



REQUEST FOR PROPOSAL (RFP)

Microgravity Research Analogue (MRA) Research Study for the Operational Segment

**Bid Submission Deadline:
February 3rd, 2023 at 2:00 pm (EST)**

**Submit Bids to : Canada Post Corporation's (CPC) Connect service
or by fax 819-997-9776**

Reference: CSA File No. 9F008-22-0258

Note: Please read this Request for Proposal carefully for further details on the requirements and bid submission instructions.



January 19, 2023



TABLE OF CONTENTS

Introduction

The bid solicitation is divided into six (6) parts plus attachments and annexes, as follows:

- Part 1 General Information:** provides a general description of the requirement;
- Part 2 Bidder Instructions:** provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3 Bid Preparation Instructions:** provides Bidders with instructions on how to prepare their bid;
- Part 4 Evaluation Procedures and Basis of Selection:** indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, and the basis of selection;
- Part 5 Certifications and Additional Information:** includes the certifications and additional information to be provided; Security, Financial and Other Requirements: includes specific requirements that must be addressed by Bidders;
- Part 6 Resulting Contract Clauses:** includes the clauses and conditions that will apply to any resulting contract.

List of Annexes:

Annex B - Basis of Payment - Pricing
 Annex C - Statement of Work (SOW)
 Annex D - Performance Evaluation Form
 Annex E - Integrity Form
 Annex F - CPC connection Instructions
 Annex G - List of potential risks

List of Appendix attached to the SOW:

Appendix A: Medical Data Sharing
 Appendix B: ERD Template
 Appendix C: ICB Template
 Appendix D: IRB Protocol Template
 Appendix E : MRA Bed rest study - SOW

PART 1 - GENERAL INFORMATION

1.1. Summary

The Canadian Space Agency's Microgravity Research Analogue (MRA) bedrest study was conducted to provide data to discern how health problems appear in older adults who are bedridden for long periods of time because of injury and illness and to protect astronauts' health in microgravity.

The service required for this part of the study is to develop the experimental requirements for a study protocol suitable for integration to the ISS operations research program. Upon a successful completion of this contract, the operational segment may be initiated.

The ultimate goal is to develop a better exercise countermeasure to human spaceflight risks than is currently being used on ISS.

- **Period of the Contract**



From contract award date to August 31, 2023.

- **Work location**

The work will be done remotely at the contractor's office, but some meetings are planned to be held at the Canadian Space Agency, at 6767 Route de l'Aéroport, Saint-Hubert, Québec.

- **Travel**

No travel expenses will be reimbursed.

- **Official languages**

The contractor must be able to provide a consultant that is able to communicate and draft documents in English.

1.2. Security Requirement

There are no security requirements associated with this request.

1.3. Trade Agreements

This request is not subject to any trade agreements.

1.4. The Canada Post Corporation's (CPC) Connect service

This bid solicitation allows bidders to use the Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

1.5. Maximum available Funding

The available funding for the contract resulting from the bid solicitation is **\$100,000.00**, Goods and Services Tax or Harmonized Sales Tax extra, as appropriate. Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

1.6. Debriefings

After contract award, bidders may request a debriefing on the results of the bid solicitation. Bidders should make the request to the Contracting Authority within 15 working days of receipt of notification that their bid was unsuccessful. The debriefing may be provided in writing, by telephone or in person.



PART 2 - BIDDER INSTRUCTIONS

2.1. Standard Instructions, Clauses and Conditions

All instructions, clauses and conditions identified in the Request for proposal (RFP) by number, date and title are set out in the Standard Acquisition Clauses and Conditions (SACC) Manual <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual> issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of this bid solicitation and accept the clauses and conditions of the resulting contract.

The document (2022-03-29) - Standard Instructions - Request for Proposal - Goods or Services - Competitive Requirements are incorporated by reference into and form part of the bid solicitation. <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/1/2003/26>

2.2. Submission of Bids

This bid solicitation allows bidders to use the Connect service provided by Canada Post Corporation to transmit their bid electronically. Bidders must refer to Part 2 entitled Bidder Instructions, and Part 3 entitled Bid Preparation Instructions, of the bid solicitation, for further information.

Bids must be submitted ONLY TO:

- By Canada Post Corporation's (CPC) Connect service:

<https://www.canadapost-postescanada.ca/cpc/en/business/postal-services/digital-mail/connect.page>

Canada Post Corporation's (CPC) Connect service: Section 08 (2022-03-29) - Transmission by CPV Connect service of document 2003 (2022-03-29) – Standard Instructions - Goods or Services - Competitive Requirements

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/1/2003/26#transmission-by-facsimile>

Or

- By Fax 819-997-9776

at the date, time and place indicated on the front page of this bid solicitation.

DO NOT COPY THE CONTRACTING AUTHORITY



2.3. Enquiries - Bid Solicitation

All enquiries must be submitted **BY E-MAIL ONLY** to the Contracting Authority melanie.seguin@asc-csa.gc.ca **no later than three (3) calendar days** before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

2.4. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in **PROVINCE OF QUEBEC**.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

2.5. Communications Notification

As a courtesy, the Government of Canada requests that successful bidders notify the Contracting Authority in advance of their intention to make public an announcement related to the award of a contract.

2.6. Bid Challenge and Recourse Mechanisms

- (a) Several mechanisms are available to potential suppliers to challenge aspects of the procurement process up to and including contract award.
- (b) Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. Canada's [Buy and Sell](#) website, under the heading "[Bid Challenge and Recourse Mechanisms](#)" contains information on potential complaint bodies such as:
 - Office of the Procurement Ombudsman (OPO)
 - Canadian International Trade Tribunal (CITT)
- (c) Suppliers should note that there are **strict deadlines** for filing complaints, and the time periods vary depending on the complaint body in question. Suppliers should therefore act quickly when they want to challenge any aspect of the procurement process.



