



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 654-2017

SUPPLY AND DELIVERY OF RADIO SERVICE MONITORS

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 SUPPLY AND DELIVERY OF RADIO SERVICE MONITORS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, December 19, 2017.

B2.2 Proposals determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. ENQUIRIES

B3.1 All enquiries shall be directed to the Contract Administrator identified in D5.1.

B3.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

B3.3 If the Proponent is unsure of the meaning or intent of any provision therein, the Proponent should request clarification as to the meaning or intent prior to the Submission Deadline.

B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator to all Proponents by issuing an addendum.

B3.5 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator only to the Proponent who made the enquiry.

B3.6 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the Contract Administrator. Failure to restrict correspondence and contact to the Contract Administrator may result in the rejection of the Proponents Proposal Submission.

B3.7 The Proponent shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B4. CONFIDENTIALITY

B4.1 Information provided to a Proponent by the City or acquired by a Proponent by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Proponent before receipt hereof; or
- (b) becomes publicly known other than through the Proponent; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B4.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B5. ADDENDA

- B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B5.2.2 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.3 The Proponent shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Request for Proposal.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 The Proponent shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Proponent who requested approval of the substitute.
- B6.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Proponents. The Proponent requesting

and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.

- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Proponent may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Proponent bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B20.
- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B7. PROPOSAL SUBMISSION

- B7.1 The Proposal shall consist of the following components:
- (a) Form A: Proposal;
 - (b) Form B: Prices; and
 - (c) Form N: Mandatory Requirements in accordance with B10
- B7.2 The Proposal should also consist of the following components:
- (a) Form N: Non-Mandatory Requirements in accordance with B11;
 - (b) Experience of Proponent and Subcontractors (Section C) in accordance with B12.
- B7.3 Further to B7.1 all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B7.4 Further to B7.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.
- B7.5 Proponents should submit one (1) unbound 8.5” x 11” original (marked “original”) including drawings and three (3) copies (copies can be in any size format) for sections identified in B7.1 and B7.2.
- B7.6 Proposal format, including type of binding, number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their team.
- B7.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B20.1(a).
- B7.8 The Proposal shall be submitted enclosed and sealed in an envelope/package clearly marked with the RFP number and the Proponent's name and address.
- B7.9 Proposals submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.10 Proposals shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor

Winnipeg MB R3B 1J1

B7.11 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B8. PROPOSAL

B8.1 The Proponent shall complete Form A: Proposal, making all required entries.

B8.2 Paragraph 2 of Form A: Proposal shall be completed in accordance with the following requirements:

- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
- (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
- (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
- (d) if the Proponent is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B8.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.

B8.3 In Paragraph 3 of Form A: Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.

B8.4 Paragraph 11 of Form A: Proposal shall be signed in accordance with the following requirements:

- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
- (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Proponent is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
- (d) if the Proponent is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Proposal should be printed below such signatures.

B8.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B9. PRICES

B9.1 The Proponent shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.1.1 Notwithstanding C10.1.3, prices on Form B: Prices shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Proposals.

- B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B9.4.1 Notwithstanding C10.1.1 and C10.1.3, prices on Form B: Prices shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.
- B9.5 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. FORM N: MANDATORY REQUIREMENTS

- B10.1 Proponent shall complete Form N: Mandatory Requirements, making all required entries

B11. FORM N: NON-MANDATORY REQUIREMENTS

- B11.1 Proponent should complete Form N: Non-Mandatory Requirements, making all required entries.

B12. EXPERIENCE OF PROPONENT AND SUBCONTRACTORS (SECTION C)

- B12.1 Proposals should include, for each of the Fixed RTE and Portable RTE:
- (a) details demonstrating the history and experience of the Proponent and Subcontractors in supplying Radio Test Equipment (RTE) and services – i.e. maintenance, support, warranty, & calibration on up to three projects of similar complexity, scope and value. Provide three references with telephone numbers.
- B12.2 The Proposal should include general firm profile information, including years in business, average volume of work, number of employees and other pertinent information for the Proponent and all Subcontractors.

B13. DISCLOSURE

- B13.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B13.2 The Persons are:
- (a) Navair Technologies
 - (b) Testforce Systems Inc.

B14. QUALIFICATION

- B14.1 The Proponent shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

- B14.2 The Proponent and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>
- B14.3 The Proponent and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
- B14.4 The Proponent shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Proponent and of any proposed Subcontractor.
- B14.5 The Proponent shall provide, on the request of the Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Work.

