter Ready	M, C		S if Interface B chosen; N/A if Interface A chosen.		P		
5.2.2.2	Transmitter On	M, C				P		

Bidder Name:								
Receiver Name or Identifier:								
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments
5.2.2.3	Transmitter Keying	M, C				P		
5.2.2.4	Channel 1 Selected	M, C				P		
5.2.2.5	Channel 2 Selected	M, C				P		
5.2.2.6	F1 Mode Low Power	M, C				P		
5.2.2.7	F1 Mode High Power	M, C				P		
5.2.2.8	Reset	M, C				P		
5.2.2.9	Ground	M, C				P		
5.2.3	Electrical	T		N/A		N/A		
5.2.3.1	Logic line voltage	M, C	Choose one of: 5V, 12V, 24V	S		P		
5.2.3.2	Input Function	I		N/A		N/A		
5.2.3.2.1	Open Circuit Low State	M		S		P		
5.2.3.2.2	Grounded Low State	M		S		P		
5.2.3.3	Output Function	M		S		P		
5.3	Automatic Antenna Tuning	T		N/A		N/A		

Bidder Name:											
Receiver Name or Identifier:											
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments			
	Unit Specifications										
5.3.1	All Weather	M		S		P					
5.3.2	Enclosure	M		S							
5.3.3	Specifications	I		N/A	N/A						
5.3.3.a)	Operating Frequency Range	M		S		P					
5.3.3.b)	Channels	M		S		P					
5.3.3.c)	Antenna Input Characteristics	I		N/A	N/A						
5.3.3.d)	Automatic Tuning Range	M		S							
5.3.3.e)	Input Impedance	M		S		P					
5.3.3.f)	VSWR	M		S		P					
5.3.3.g)	Power Rating	M		S		P					
5.3.3.h)	Controls (Minimum)	M		S		P					
5.3.3.i)	Environmental (Operating)	M		S							
5.3.3.j)	MTBF	M		S							
5.3.3.k)	Power Requirements	M		S		P					
5.3.3.l)	Channel Change Time	M		S		P					
5.3.3.m)	Metering	M		S		P					

	Bidder Name:							
	Receiver Name or Identifier:							
Section	Description	Compliance Requirement	Options	Compliance Demonstration Method	Bidder Response	Proof of Bid	For CCG Use (Requirement Met/Not Met)	For CCG Comments
5.3.3.n)	Dimensions	M		S				