PART 3 - BID PREPARATION INSTRUCTIONS

3.1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately sections as follows:

Section I: Technical Bid

Section II: Financial Bid

Section III: Certifications

Prices must appear in the financial offer only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid.

- 3 separate documents
 - a) use a numbering system that corresponds to that of the Request for proposal

Section I: Technical Bid

In their technical bid, bidders should demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Please refer to the RFP for bid preparation instructions in Appendices presented at Annex C - SOW regarding the necessary information to provide for the proposal.

Section II: Financial Bid

Bidders must submit the sum of the applicable direct and indirect costs which are, or must be reasonably and properly incurred and/or allocated, in the performance of the Contract, less any applicable credits. These costs must be determined in accordance with the Contractor's cost accounting practices as accepted by Canada and applied consistently over time.

Bidders should review Contract Cost Principles 1031-2 - <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/1031-2/6> for a description of allowable costs.

Bidders must submit their financial bid in accordance with the Basis of Payment and the **Annex B** - Pricing. The total amount of Goods and Services Tax must be shown separately, if applicable.

The requirement does not provide for exchange rate fluctuation protection. Any request for exchange rate fluctuation protection will not be considered and will render the bid non-responsive.

Section III: Certifications

Bidders must submit the certifications required under Part 5.



PART 4 – EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1. Evaluation Procedures

- a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- b) An evaluation team composed of representatives of Canada will evaluate the bids.

4.2. Evaluation Criteria

4.2.1 Point Rated Technical Criteria (SEE TABLE #1)

At Bid closing time, the bid must comply with the Requirements outlined in TABLE #1 and provide the necessary documentation to support compliance.

4.3. Mandatory Financial Criteria

The maximum funding available for the contract resulting from this solicitation is **\$100,000.00**, excluding applicable taxes. Any bid exceeding this amount will be deemed non-responsive. The disclosure of the maximum funding available does not commit Canada to pay that amount.

The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, FOB destination, Canadian customs duties and excise taxes included.

4.4. Basis of Selection - Highest Rated within the budget

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation;
 - b. obtain the required minimum points specified for each criterion for the Point-rated technical evaluation; and
 - c. obtain the required minimum of 75 points overall for the technical evaluation criteria which are subject to point rating. The rating is performed on a scale of 100 points.
2. Bids not meeting (a) or (b) or (c) will be declared non-responsive. The responsive bid with the highest number of points will be recommended for award of a contract, provided that the total evaluated price does not exceed the budget available for this requirement.

**TABLE 1 - Point Rated Technical Criteria**

Bids which fail to obtain the required minimum number of points specified will be declared non-responsive. Each point-rated technical criterion should be addressed separately.

	<u>MINIMUM POINTS REQUIRED</u>	<u>MAXIMUM TOTAL POINTS</u>
RC1. SCIENTIFIC PERTINENCE	15	20
RC2. APPROACH VALIDITY	10	20
RC3. METHODOLOGY	15	20
RC4. POTENTIAL RISKS OF EXERCISE PROTOCOL OPTIONS	10	20
RC5. EXPERIENCE AND PRODUCTIVITY	10	20
Maximum score		100
Minimum score requirement	75	

RC1. SCIENTIFIC PERTINENCE

This criterion evaluates whether the proposal addresses the objective to evaluate if the Microgravity Research Analogue (MRA) exercise protocol would mitigate musculoskeletal, cardiorespiratory and cardiovascular deconditioning (insulin resistance and arterial stiffness) risks occurring during spaceflight in comparison to current published data from ISS exercise countermeasures. The pertinence of the proposed research experiment and variables collected to evaluate the MRA exercise protocol will be assessed.

0 point : The proposed research does not answer the objective. The variables collected will not permit the comparison of the mitigation effect of the exercises.

10 points : The proposed research provides an incomplete answer to the objective. The variables collected will permit a comparison of only one of the 3 risks mitigation.

15 points : The proposed research answers the objective. The variables collected will permit a partial comparison of 2 of the 3 risks mitigation.

20 points : The proposed research answers the objective and the variables collected will permit a complete comparison of all 3 of the risks mitigation.

RC2. APPROACH VALIDITY

This criterion evaluates how the research approach builds upon a successful foundation of ground or previous flight studies. It evaluates the completeness of the literature review and its relevance to the study design.

0 point: The research approach is not based upon previous flight studies. The literature review is missing or inadequate/incomplete.

10 points: The research approach is indirectly related previous flight studies. The literature review is missing or inadequate/incomplete.



15 points: The research approach is based in part upon previous flight studies. The literature review contains some relevant references but some important documents related to the proposed approach are missing.

20 points: The research approach is fully based upon a successful foundation of ground or previous flight studies. The literature review covers all aspects of the proposed study.

RC3. METHODOLOGY

This criterion evaluates the feasibility of the proposed research design, research methods of the exercise scenarios proposed (3) to achieve the current objective (to evaluate if the MRA exercise protocol would mitigate musculoskeletal, cardiorespiratory and cardiovascular deconditioning occurring during spaceflight in comparison to current published data from ISS exercise countermeasures). This criterion should justify why this data/sample was chosen and should demonstrate its usefulness.

0 point: The proposed methodology is unlikely to support the research objective of the study or is poorly described. The research design lacks important details. The choice of data/samples or scenarios are not well justified.