B15. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B15.1 Proposals will not be opened publicly.
- B15.2 After award of Contract, the names of the Proponents and the Contract amount of the successful Proponent will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B15.3 The Proponent is advised that any information contained in any Proposal Submission may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B15.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of his/her submission upon written request to the Contract Administrator.

B16. IRREVOCABLE OFFER

- B16.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 10 of Form A: Proposal.
- B16.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any offer shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 10 of Form A: Proposal.

B17. WITHDRAWAL OF OFFERS

- B17.1 A Proponent may withdraw his/her Proposal without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B17.1.1 Notwithstanding C21, the time and date of receipt of any notice withdrawing a Proposal shall be the time and date of receipt as determined by the Manager of Materials.

B17.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Proposal or the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.

B17.1.3 If a Proponent gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Proposal until after the Submission Deadline has elapsed;
- (b) open the Proposal to identify the contact person named in Paragraph 3 of Form A: Proposal and the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal; and
- (c) if the notice has been given by any one of the persons specified in B17.1.3(b), declare the Proposal withdrawn.

B17.2 A Proponent who withdraws his/her Proposal after the Submission Deadline but before his/her offer has been released or has lapsed as provided for in B16.2 shall be liable for such damages as are imposed upon the Proponent by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B18. INTERVIEWS

B18.1 The Contract Administrator may, in his/her sole discretion, interview Proponents during the evaluation process.

B18.2 The Contract Administrator may, in his/her sole discretion, ask Proponents to provide product demonstrations to given scenarios.

B19. NEGOTIATIONS

B19.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.

B19.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.

B19.3 If, in the course of negotiations pursuant to B19.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B20. EVALUATION OF PROPOSALS

B20.1 Award of the Contract shall be based on the following evaluation criteria:

- (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: (pass/fail)
- (b) qualifications of the Proponent and the Subcontractors, if any, pursuant to B14: (pass/fail)
- (c) Form N: Mandatory Requirements (pass/fail)
- (d) Total Bid Price ; 50%
- (e) Form N: Non-Mandatory Requirements 45%
- (f) Experience of Proponent and Subcontractors (Section C) 5%

- B20.2 Further to B20.1(a) and B20.1(c), the Award Authority may reject a Proposal as being non-responsive if the Proposal Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B20.3 Further to B20.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is responsible and qualified.
- B20.4 Further to B20.1(d) the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B20.4.1 Optional Service Prices are for information purposes only and will not be evaluated.
- B20.5 Further to B20.1(d), the Non-Mandatory Requirements will be evaluated based on the specifications listed in Form N and E2.
- B20.6 Further to B20.1(e), Experience of Proponent and Subcontractors will be evaluated considering the experience of the organization on projects of similar size and complexity as well as other information requested and submitted in accordance with B12.
- B20.7 Notwithstanding B20.1(e) and B20.1(f), where Proponents fail to provide a response to B7.2(a) to B7.2(b), the score of zero may be assigned to the incomplete part of the response.
- B20.8 This Contract may be awarded on the basis of:
- (a) Alternative 1 – Fixed Bench RTE (New); or
 - (b) Alternative 2 – Fixed Bench RTE (Refurbished).
 - (c) Alternative 1 – Portable RTE (New); or
 - (d) Alternative 2 – Portable RTE (Refurbished)
- as identified on Form B: Prices. Each alternative will be evaluated in accordance with the specified evaluation criteria.
- B20.8.1 Notwithstanding B8.1, the Proponent may, but is not required to, bid on all alternatives.
- B20.8.2 Notwithstanding B26.3, the City shall have the right to choose the alternative that is in its best interests. If the Proponent has not bid on all alternatives, he/she shall have no claim against the City if his/her partial offer is rejected in favour of an award of the Contract on the basis of an alternative upon which he/she has not bid.
- B20.9 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B20.1(a) and B20.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B20.10 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B18.

B21. AWARD OF CONTRACT

- B21.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B21.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be responsible and qualified, and the Proposals are determined to be responsive.
- B21.2.1 Without limiting the generality of B21.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;

- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Proposal is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B21.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Proponent submitting the most advantageous offer.

B21.3.1 Following the award of contract, a Proponent will be provided with information related to the evaluation of his/her Proposal upon written request to the Contract Administrator.

