Return Bids to:

Retourner Les Soumissions à :

Natural Resources Canada Len.Pizzi@Canada.ca

Request for Proposal (RFP) Demande de proposition (DDP)

Proposal To: Natural Resources Canada

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

Proposition à: Ressources Naturelles Canada

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

Issuing Office - Bureau de distribution

Finance and Procurement Management Branch Natural Resources Canada 183 Longwood Road South Hamilton, ON L8P 0A5

	RFP ———	7 # NRCan-5000035613	
Title - Sujet			
Impact of Disruptive Digital Technologies (D2Ts) on productivity and competitiveness in Canada's natural resources sectors			
Solicitation No. – No de l'invitation NRCan-5000035613		Date December 15, 2017	
Requisition Reference No Nº de la 143551	demande		
solicitation Closes – L'invitation pre at – à 02:00 PM (Eastern S on – le January 15, 2018	tandard Ti	me (EST))	
Address Enquiries to: - Adresse tout	es questions	à:	
Len.Pizzi@Canada.ca			
Telephone No. – No de telephone	Fax No. – No	o. de Fax	
(905) 645-0676	(905) 645	i-0831	
Destination – of Goods and Services Destination – des biens et services:	:		
Natural Resources Canad 580 Booth St Ottawa, ON K1A 0E4	a		
Security – Sécurité			
There is no security require	ment asso	ciated with this project.	
Vendor/Firm Name and Address Raison sociale et adresse du fournis	seur/de l'entre	epreneur	
Telephone No.:- No. de téléphone: Facsimile No.: - No. de télécopieur:			
Name and Title of person authorized print) Nom et titre de la personne autorisée l'entrepreneur (taper ou écrire en car	e à signer au n	nom du fournisseur/de	

Date

Signature

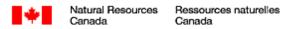


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The Articles contains in this document are mandatory in their entirety, unless otherwise indicated. Acceptance of these Articles, in their entirety, as they appear in this document, is a Mandatory requirement of this RFP. Suppliers submitting a proposal containing statements implying that their proposal is conditional on modification of these clauses or containing terms and conditions that purport to supersede these clauses or derogate from them will be considered non-responsive.

Bidders with concerns regarding the provisions of the Bid Solicitation document (including the Resulting Contract Clauses) should raise such concerns in accordance with the Enquiries provision of this RFP.



PART 1 - GENERAL INFORMATION

1.1 Introduction

The bid solicitation is divided into seven 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: includes the certifications to be provided:
- Part 6 Security Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7 Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The Annexes include the Statement of Work and the Basis of Payment.

The Appendixes include the Evaluation Criteria and the Financial Proposal Form.

1.2 Summary

By means of the RFP, NRCan is seeking proposals from bidders for....

1.2.1 The objective of this research is to conduct an analysis of how the adoption of digital disruptive technologies can help advance the clean growth agenda while also increasing productivity and competitiveness of the natural resources industries (i.e. energy, forest, metals and minerals). The paper will also identify policy levers that the Government of Canada could potentially use to support businesses (upstream companies and supply chain for them) in the natural resource sectors to remain competitive on the global market while also advancing clean growth objectives.

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days from receipt of the results of the bid solicitation process. The debriefing may be 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 bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-andquidelines/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 the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2017-04-27) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation with the modifications to the text below. If there is a conflict between the provisions of 2003 and this document, this document prevails.

- In the complete text content (except Section 3) Delete: Public Works and Government Services Canada" and Insert: "Natural Resources Canada." Delete: "PWGSC" and Insert: "NRCan"
- Section 2: Delete: "Suppliers are required to" and Insert: "It is suggested that suppliers"
- Subsection 1 of Section 8: Delete entirely
- Under Subsection 2 of Section 20: Not applicable

2.2 **Submission of Bids**

It is the Bidders responsibility to ensure that proposals are sent to the following e-mail address, by the time and date indicated on page 1 of this RFP document:

len.pizzi@canada.ca

IMPORTANT

It is requested that you write the following information in "Subject" of the e-mail:

NRCan-5000035613 - Impact of Disruptive Digital Technologies (D2T) on productivity and competitiveness in Canada's natural resources sectors

Due to the nature of the bid solicitation, bids transmitted by mail or facsimile to NRCan will not be accepted.

NRCan will not assume responsibility for proposals directed to any other location.

The onus is on the Bidder to ensure that the proposal is submitted correctly to the above address. Not complying with the above instructions may result in NRCan's inability to ascertain reception date and/or to consider the bid prior to contract award. Therefore, NRCan reserves the right to reject any proposal not complying with these instructions.

2.3 **Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority 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 question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered 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 Ontario.

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 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least three (3) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

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

Section I: Technical Bid (1 electronic copy)

Section II: Financial Bid (1 electronic copy) in a separate file and document

Section III: Certifications (1 electronic copy)

Prices should appear in the financial bid only. No prices should 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:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) format;
- (b) use a numbering system that corresponds to the bid solicitation.

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 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.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Financial Proposal Form in Appendix "2". The total amount of Applicable Taxes must be shown separately.

Exchange Rate Fluctuation

C3011T (2013-11-06), Exchange Rate Fluctuation

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.