10 points: The proposed methodology may support the study's research objective. However, some aspects of the research design lacks details or is not well described. The choice of data/samples or scenarios are justified, but doesn't corresponds with the research objective.

15 points: The proposed methodology is likely to achieve the research objective. The research design is well described. The choice of data/samples or scenarios are well justified and demonstrates the usefulness of the research objective.

20 points: The proposed methodology is clearly described, giving a high level of confidence that the objectives will be achieved. The choice of data/samples or scenarios are well justified and the proposed methodology demonstrates the usefulness of the research objective and addresses potential challenges.

RC4. POTENTIAL RISKS OF EXERCISE PROTOCOL OPTIONS

This criterion evaluates how the proposal takes into consideration the knowledge of potential pitfalls and obstacles that may occur during the course of the project (exercise protocols), as well as the adequacy of proposed preventive/remedial measures related to these risks. ****Please complete Annex G - List of potential risks.***

0 point: The proposal fails to identify and address potential risks and does not include mitigation strategies.

10 points: The proposal identifies at least one (1) risk in all three (3) risks categories with acceptable mitigation strategies.

15 points: The proposal identifies at least two (2) risks in all three (3) risks categories with acceptable mitigation strategies.

20 points: The proposal identifies more than two (2) risks in all three (3) risks categories with acceptable mitigation strategies.



RC5. EXPERIENCE AND PRODUCTIVITY

This criterion evaluates the expertise and experience of the team in the proposed area of research as demonstrated by scientific productivity over the past five (5) years and past achievements in the proposed field of research and methodology that are described in the SOW. The level of expertise is checked with the CV and publications record that should correspond to what they proposed and they say they are expert in.

0 point: The team has some members with the required expertise or experience in similar research studies, but it is rather poor or limited. The team's scientific publication record in this field of research is not clearly demonstrated.

10 points: Some of the team members have expertise and experience in the field of research, but the overall level of expertise in the team is average. The team's scientific publication record is average with acceptable level of quality, impact and/or importance in the field of exercise or cardiovascular deconditioning.

15 points: Most of the team members have the required expertise in the field and demonstrated experience in similar studies. The research team has a good scientific publication record of high quality, impact and/or importance in the field of exercise and cardiovascular deconditioning.

20 points: The team is composed of experts in the proposed field of research. It is clear that the team has successfully conducted studies of similar scope. The scientific publication record of the research team has a high quality, impact and/or importance in the field of exercise, cardiovascular, and musculoskeletal deconditioning.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1. Certifications Required with the Bid

Bidders **MUST** submit the following duly completed certifications as part of their bid.

5.1.1. Certification – Contract

SACC Manual Clause [A3015C](#) (2014-06-26)

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.



5.2. Former Public Servant

Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts with FPS, bidders must provide the information required below before contract award.

5.2.1. Definitions

For the purposes of this clause,

"former public servant" is any former member of a department as defined in the Financial Administration Act, R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- a) an individual;
- b) an individual who has incorporated;
- c) a partnership made of former public servants; or
- d) a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the Public Service Superannuation Act (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the Supplementary Retirement Benefits Act, R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the Canadian Forces Superannuation Act, R.S., 1985, c.C-17, the Defence Services Pension Continuation Act, 1970, c.D-3, the Royal Canadian Mounted Police Pension Continuation Act, 1970, c.R-10, and the Royal Canadian Mounted Police Superannuation Act, R.S., 1985, c.R-11, the Members of Parliament Retiring Allowances Act, R.S., 1985, c.M-5, and that portion of pension payable to the Canada Pension Plan Act, R.S., 1985, c.C-8.

5.2.2 Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension?

Yes () No ()

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

- a) name of former public servant;
- b) date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the Guidelines on the Proactive Disclosure of Contracts.

5.2.3 Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive?

Yes () No ()



If so, the Bidder must provide the following information:

- a) name of former public servant;
- b) conditions of the lump sum payment incentive;
- c) date of termination of employment;
- d) amount of lump sum payment;
- e) rate of pay on which lump sum payment is based;
- f) period of lump sum payment including start date, end date and number of weeks;
- g) number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

5.3. Ineligibility and Suspension Policy

Bidders, offerors or suppliers certify to the following when submitting a bid:

- they have read and understand the **Ineligibility and Suspension Policy**; <http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>
- they understand that certain domestic and foreign criminal charges and convictions, and other circumstances, will or may result in a determination of ineligibility or suspension;
- they are aware that Canada may request additional information, certifications and validations for the purposes of making a determination of ineligibility or suspension;
- they have provided a list of all foreign criminal charges and convictions;
- none of the domestic criminal offences and other circumstances described in the Policy applies to them, their affiliates and their first tier subcontractors; and
- they are not aware of a determination of ineligibility or suspension that applies to them.

5.4. Integrity Provisions – List of Names

- Bidders who are incorporated, including those bidding as a joint venture, **must provide a complete list of names of all individuals who are currently directors** of the Bidder. (See Annex E - Integrity Form).
- Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, **must provide the name of the owner(s)**. (See Annex E - Integrity Form).
- Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

5.5. Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, maternity and parental leave, retirement, resignation, dismissal for cause or termination of an agreement for default.

If the Bidder has proposed any individual who is not an employee of the Bidder, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed



and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability.

5.6. Education and Experience

The Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting contract.

5.7. Procurement Business Number

Suppliers are required to have a Procurement Business Number (PBN) before contract award. Suppliers may register for a PBN online at Supplier Registration Information <https://srisupplier.contractsCanada.gc.ca/>.

For non-Internet registration, suppliers may contact the InfoLine at 1-800-811-1148 to obtain the telephone number of the nearest Supplier Registration Agent.