B21.4 Notwithstanding C4 and Paragraph 6 of Form A; Proposal, the City may issue a purchase order to the successful Proponent in lieu of the execution of a Contract.

B21.5 The Contract Documents, as defined in C1.1(n)(ii), in their entirety shall be deemed to be incorporated in and to form a part of the purchase order notwithstanding that they are not necessarily attached to or accompany said purchase order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for the Combined Provision of Goods and Services (2017-02-17)* are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for the Combined Provision of Goods and Services* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for the Combined Provision of Goods and Services*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for the Combined Provision of Goods and Services*, these Supplemental Conditions are applicable to the Work of the Contract.

D2. BACKGROUND

D2.1 The City of Winnipeg operates a variety of land mobile radio systems including P25 Phase 2 simulcast system, MPT1327 Multi-site trunked system, as well as various conventional analog FM channels.

D2.2 The City of Winnipeg Communication System's departmental staffs are responsible for the management, operation, maintenance and support of these LMR systems. As such, Radio Test Equipment - (one fixed bench, one portable) is needed to support the operation and maintenance of repeaters, mobiles and portable radios on these LMR systems.

D2.3 The existing service monitors are in excess of 20 years of age and do not provide the testing capabilities for modern digital land mobile radio equipment. The contemplated equipment provides the service technicians and technologists the ability to test and repair public safety and public service radios on site.

D3. SCOPE OF WORK

D3.1 The Work to be done under the Contract shall consist of :

- (a) Supply of Fixed Bench Radio Test Equipment {RTE} (New or Used/Refurbished) to be used as service monitor for the radios and portables deployed on the network.
- (b) Supply of Portable RTE (New or Refurbished) to be used as service monitor for the radios and portables deployed on the network.

D3.2 The Work shall be done on an "as required" basis during the term of the Contract.

D3.2.1 The type and quantity of Work to be performed under this Contract shall be as authorized from time to time by the Contract Administrator and/or Users.

D3.2.2 Subject to C7.2, the City shall have no obligation under the Contract to purchase any quantity of any item in excess of its actual operational requirements.

D3.3 Notwithstanding D3.1, the type and quantity of Work to be performed under this Contract is subject to annual approval of monies therefore in a budget by Council. Proponents are advised that monies have been approved for work up to and including December 31, 2017.

D3.4 Notwithstanding D3.1, in the event that operational changes result in substantial changes to the requirements for Work, the City reserves the right to alter the type or quantity of work performed under this Contract, or to terminate the Contract, upon thirty (30) Calendar Days written notice by the Contract Administrator. In such an event, no claim may be made for damages on the ground of loss of anticipated profit on Work.

D4. DEFINITIONS

D4.1 When used in this Request for Proposal:

- (a) "**Proponent**" means any Person or Persons submitting a Proposal for Goods and Services;
- (b) "**P25**" means Project 25;
- (c) "**RTE**" means Radio Test Equipment;

(d) “**NIST**” means National Institute of Standards and Technology;

D5. CONTRACT ADMINISTRATOR

D5.1 The Contract Administrator is:

Olawale D. Jegede P.Eng.
Telecommunication Systems Engineer
Telephone No.: 204 986 8363
Email Address: ojegede@winnipeg.ca

D6. NOTICES

D6.1 Notwithstanding C21.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:

The City of Winnipeg
Chief Financial Officer
Facsimile No.: 204 949-1174

D6.2 **Bid Submissions must not be submitted to this facsimile number. Bids must be submitted in accordance with B7.**

D7. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D7.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

D7.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

D7.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;

- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
- (b) the Contract, all deliverables produced or developed; and
- (c) any statement of fact or opinion regarding any aspect of the Contract.

D7.4 A Contractor who violates any provision of D7 may be determined to be in breach of Contract.

SUBMISSIONS

D8. AUTHORITY TO CARRY ON BUSINESS

D8.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

CONTROL OF WORK

D9. COMMENCEMENT

- D9.1 The Contractor shall not commence any Work until he/she is in receipt of a notice of award from the City authorizing the commencement of the Work.
- D9.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D8;
 - (ii) evidence of the workers compensation coverage specified in C6.14;
 - (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

D10. DELIVERY

- D10.1 Goods should be delivered within twenty-one (21) Business Days of the placing of an order, f.o.b. destination, freight prepaid to:

Radio Shop
421 Osborne Street
Winnipeg MB Canada
R3L 2A2

- D10.2 Goods shall be delivered between 8:30 a.m. and 4:30 p.m. on Business Days.
- D10.3 The Contractor shall off-load goods as directed at the delivery location.

MEASUREMENT AND PAYMENT

D11. INVOICES

- D11.1 Further to C10, the Contractor shall submit an invoice for each portion of Work performed to:
- The City of Winnipeg
Corporate Finance - Accounts Payable
4th Floor, Administration Building, 510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: 204 949-0864
Email: CityWpgAP@winnipeg.ca
- D11.2 Invoices must clearly indicate, as a minimum:
- (a) the City's purchase order number;
 - (b) date of delivery;
 - (c) delivery address;
 - (d) type and quantity of work performed;
 - (e) the amount payable with GST and MRST shown as separate amounts; and
 - (f) the Contractor's GST registration number.
- D11.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.
- D11.4 **Bid Submissions must not be submitted to the above facsimile number. Bids must be submitted in accordance with B7.**

D12. PAYMENT

D12.1 Further to C10, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

D12.2 Further to C10, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D13. WARRANTY

D13.1 Notwithstanding C11, the warranty period for each item of Work supplied shall begin on the date of successful delivery and expire **TWO (2) YEARS** thereafter unless extended pursuant to C11.3, in which case it shall expire when provided for thereunder.

D13.2 Notwithstanding D13.1, the City will accept the standard manufacturer warranty over two (2) years.

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS

- E1.1 These Specifications shall apply to the Work.
- E1.2 Proponents are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B6.

E2. GOODS AND SERVICES

- E2.1 The Contractor shall supply Radio Test Equipment in accordance with the requirements hereinafter specified.
- E2.2 Item No. 1 – Fixed Bench Radio Test Equipment (New) shall be provided to meet the specifications given below and also repeated in parts A.1 & A.2 of Form N.
- E2.2.1 Mandatory Requirements:
- (a) Shall support full duplex testing for Analog and Digital FM radios and system tests.
 - (b) Technology:
 - (i) Shall support test and alignment of Project 25 Phase 1 & Phase 2 radios.
 - (ii) Shall be able to generate test signals using P25 Phase 1 and Phase 2 protocols with frequency range of 10MHz to 1.05GHz, resolution 1Hz, and accuracy of ± 1 count.
 - (c) RF Signal Generator: Shall have
 - (i) Frequency Range of 10MHz to 1.05 GHz (standard); 10 MHz to 2.7 GHz (32XOPT058). Both Usable from 100 kHz.
 - (ii) Frequency Resolution of 1 Hz or less.
 - (iii) Frequency accuracy of frequency standard ± 1 count.
 - (iv) Output Level Range:
 - ◆ T/R Port: -130.0 to -30 dBm max for CW or FM; -35 dBm max for AM modulations; -40 dBm max for complex modulations).
 - ◆ Duplex: -130.0 to +10.0 dBm (+10 dBm max for CW or FM; +5 dBm max for AM modulations; 0 dBm max for complex modulation)
 - (v) Output level Resolution: 0.1dB
 - (vi) Output Level Accuracy: 1.0 dB for levels > -110dBm (Typical better than 0.6 dB). 1.5 dB for levels \leq (typical better than ± 1.0 dB)
 - (vii) Shall have a generator spectral purity harmonic spurious specification that is not higher than -30 dBc and have non Harmonic spurious specifications not higher than -40 dBc.
 - (d) RF Receiver: Shall have
 - (i) Demod Selections of AM, FM, FM50us, FM75us, FM750us, AM, USB, and AM LSB
 - (ii) Frequency Range of 10 MHz to 1.05 GHz (Standard); 10 MHz to 2.7 GHz (392XOPT058). Both Usable from 100 kHz.
 - (iii) Sensitivity of < - 100 dBm (for 10 dB SINAD, FM, 25 kHz, 1kHz rate, 6kHz FM Deviation, 300 Hz to 3.4 kHz AF Filter, Pre-amp OFF).
 - (iv) Sensitivity of < - 133 dBm (for 10 dB SINAD, FM, 25 kHz, 1kHz rate, 6kHz FM Deviation, 300 Hz to 3.4 kHz AF Filter, Pre-amp ON).
 - (v) FM Demod Output Level of nominally 1 Vrms (for deviation $\pm 1/4$ of selected BW; 25 kHz BW same output level as 30 kHz BW)