Procurement Business Number (PBN): _____

5.8. Certification – Bid

SACC Manual Clause [A3015T](#) (2014-06-26)

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after contract award. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive

CERTIFICATION SIGNATURE

We hereby certify compliance with the above noted certification requirements for:

- 5.1 Certification – Contract
- 5.2 Former Public Servant
- 5.3 Ineligibility and Suspension Policy
- 5.4 Integrity Provisions – List of Names
- 5.5 Status and Availability of Resources
- 5.6 Education and Experience
- 5.7 Procurement Business Number
- 5.8 Certification - Bid

Signature

Date



Name (print or type) of person authorized to sign on behalf of the Organization

Phone : _____

E-Mail : _____



PART 6 - RESULTING CONTRACT CLAUSES

6.1. Priority of Documents

The documents specified below will form part of and will be incorporated into the Contract. If there is a discrepancy between the wording of any documents which appear on the list, the wording of the document which first appears must prevail over the wording of any document which subsequently appears on the list.

- the Articles of Agreement;
- Annex A, Clauses and Conditions
Supplementary Conditions
 - [4006 \(2010-08-16\)](#), Contractor to Own Intellectual Property Rights in Foreground Information
 - [2035 \(2022-12-01\)](#), General Conditions - Higher Complexity - Services
- Annex B, Basis of payment
- Annex C, Statement of Work;
- Annex D, Performance Evaluation
- the Contractor's proposal dated _____

6.2. Statement of Work

The Contractor must perform the Work in accordance with the Statement of Work at Annex "____" and the Contractor's technical bid entitled _____, dated _____.

6.3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual issued by Public Works and Government Services Canada. <https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>

6.3.1 General conditions

[2035 \(2022-12-01\)](#) General Conditions - Higher Complexity – Services, apply to and form part of the Contract.

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/3/2035/21>

6.3.2 Supplementary Conditions

[4006 \(2010-08-16\)](#), Contractor to Own Intellectual Property Rights in Foreground

<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual/4/4006/3>

6.4. Security Requirement

There is no security requirement applicable to the Contract.

6.5. Term of Contract

From contract award date to August 31, 2023.



6.6. Basis of Payment – Firm Price

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm as specified in Annex B for a cost of \$ _____ *insert the amount at contract award*). Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.7. Methods of Payment – Milestone Payments

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if :

- (a) an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (b) all such documents have been verified by Canada;
- (c) all work associated with the milestone and, as applicable, any deliverable required have been completed and accepted by Canada.

6.8. Invoicing Instructions

The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions.

Invoices cannot be submitted until all work identified in the invoice is completed.

Each invoice must be supported by:

- a) a copy of the release document and any other documents as specified in the Contract;
- b) a copy of the monthly progress report.

Invoices must be distributed as follows:

One (1) copy must be forwarded to the following address for certification and payment

CANADIAN SPACE AGENCY
9F008 – FINANCIAL SERVICES
facturation-invoicing@asc-csa.gc.ca

One (1) copy must be forwarded to the Business owner

6.9. Electronic Payment of Invoices

The Government of Canada is phasing out paper cheques in favour of Direct Deposit for all payments issued by the Receiver General. Direct Deposit is a secure and reliable method of receiving payment, eliminating the risk of lost or stolen cheques. You will find all the information to enrol in direct deposit with Canadian Space Agency at: <http://www.asc-csa.gc.ca/eng/forms/vendor-direct-depot-form.asp>

6.10. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____. (*Insert the name of the province or territory.*)



6.11. Contracting Authority

The Contracting Authority for the Contract is:

Mélanie Séguin
Procurement and Contract Administration
Canadian Space Agency
6767, route de l'Aéroport
St-Hubert (Québec) J3Y 8Y9
Phone : 438-364-1399
Email : melanie.seguin@asc-csa.gc.ca

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.12. Business owner

To be inserted at contract award.

Name:
Canadian Space Agency
Address: 6767, Route de l'Aéroport
St-Hubert, Québec, J3Y 8Y9
Telephone: (450) 926-
E-Mail:

The Business owner is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Business owner, however the Business owner has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.13. Technical Authority (TA)

To be inserted at contract award.

Name: TBD
Canadian Space Agency
Address: 6767, Route de l'Aéroport
St-Hubert, Québec, J3Y 8Y9
Telephone: (450) 926-
E-Mail:

The Technical Authority (TA) is the Contractor's point-of-contact for all matters concerning the technological content of the work under this Contract. The TA is responsible for recommending for approval the technical progress of the work conducted under this contract. Any proposed changes to the scope of the work or otherwise are to be discussed and agreed with the Business owner, but any resultant changes can only be authorized by a contract amendment issued by the Contracting Authority.

6.14. Contractor's Representative

The Contractor's Representative for the Contract is:

Name:
Contractor:
Telephone:



E-Mail:

6.15. Performance Evaluation

Contractor must take note that the performance of the Contractor during and upon completion of the work must be evaluated by the Government of Canada. Should the Contractor's performance be considered unsatisfactory more than once, the Contractor's bidding privileges on future work may be suspended for a period of 18 months or 36 months. Contractor Performance Evaluation Report Form is used to record the performance. See ANNEX D.

6.16. Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.17. Proactive Disclosure of Contracts with Former Public Servants

By providing information on its status, with respect to being a former public servant in receipt of a [Public Service Superannuation Act](#) (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with [Contracting Policy Notice: 2012-2](#) of the Treasury Board Secretariat of Canada.