- (vi) AM Demod Output Level of nominally 2 Vrms (100% AM)

- (e) RF Measurements: Shall have
 - (i) RF Power Meter (Broadband):
 - ◆ Frequency Range 10 MHz to 1.05 GHz (Standard); 10 MHz to 2.7 GHz (329XOPT058). Both Usable from 2MHz.
 - ◆ Level Range of 100 mW to 125 W (Usable from 10 mW).
 - ◆ Resolution of 4 digits for W or 0.1 dB.
 - ◆ Accuracy of 10%, 1 digit.
 - ◆ Signal including CW, FM, C4GM and 4FSK.
 - (ii) RF Power Meter (Inband)
 - ◆ Frequency Range of 10 MHz to 1.05 GHz (Standard); 10 MHz to 2.7 GHz (Freq Ext Opt). Both Usable from 100 kHz.
 - ◆ Level Range T/R Port: -60 to +51 dBm and ANT Port of -100 to +10 dBm.
 - ◆ Resolution of 0.1 dB or less.
 - ◆ Accuracy of ± 1 dB.
 - ◆ AM Filter BW of 6.25, 8.33, 10, 12.5, 25, and 30 kHz.
 - ◆ FM Filter of 6.25, 10, 12.5, 25, 30, 100, and 300 kHz.
 - ◆ Signal CW, FM, AM, C4FM, 4FSK, QPSK, and QAM.
 - (iii) RF Counter
 - ◆ Range 10MHz to 1.05 GHz (Standard); 10 MHz to 2.7 GHz (392XOPT058). Both usable from 100 kHz, Auto-tune).
 - ◆ Resolution 1 Hz or less.
 - ◆ Accuracy of Frequency Standard \pm count.
 - ◆ Level Range for Auto-tune: T/R Port of -10 to +50 dBm and ANT Port of -60 to +10 dBm.
 - ◆ Signal including CW, FM, AM < 70 % modulation.
 - (iv) RF Error Meter
 - ◆ Range: 0 to ± 2.5 MHz from receiver frequency (6 MHz IF BW).
 - ◆ Resolution 1 Hz or less.
 - ◆ Accuracy: Frequency standard \pm count.
 - ◆ Level Range T/R Port: -10 to +50 dBm; ANT Port: -60 to +10 dBm.
 - ◆ Signal including CW, FM, AM < 70% modulation.
 - (v) Shall have RF Input port that can accept a minimum of 50 Watt input continuously.
 - (vi) Shall have transmit and receive port that can accept signals up to +52 dBm CW (Continuous Wave) without damage.
 - (vii) Shall allow for a minimum continuous 100 mW or +10 dBm at the Antenna/sensitive RF input port.

- (f) Demodulation Measurements: Shall have
 - (i) RF Characteristics:
 - ◆ Frequency range of 10 MHz to 1.05 GHz (Standard); 10 MHz to 2.7 GHz (392XOPT058). Both usable from 100 kHz.
 - ◆ Input RF Level: T/R Port of -10 to +50 dBm; ANT Port: -80 to +10 dBm.
 - (ii) Demod Counter:

- ◆ Range 20 Hz to 20 kHz (1 to 100 kHz FM Deviation, IF BW set approximately for the received modulation BW). Range 20 Hz to 10 kHz (30 to 90% AM, IF BW set appropriately for the received modulation BW)
 - ◆ Resolution: 0.1 Hz or less
 - ◆ Accuracy: ± 50 ppm (+10 ppm typical)
 - ◆ Waveform: Sine or Square
- (iii) FM Deviation Meter:
- ◆ Range: 0 to 150 kHz
 - ◆ Resolution: 10 Hz
 - ◆ Accuracy: ± 3 % plus source residual, ± 1 count (30 to 90% AM, IF BW set appropriately for the received modulation BW)
 - ◆ FM Rate: 20 Hz to 20 kHz (IF BW set appropriately for the received modulation BW)
- (iv) AM Deviation Meter:
- ◆ Range: 0 to 100%
 - ◆ Resolution: 0.1% or less
 - ◆ Accuracy: ± 3 % + source residual, ± 1 count (30 to 90% AM, IF BW set appropriately for the received modulation BW)
 - ◆ AM Rate: 20 Hz to 15 kHz (IF BW set appropriately for the received modulation BW)
- (g) Audio and Modulation Measurements: Shall have
- (i) Audio Input Characteristics for the following meters: AF Counter, AF Level Meter, SINAD Meter, Distortion Meter, Hum and Noise Meter, Signal-to-Noise Meter.
- (ii) Front Panel Audio Inputs: Audio 1 or Audio 2 (unbalanced, chassis reference); Audio 1 and Audio 2 (balanced, 600 W differential input).
- (iii) Audio Input Impedance (Audio 1 and 2): Hi-Z (>10 kW) - Unbalanced input 600 W - Unbalanced input (8 Vrms MAX input*) 600 W - Balanced input (Audio 1 and 2) * Note - 600 W unbalanced will auto-switch to Hi-Z @ 8 Vrms.
- (iv) AF Counter:
- ◆ Range: 20 Hz to 20 kHz (usable from 10 Hz)
 - ◆ Resolution: 0.1 Hz or less
 - ◆ Accuracy: ± 50 ppm max, ± 10 ppm typical
 - ◆ Wave shape: Sine or Square
 - ◆ Level Range (Audio): 20 mV to 30 Vrms
- (v) AF Level Meter
- ◆ Range: 0 to 30 Vrms
 - ◆ Resolution: Volts: 1 mV (input < 1V), 10 mV (input ≥ 1 V)
 - ◆ Accuracy: 5% (Unbalanced, Hi-Z, 300 to 3 kHz, 0.1 to 30 Vrms)
 - ◆ Frequency: 20 Hz to 20 kHz
- (vi) SINAD Meter
- ◆ Range: 0 to 60 dB
 - ◆ Resolution: 0.01 dB or less
 - ◆ Accuracy: ± 1 dB, ± 1 count (SINAD >3 dB, ≤ 40 dB, 5 kHz LP AF filter)
 - ◆ Frequency Range: 300 Hz to 5 kHz
 - ◆ Level Range (Audio): 0.1 to 30 Vrms.

- (vii) DISTORTION METER
 - ◆ Range: 0.0 to 100.0 %
 - ◆ Resolution: 0.1%
 - ◆ Accuracy: $\pm 0.5\%$ (Distortion 1 to 10%, 5 kHz LP AF Filter). $< \pm 1.0\%$ (Distortion 10 to 20%, 5 kHz LP AF Filter)
 - ◆ Frequency Range: 300 Hz to 5kHz
 - ◆ Level Range (Audio): 0.1 to 30 Vrms
- (viii) HUM AND NOISE
 - ◆ Range: -100 dB to 0 dB
 - ◆ Resolution: 0.01 dB
 - ◆ Accuracy: ± 1 dB, ± 1 count (> -60 dB, ≤ -20 dB)
 - ◆ Signal Frequency: 300 Hz to 5 kHz
 - ◆ Audio Input Level: 0.1 to 30 Vrms
 - ◆ RF Input Level: T/R Port: - 10 to +50 dBm; ANT Port: -80 to +10 dBm
- (ix) SIGNAL-TO-NOISE-RATIO
 - ◆ Range: -100 to 0 dB
 - ◆ Resolution: 0.01 dB
 - ◆ Accuracy: ± 1 dB, ± 1 count (> -60 dB, ≤ -20 dB)
 - ◆ Signal Frequency: 300 Hz to 5 kHz
 - ◆ Audio Input Level: 0.1 to 30 Vrms
 - ◆ RF Input Level: T/R Port: - 10 to +50 dBm; ANT Port: -80 to +10 dBm
- (h) Frequency Standard I/O: Shall have
 - ◆ Internal Frequency Standard output: Frequency 10MHz (nominal).
 - ◆ Output level: 1 Vpp (nominal) into 50 Ohms.
 - ◆ Temperature stability (at 0 to 50): ± 0.01 ppm
 - ◆ Aging rate: ± 0.1 ppm/year after 1 month continuous use
 - ◆ Warm up time: less than 5 minutes to ± 0.02 ppm.
- (i) Environmental/Safety: Shall
 - ◆ Have operating temperature: -40C to 71°C, shock and vibrations of 30G Shock at 5-500 Hz random vibrations.
 - ◆ Comply with the safety standards UL 61010B-1, EN 61010-1, and CSA C22.2 No. 61010-1.
 - ◆ Maximum warm-up time of 15 minutes for every measurement to be within specifications.