6.18. Insurance - No Specific Requirement

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

6.19. Recourse for suppliers with respect to the Procurement Process

Canada encourages suppliers to first bring their concerns to the attention of the Contracting Authority. There are several mechanisms available to suppliers to address concerns they may have related to federal government procurement, such as: the Office of the Procurement Ombudsman (OPO), the Canadian International Trade Tribunal (CITT), the Competition Bureau, and before the Federal Court of Canada and any of Canada's provincial superior courts. Regardless of the forum to which a supplier brings a complaint, there are strict timelines for filing complaints. Additional information can be found at Canada's Buy and Sell website at www.buyandsell.gc.ca under the heading "Supplier Dispute Management Process".

6.20. Dispute Resolution

The Parties agree to make every reasonable effort, in good faith, to settle amicably all disputes or claims relating to or arising from the Contract, through negotiations between the Parties' representatives authorized to settle. If the Parties do not reach a settlement within 10 working days, each party hereby consents to fully participate in and bear the cost of mediation led by the Procurement Ombudsman pursuant to Subsection 22.1(3)(d) of the *Department of Public Work and Government Services Act* and Section 23 of the *Procurement Ombudsman Regulations*.

The Office of the Procurement Ombudsman may be contacted by telephone at 1-866-734-5169, by e-mail at boa.opo@boa-opo.gc.ca, or by web at www.opo-boa.gc.ca.



6.21. Contract Administration

The parties understand that the Procurement Ombudsman appointed pursuant to Subsection 22.1(1) of the *Department of Public Works and Government Services Act* will review a complaint filed by the complainant respecting the administration of the Contract if the requirements of Subsection 22.2(1) of the *Department of Public Works and Government Services Act* and Sections 15 and 16 of the *Procurement Ombudsman Regulations* have been met.

To file a complaint, the Office of the Procurement Ombudsman may be contacted by e-mail at boa.opo@boa-opo.gc.ca, by telephone at 1-866-734-5169, or by web at www.opo-boa.gc.ca.



ANNEX B

Basis of Payment

Pricing



During the period of the Contract, the Contractor will be paid as specified below, for Work performed in accordance with the Contract.

As a minimum, the Bidder must respond to this pricing schedule by inserting in its financial bid for each of the milestone specified below its quoted firm all inclusive price per milestone (in Cdn \$).

The rates specified below, when quoted by the Bidder, include any of the following expenses that may need to be incurred to satisfy the terms of any contract that may result from its bid:

- a) all travel and living expenses for work performed within the National Capital Region (NCR) and the Canadian Space Agency (CSA) in St-Hubert. The NCR is defined in the National Capital Act, R.S.C. 1985, c. N-4, S.2. The National Capital Act is available on the Justice Website: <http://laws-lois.justice.gc.ca/eng/acts/N-4/>;
- b) any travel expenses for travel between the Contractor's place of business and the NCR and the CSA; and
- c) any travel and living expenses for the relocation of resources to satisfy the terms of any resulting contract. These expenses cannot be charged directly and separately from the professional fees to any contract that may result from the bid solicitation.

Milestone	Deliverables	Schedule of the delivery	Estimated Percentage of the total work	Firm Price (in CAD \$)
MS1	<ul style="list-style-type: none"> ○ Within one (1) month after contract signature and before March 30, 2023 ○ Kick-Off Meeting (KOM) at CSA ○ Goal will be to brief contractor on CSA payloads implementation and integration process as well as address contractor questions. ○ Two (2) draft exercise protocol options 	Contract start + 4 weeks and by March 30, 2023	20%	
MS2	<ul style="list-style-type: none"> ○ Up to two (2) months after Milestone #1 ○ Final exercise protocol proposed ○ Review meeting with CSA to discuss preferred option ○ 1st draft ERD 	By May 2023	20%	
MS3	<ul style="list-style-type: none"> ○ Two (2) months after Milestone #2 ○ 2nd draft ERD ○ Draft implementation budget ○ Draft crew training requirements, and materials ○ Draft version of ICB presentation and IRB documentation ○ Mid-point review (held via teleconference, plan ½ day) 	By July 27, 2023	30%	
MS4	<ul style="list-style-type: none"> ○ One (1) months after Milestone #3 and by August 31, 2023 ○ Final ERD ○ Final version of exercise protocol option 	By August 31, 2023	30%	



	<ul style="list-style-type: none">○ Final implementation budget○ Final crew training requirements, and materials○ Final version of ICB presentation and IRB documentation○ Final review (to be held at CSA, ½ day)			
Sub-total (Maximum funding \$100,000.00)				
Applicable taxes (___%)				
Total				



ANNEX C

STATEMENT OF WORK (SOW)



ACRONYMS

BDC	Baseline Data Collection
BIP	Background Intellectual Property
BROA	Bedrest in older adults
CFN	Canadian Frailty Network
CIHR	Canadian Institutes of Health Research
CSA	Canadian Space Agency
DID	Data Item Description
ERD	Experiment Requirements Document
FIP	Foreground Intellectual Property
GMT	Greenwich Mean Time
HIIT	High Intensity Interval Training
IA	Institute of Aging
ICB	Informed Consent Briefing
ICRH	Institute of Circulatory and Respiratory Health
IMHA	Institute of Musculoskeletal Health and Arthritis
Inc	Increment [Defined as the undock of a Soyuz spacecraft from the ISS to the next chronological undocking of the Soyuz spacecraft from the ISS]
IRB	Institutional Research Board
ISS	International Space Station
JSC	Johnson Space Center
KOM	Kick-Off Meeting
L+(or -)#d	Launch plus (or minus) # days; L can be a calendar date or a GMT date.
MRA	Microgravity Research Analogue
NASA	National Aeronautics and Space Agency
PI	Principal Investigator
Rev	Revision
RFP	Request for Proposal
R+(or -)#d	Return plus (or minus) # days; R can be a calendar date or a GMT date.
SOW	Statement of Work
SHARE	Space Health and Aging Research

1 INTRODUCTION

1.1 MICROGRAVITY RESEARCH ANALOGUE STUDY SCIENCE BACKGROUND

Several health risks are prevalent in the space environment. The effects of weightlessness on the body induce fluid shifts, bone, and muscle mass and strength loss, as well as cardiovascular, sensory, motor function and cognitive alterations. This is similar to what is observed on Earth with people who experience inactivity due to being bedridden for long periods of time because of injury and illness. Inactivity is the root cause of space flight health risks.

Exercise is the most important countermeasure as a way to maintain or restore cardiovascular, musculoskeletal and other functions. A novel exercise countermeasure had received initial recommendation from an expert committee (SHARE Bedrest Study Coordination Group) to be tested for



the mitigation of the risk of increased arterial stiffness, insulin resistance, musculoskeletal, and cardiovascular changes as a result of the microgravity environment and prolonged inactivity.

Microgravity Research Analogue (MRA) bedrest study was conducted to provide data to discern how health problems appear in older adults who are bedridden for long periods of time because of injury and illness and to protect astronauts' health in microgravity. The basis of the bedrest was to have participants lie in bed, with their heads slightly tilted down for fourteen (14) days to reproduce the effects of weightlessness on the body, such as fluid shifts, bone, muscle mass and strength loss, as well as cardiovascular, sensory, motor function and cognitive alterations. Half of the participants were randomly selected to undergo strength and aerobic exercises as a countermeasure - including High Intensity Interval Training (HIIT) as one of the aerobic components – three (3) times a day while laying down using adapted equipment. The countermeasure promises also to be useful in the prevention or rehabilitation of Canadians faced with similar health risks; for example, people with sedentary lifestyles, the elderly, or people bed ridden due to an injury or illness. Before this countermeasure can be made part of spaceflight operations, it needed to be validated through the use of a ground analogue, followed by a verification testing on a space platform.

The CSA and the Canadian Institutes of Health Research (CIHR), with the Institute partners the Institute of Aging (IA), Institute of Circulatory and Respiratory Health (ICRH), and the CIHR Institute of Musculoskeletal Health and Arthritis (IMHA), in collaboration with the Canadian Frailty Network (CFN) supported an inactivity study using a bedrest paradigm which provided new knowledge on the process of aging, the impact of inactivity on health and that allowed for testing of the physical exercise countermeasure intervention ([reference journal: BROA Bedrest in Older Adults](#)). The bedrest paradigm was relevant to the CSA because it offers the best ground analogue of the physiological effects of weightlessness.

1.2 SCOPE

This statement of work (SOW) is intended to define the framework for the adaptation of the MRA study exercise protocol, in order to be scientifically evaluated on the International Space Station (ISS). It outlines the work to be performed by the Contractor selected. This is not the information to be provided in the proposal.

The evaluation of the efficacy of the countermeasure must be determined with respect to the present understanding of risks during human spaceflight.

1.3 DOCUMENT CONVENTIONS

The following verbs, as used in this document, have the specific meaning as indicated below:

“must”	Indicates a mandatory requirement
“should”	Indicates a preferred, but not mandatory alternative
“may”	Indicates an option
“will”	Indicates a statement of intention

1.4 DEFINITIONS

Conditioned stowage: Cold Stowage provides controlled environments to meet temperature requirements during ascent, on-orbit operations and return in relation to International Space Station Payload Science.

Contingency Subject: As part of subject coordination, additional crewmembers can be included to ensure the minimum subject quota required for the experiment is achieved. This crewmember is recruited and



participates fully in preparation for the experiment since the full complement of astronauts has not completed the experiment at the time of this individual's launch.

Experiment Requirements Document: Produced by the Principal Investigator in collaboration with the CSA. Its intent is to identify all the scientific requirements necessary to design and implement a successful experiment in space. Each scientific requirement is accompanied by a scientific rationale and provides guidelines for the required hardware and software.

Integration Support: The activities and documents provided by the contractor to support CSA in the Payload integration process.

Increment (Inc.): Planning period of approximately 5 to 6 months for ISS operations defined as the undocking of a Soyuz spacecraft from the ISS to the next chronological undocking of a Soyuz spacecraft from the ISS.

Operational Products: The documents required by the National Aeronautics and Space Agency (NASA) to implement a study to the ISS Research Program and for on-orbit operations.

Mission: The collection of activities and the resources, both on ground and in orbit, summoned to implement a scientific experiment on the ISS, for a finite duration determined by available resources, scientific success or a predetermined timeframe.

Payload: The experiment that will be developed by this SOW to be tested with astronauts on ISS.

Payload Integration: The process of inserting an experiment Payload in the ISS Increment planning process such that the Payload hardware can be transported onto the ISS and the experiment activities can be rolled into the crew activity schedule for execution. The Integration does not necessarily include Payload hardware and may be limited to the experiment activities.

Prime Subject: A crewmember that has volunteered for participation in an experiment and is scheduled to execute experiment activities during a planned increment.

Program Authority: Person responsible at CSA for the contractual and programmatic documentation and execution. Please refer to the main contract for further definition.

Subject Data Set: The collection of physiological measurements and biological samples taken on any one subject per experiment protocol, and constituting the totality of the data required to conclude the experiment for that subject. The data set will be collected during pre- and post-flight baseline data collection (BDC) and during in-flight experiment activities.