E2.2.2 Non-Mandatory

- (a) RF Signal Generator: Should support modulations including C4FM, CQPSK, and LSM. Proponents should provide the complete list of modulations that are supported.
- (b) RF Measurements: Should
 - ◆ have a RF Sensitivity of < -100 dBm (for 10 db SINAD, FM, 25kHz, 1kHz rate, 6 kHz FM Deviation, 300 Hz to 3.4 kHz Filter, Pre-amp OFF) & < -113 dBm (10 dB SINAD, FM, 25 kHz, 1 kHz rate, 6 kHz FM Deviation, 300 Hz to 3.4 kHz AF Filter, Pre-amp ON)
 - ◆ have user adjustable Resolution Bandwidths of 300 Hz, 3 kHz, 30 kHz, 60 kHz, 300 kHz and 6 MHz.
- (c) Built in Test Function: Should support fully automated alignment and testing that is validated and approved by vendors/manufacturers for the Phase 1 & Phase 2 P25

Mobile and Portable radios, including the Harris XL-200P, XG-75M, XG-75P, XG-25M, & XG-25P. If the auto test and alignment support for XL-200P or any of the others is currently not available, the Proponent should indicate when this support will become available and the value of associated cost – if any.

- (d) Vocoder: Should include a Phase 1 & Phase 2 P25-compatible vocoder which enables the user to perform, transmit and receive audio testing live. If support for Phase II is currently not available, it shall be available by the end of third quarter of the year 2018. The Proponent should indicate, in their proposal, the estimated cost of providing this feature at the said future time.
- (e) Dimensions and Weight: Should
 - ◆ weigh approximately 13kg to 20kg with an LCD Display Screen Size of approximately 16.26 cm diagonal.
 - ◆ have approximate dimensions of Height 20cm, Width 36 cm, and Depth 52.0 cm.
- (f) Should have an oscilloscope with two channel input and at least 4MHz bandwidth.
- (g) Should have Ethernet, USB and RS-232 connection interfaces for remote control operation. Proponents should provide a list of all interfaces available for remote control operation.
- (h) Should provide a standard video output port to allow interfacing to an external display with size of at least 21 inches.
- (i) Should have, for the I/O Connectors, an Antenna RF Input port protection of 10W with warning from +16dBm to +18dBm and Generator RF Input protection of 10W with warning above +23dBm (Remove power immediately when alarm sounds).
- (j) Should have General Purpose Interface Bus (GPIB) connection interface
- (k) The Equipment Provider should have a factory-approved calibration and service facility located in Canada.

E2.3 Item No. 2 – Fixed Bench Radio Test Equipment {Used / Refurbished} (Optional)

- (a) Shall be provided to meet the same specifications given for the Fixed Bench Radio Test Equipment (New) in E2.2.1 and E2.2.2.
- (b) The **RTE shall be factory tested and significant details provided including the age of the used RTE and details of refurbishment and re-certification.**

E2.4 Item No. 3 – Portable Radio Test Equipment (New) shall be provided to meet the specifications given below and also repeated in parts B.1 & B.2 of Form N.

- (a) Mandatory Requirements
 - (i) Shall support full duplex testing for Analog and Digital FM radios and system tests.
 - (ii) Technology: Shall support test and alignment of Project 25 Phase 1 & Phase 2 radios.
 - (iii) RF Generator: Shall have
 - ◆ a generator spectral purity harmonic spurious specification that is not higher than -30 dBc, and have non Harmonic spurious specifications no higher than -40 dBc.
 - (iv) RF Measurements: Shall
 - ◆ provide an FM deviation accuracy specification of 3% or better.
 - ◆ have a FM sensitivity of 1 uV or better for 10 dB EIA Signal-to-noise and distortion ratio SINAD.
 - ◆ have RF Input port that can accept a minimum of 50 Watt input continuously.