Technical Authority: Person responsible at CSA for technical aspects of the contract execution. Please refer to the main contract for further definition.

Scientific Authority: Person responsible at CSA for the scientific aspects of the contract execution. Please refer to the main contract for further definition.



1.5 WORK TO BE PERFORMED

This SOW is to develop the experimental requirements for a study protocol suitable for integration to the ISS operations research program. Upon a successful completion of this contract, the operational segment may be initiated.

The ultimate goal is to develop a better exercise countermeasure to human spaceflight risks than is currently being used on ISS.

The work must be performed as per the requirements below.

Research objectives:

- Prepare a study to adapt, develop and evaluate an exercise countermeasure to address cardiovascular risks including arterial stiffening and insulin resistance for the crewmembers during long duration space flight based on the exercise countermeasure used in the MRA bedrest study.
- The exercise countermeasure adaptation must continue to be a countermeasure for aerobic fitness, muscle and bone loss.
- The exercise countermeasure must be prescribed in-flight.
- The countermeasure may be included in pre-flight and post-flight BDCs.
- Define and describe the data collection sets to test the exercise countermeasure, evaluate the efficacy of the countermeasure and provide a recommendation for the preferred exercise option.
- Provide rationale for the number of prime subject required and provisions for contingency subject(s).
- If number of subjects differ from the study constraints (see below) provide justification for number of subject requested.

Research Study Constraints

To accomplish the study, the following constraints must be applied:

- The total duration of the in-flight portion of the study will be approximately two (2) years at an estimated rate of two (2) subjects per six (6) month increment.
- ISS crew size limits the number of available subjects for human research. Sample size (n) maximum of eight (8) +/- contingency subject.
- Crew time available on-board the ISS for Canadian investigations is limited. In-flight crew time per subject dedicated to data collection (not including the exercise sessions) is fifteen (15) hours maximum.
 - Crew time calculation does not include passive wear of hardware or biomedical equipment.
- The in-flight windows may occur during critically limited crew access periods. Note that the choice of the windows will also impact the ease to recruit participants and schedule the BDCs. These limited periods include:
 - First two (2) weeks on orbit (Launch+0d to Launch+15d)
 - One (1) week before return (Return-7d to Return-0d)
- In-flight invasive data collection should be limited (ex. Blood draws, biopsy, injections, etc.).
- In-flight data collection is limited to the use of available ISS hardware. Complimentary handheld exercise tools can be proposed (ex. Bands, cables, etc.).
- Samples transportation to and from orbit: maximum of 2 kg samples per subject.
- Conditioned stowage must be minimized.
- Data sharing from other payloads and/or from the medical data available (Appendix A) should be included to improve the feasibility of the project.



- The pre- and post-flight windows may fall inside critically limited crew access periods. Note that the choice of the windows will also impact the ease to recruit participants and schedule the BDCs. These limited periods include:
 - Launch-60d to Launch-0d
 - Return+0d to Return-7d

1.5.1 Tasks

The principal investigator (PI) must:

- Define at least two (2) operational exercise protocol options with associated risks and mitigations.
- Provide justification for the preferred option including power analysis and statistical strategy, and data management plan.
- Hold regular meetings with the CSA (at least bi-weekly) and provide minutes.

For the preferred option, the PI must:

- Include data collection sets to test the exercise countermeasure and evaluate its efficacy
- Define the experiment requirements and experiment success criteria, and develop the ERD (Experiment Requirements Document) in Appendix B Reference Documents;
- Provide an implementation budget according to the preliminary schedule defined in the milestones below
- Produce a draft Informed Consent Briefing (ICB) presentation in Appendix C
- Produce a draft Johnson Space Center (JSC) Institutional Research Board (IRB) document using the IRB Protocol Template in Appendix D.
- Define crew protocol training requirements and develop flight training presentation if required.

1.5.2 Deliverables

1. Draft and final version of the at least two (2) exercise protocol options
2. Draft and final project implementation budget
3. Drafts 1, 2 and final version of the ERD
4. Draft and final version of ICB presentation and IRB documentation
5. Draft of crew training requirements, and materials
6. Mid-term review and final review PowerPoint (or equivalent) presentation

1.6 INITIAL SCHEDULE

Milestone payments are the envisioned basis of payment during this experiment definition contract.

The milestones are as follows:

Milestone #1:

- Within one (1) month after contract signature and before March 30, 2023
- Kick-Off Meeting (KOM) at CSA
 - Goal will be to brief contractor on CSA payloads implementation and integration process as well as address contractor questions.
- Two (2) draft exercise protocol options

Milestone #2

- Up to two (2) months after Milestone #1
- Final exercise protocol proposed
- Review meeting with CSA to discuss preferred option



- 1st draft ERD

Milestone #3

- Two (2) months after Milestone #2
- 2nd draft ERD
- Draft implementation budget
- Draft crew training requirements, and materials
- Draft version of ICB presentation and IRB documentation
- Mid-point review (held via teleconference, plan ½ day)

Milestone # 4

- One (1) months after Milestone #3 and by August 31, 2023
- Final ERD
- Final version of exercise protocol option
- Final implementation budget
- Final crew training requirements, and materials
- Final version of ICB presentation and IRB documentation
- Final review (to be held at CSA, ½ day)

1.7 ASSUMPTIONS

This SOW must take precedence over the SOW included in appendix E if any conflicting requirements were to be found between the two documents.

The PI is responsible for bringing any perceived conflict to CSA's (technical and scientific authority) attention.

2 ADMINISTRATIVE

2.1 COMMUNICATIONS

In order to coordinate any public announcements pertaining to this contract, the Contractor must not make any public announcements without prior approval of the CSA. The client, CSA, retains the right to make primary contract announcements.