- ◆ have transmit and receive port that provides protection up to +52 dBm CW.
- ◆ allow for a minimum continuous 100 mW or +10 dBm at the Antenna/sensitive RF input port.
- (v) Demodulations Measurements: Shall be able to
 - ◆ demodulate AM/FM audio at any Channel/ Spectrum Analyzer span setting.
 - ◆ demodulate RF in the range 10 MHz to 1 GHz.
- (vi) Audio and Modulation Measurement: Shall include a P25-compatible vocoder which enables the user to perform, transmit and receive audio testing live.
- (vii) Power Requirement: Shall have a rechargeable internal battery with a life of at least 2.5 to 3 hours.
- (viii) Environmental/Safety: Shall
 - ◆ be able to operate in an environmental temperature of -20C to 80°C.
 - ◆ comply with the safety standards CE/ UL2054 / UL1642 / FCC IEC 62133 / EN6095 / ROHS UN 38.3 / PSE / RCM.
 - ◆ have a maximum warm-up time of 15 minutes for every measurement to be within specifications.
- (b) Non-Mandatory Requirements
 - (i) RF Measurements: Should have
 - ◆ a power measurement that provides accuracy of better than 7%.
 - ◆ an option for an internal thru-line power meter capable of 500 W signals and a measurement accuracy of better than 5%.
 - (ii) Built in Test Function: Should support fully automated alignment and testing that is validated and approved by Harris, for Project 25 Phase 1 & Phase 2 radios, including the Harris XL-200P, XG-75M, XG-75P, XG-25M, & XG-25P. If the auto test and alignment support for XL-200P or any of the others is currently not available, the Contractor shall indicate when this support will become available and the value of associated cost – if any.
 - (iii) Vocoder: Should include a Phase 1 & Phase 2 P25-compatible vocoder which enables the user to perform, transmit and receive audio testing live. If support for Phase II is currently not available, it shall be available by the end of third quarter of the year 2018. The Contractor shall indicate, in their proposal, the estimated cost of providing this feature at the said future time.
 - (iv) Dimensions and Weight: Should
 - ◆ weigh between 5 – 10 kg.
 - ◆ have approximate dimensions of Height 24 cm, Width 33 cm, and Depth 20 cm.
 - (v) Should have Video Graphics Array (VGA), and USB connection interfaces.
 - (vi) Should provide remote control operation through Ethernet including control of Duplex and Generation functions. Proponents should provide a list of all interfaces available for remote control operation.
 - (vii) Should be ruggedized and able to withstand a Shock of 30g (multiples of the acceleration of gravity).
 - (viii) Should have an output that can be extended to an external display of at least 21 inches.
 - (ix) The Equipment Provider should have a factory approved calibration and service facility located in Canada.

- (a) Shall be provided to meet the same specifications given for the Portable Radio Test Equipment (New) in E2.4(a) and E2.4(b).
- (b) **The RTE shall be factory tested and significant details provided including the age of the used RTE and details of refurbishment and re-certification.**

E2.6 Optional Items 1 to 10 - Maintenance & Support

- (a) Should be provided for the Fixed Bench RTE (Items 5 - 9). The Contractor should detail what constitutes maintenance and how often it needed to be done.
- (b) Should be provided for the Portable RTE (Items 10 - 14). The Contractor should detail what constitutes maintenance and how often it needed to be done.
- (c) Should be accessible via online support.
- (d) Should be renewable, per form B, at least annually.
- (e) The Contractor shall indicate – in case repair is needed – the address to which the equipment should be shipped.
- (f) The Contractor shall indicate if they provide loan RTE and any associated costs with the loan RTE, while the original RTE is being repaired.

E2.7 Optional Items 11 to 20 - Calibration

- (a) Should be provided for each year of the first 5 service years of the Fixed Bench RTE
- (b) Should be provided for each year of the first 5 service years of the Portable RTE
- (c) Should be traceable to NIST standards.
- (d) Should provide procedure documentation and completion certificate.
- (e) Should provide test reports which conforms to the NIST standard; the test report shall be shipped with the returned device.

E2.8 Optional Items 21 to 26 - Extended Warranty (Optional):

- (a) Should match the original terms and conditions of the initial warranty.
- (b) Should be provided for the Fixed Bench RTE (Items 25 – 27).
- (c) Should be provided for the Portable RTE (Items 28 - 30).
- (d) Should indicate warranty service offered beyond the standard manufacturer's warranty.
- (e) The extended warranty should be renewable, per form B, at least annually.

E2.9 Optional Items 27 to 36 - Software Patch Updates (Optional)

- (a) Should be provided for the Fixed Bench RTE (Items 31-35).
- (b) Should be provided for the Portable RTE (Items 36 - 40).
- (c) Should be possible remotely via Ethernet, USB and/ RS-232 connections of the RTE.
- (d) Should be renewable (if applicable), per form B, at least annually.

E2.10 Optional Items 37 to 38 - Training

- (a) The Contractor should provide details on if training is available on using the Fixed RTE and the mode of training (online or in person).
- (b) The Contractor should provide details on if training is available on using the Portable RTE and the mode of training (online or in person).