2.2 INTELLECTUAL PROPERTY

The PI must clearly disclose any Background Intellectual Property (BIP) that will be incorporated into this work. Ownership of or licensing of that BIP must be properly documented.

2.3 APPLICABLE DOCUMENTS

1. Implementation of exercise countermeasures during spaceflight and microgravity analogue studies: Developing countermeasure protocols for bedrest in older adults (BROA) <https://doi.org/10.3389/fphys.2022.928313>



2.4 REFERENCE DOCUMENTS

1. MRA bedrest study SOW (**See Appendix E**)
2. Standard ISS exercise equipment and hardware

2.5 APPENDICES (attached in a separate document)

- Appendix A: Medical Data Sharing
- Appendix B: ERD Template
- Appendix C: ICB Template
- Appendix D: IRB Protocol Template
- Appendix E : SOW MRA bedrest study



ANNEX D

Performance Evaluation Report



Contract #:		
Contractor's Name:	Award Amt:	Award Date:
Contractor's Address:	Final Amt:	End Date:
	Total Spent:	
	TA Contract: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Description of Work:	Amendment History:	
Client Department:		
Project Authority	Procurement Authority	PWGSC Contracting Authority
Name:	Name:	Name:
Telephone #:	Telephone #:	Telephone #:
e-mail:	e-mail:	e-mail:
<p>1. How do you rate the Contractor's overall performance?</p> <p><input type="checkbox"/> below expectations <input type="checkbox"/> as expected <input type="checkbox"/> above expectations</p> <p>2. Resources</p> <p>a. Did the Contractor provide the resources as identified in their Proposal? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>b. Did the Contractor's resources conduct their work in a professional manner? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>c. Were replacement resources required? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. Replacement Resources</p> <p>a. Did the Contractor's request to replace the resources immediately after Contract Award? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p>b. Did the Replacement Resources meet the requirements of the RFP? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p>c. How many times were the Contractor's resources replaced? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p>4. Was the Contract completed within the predetermined:</p> <p>a. Time Estimate? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>b. Cost Estimate? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>5. Were the required Reports and Deliverables:</p> <p>a. In conformity with the Scope & Tasks of the SOW <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>b. Received in the specified time frame? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>6. Contract Management</p> <p>a. Did the Contractor deal with performance issues in a timely basis? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p>b. Did the Contractor submit the invoices in accordance with the Invoicing Instructions? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>c. Did the Contractor submit the invoices in accordance with the Basis of Payment? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>d. Did the Contractor submit the invoices in accordance with the Method of Payment? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>e. Did the Contractor respond to every TA Request? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p>f. Did the Contractor properly respond to every TA Request? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA</p> <p>7. Remarks</p>		



ANNEX E

INTEGRITY FORM

**To be included with certifications
(Section III : Certifications):**



Dénomination complète de l'entreprise / Complete Legal Name of Company	
Adresse de l'entreprise / Company's address	
NEA de l'entreprise / Company's PBN number	
Numéro de l'appel d'offre / Request for proposal's number	
Membres du conseil d'administration (Utilisez le format – Prénom, Nom Board of Directors (Use format – First name, Last name	
1. Membre / Director	
2. Membre / Director	
3. Membre / Director	
4. Membre / Director	
5. Membre / Director	
6. Membre / Director	
7. Membre / Director	
8. Membre / Director	
9. Membre / Director	
10. Membre / Director	
Autres Membres / Other members:	
Commentaires / Comments	



ANNEX F

CANADA POST CORPORATION INSTRUCTIONS



Public Services and Procurement Canada (PSPC) is moving forward on its Procurement Modernization Initiative, which aims to simplify the procurement process. The Bid Receiving Unit is launching an electronic bid submissions pilot using Canada Post Corporation's (CPC) Connect service.

What is CPC service ?

CPC is a secure, online service that allows users to share large, confidential files. Some of the service features include:

- large file transfers, allowing users to attach multiple 1 gigabyte (GB) files (any file type) in a single message
- the ability to track your electronic activity history
- privacy and security features that allow the processing of Protected B documents (which meet Government of Canada requirements).

Participants in the pilot project **will not incur any costs** for the use of the CPC service.

Please note that a Canadian mailing address is required to use the CPC service. Should this be an issue for you, please contact us and we will be pleased to provide a work-around procedure to ensure you can still participate.

Benefits to businesses

Sending bid submission files via CPC service means:

- a faster and more efficient bid submission process
- a green alternative to submitting paper files in-person, by mail or fax to a Bid Receiving Unit office
- a time and date stamp record for the upload of files in CPC service

How to participate

Please confirm your participation to PSPC's Bid Receiving Unit at:

TPSGC.DGAreceptiondessomissions-ABBidReceiving.PWGSC@tpsgc-pwgsc.gc.ca

Once you have confirmed your participation, the Bid Receiving Unit will explain the next steps and invite you to create an CPC service account.



ANNEX G LIST OF POTENTIAL RISKS



#	Risks	Likelihood (rare, possible, high)	Impact	Mitigation/Preventative action
Managerial				
1	Inability to recruit qualified team members/students			
2	Unavailability/loss of key team members/students			
3	Issues with project Schedule			
4	(other managerial risks)			
Financial				
5	Budget is exceeded or insufficient			
6				
7	(other financial risks)			
8				
Technical				
9	Issues with ethics approval of experimental protocol			
10	Issues with execution of experimental protocol			
11	Issues with crew members participation			
12	Equipment failure			
13	Sample/subject loss; corrupted data set			
14	(other specific technical risks)			