4.1.1 Technical Evaluation

Mandatory and point rated technical evaluation criteria are included in Appendix "1" – Evaluation Criteria.

4.1.2 Financial Evaluation

Mandatory financial evaluation criteria are included in Appendix "1" - Evaluation Criteria.

4.2 Basis of Selection

4.2.1 Highest Combined Rating of Technical Merit and Price

- 1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory criteria; and
 - c. obtain the required minimum of 43 points overall for the technical evaluation criteria which are subject to point rating.
 The rating is performed on a scale of 85 points.
- 2. Bids not meeting (a) or (b) or (c) will be declared non-responsive.
- 3. The selection will be based on the highest responsive combined rating of technical merit and price. The ratio will be 70% for the technical merit and 20% for the price.
- 4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 70%.
- 5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 20%.
- 6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
- 7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 60/40 ratio of technical merit and price, respectively. The total available points equal 135 and the lowest evaluated price is \$45,000 (45).

Basis of Selection - Highest Combined Rating Technical Merit (60%) and Price (40%)				
		Bidder 1	Bidder 2	Bidder 3
Overall Technical Score		115/135	89/135	92/135
Bid Evaluated	Price	\$55,000.00	\$50,000.00	\$45,000.00
	Technical Merit Score	115/135 x 60 = 51.11	89/135 x 60 = 39.56	92/135 x 60 = 40.89
Calculations	Pricing Score	45/55 x 40 = 32.73	45/50 x 40 = 36.00	45/45 x 40 = 40.00
Combined Rat	ting	83.84	75.56	80.89
Overall Rating		1st	3rd	2nd



PART 5 - CERTIFICATIONS AND ADDITIONAL INFORMATION

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. 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 Declaration of Convicted Offences

In accordance with the <u>Ineligibility and Suspension Policy</u> (http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

5.2 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information listed below should be submitted with the bid but may be submitted afterwards. If any of these required certifications or additional information is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

5.2.1 Integrity Provisions – List of Names

In accordance with the <u>Ineligibility and Suspension Policy</u> (http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

- 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 or, in the case of a private
 company, the owners of the company.
- Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).
- Bidders bidding as partnerships do not need to provide lists of names.

Name of Bidder:
OR
Name of each member of the joint venture:
Member 1:

Member 2:		
Member 3:		
Member 3	 =	
Member 4:		
	 •	

Identification of the administrators/owners:

SURNAME	NAME	TITLE

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Employment and Social Development Canada (ESDC) - Labour's website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

5.2.3 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.



5.2.4 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.

5.2.5 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 awarded to FPSs, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

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.

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 FPSs in receipt of a pension, as applicable:

name of former public servant;
date of termination of employment or retirement from the Public Service.
oviding this information, Bidders agree that the successful Bidder's status, with respect to being public servant in receipt of a pension, will be reported on departmental websites as part of the shed proactive disclosure reports in accordance with Contracting Policy Notice: 2012-2 and the elines on the Proactive Disclosure of Contracts.
Force Adjustment Directive
the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force ljustment Directive? Yes () No ()
the Bidder must provide the following information:
name of former public servant;
conditions of the lump sum payment incentive;
date of termination of employment;
amount of lump sum payment;
rate of pay on which lump sum payment is based;
period of lump sum payment including:
 start date end date and number of weeks
number and amount (professional fees) of other contracts subject to the restrictions of a worce adjustment program.
Professional fees Amount

Il contracts awarded during the lump sum payment period, the total amount of fees that may be
erskillige til

paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

5.2.6 Aboriginal Designation

Who is eligible?

- a) An Aboriginal business, which can be:
 - i. a band as defined by the Indian Act
 - a sole proprietorship ii.
 - iii. a limited company
 - a co-operative iv.
 - a partnership

vi. a not-for-profit organization

in which Aboriginal persons have at least 51 percent ownership and control,

OR

b. A joint venture consisting of two or more Aboriginal businesses or an Aboriginal business and a non-Aboriginal business(es), provided that the Aboriginal business(es) has at least 51 percent ownership and control of the joint venture.

When an Aboriginal business has six or more full-time employees at the date of submitting the bid, at least thirty-three percent of them must be Aboriginal persons, and this ratio must be maintained throughout the duration of the contract.

The bidder must certify in its submitted bid that it is an Aboriginal business or a joint venture constituted as described above.

$\hfill \square$ Our Company is NOT an Aboriginal Firm, as identified a	bove.
\square Our Company is an Aboriginal Firm, as identified above.	The supplier must complete the certificate in
the appropriate clause below.	

SACC Manual clauses <u>A3000T</u>, <u>A3001T</u>, <u>M3030T</u>, <u>M9030T</u>, <u>S3035T</u> and <u>S3036T</u> contain a certification that suppliers must complete and submit with their bid/offer/arrangement. Failure by suppliers to submit this completed certification form with their bids/offers/arrangements will render the bid/offer/arrangement non-responsive.

PART 6 - SECURITY REQUIREMENTS

6.1 **Security Requirements**

There is no security requirements associated with this requirement.

PART 7 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

7.1 Statement of Work

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

7.2 Standard Clauses and Conditions

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

7.2.1 General Conditions

<u>2010B</u> (2016-04-04), General Conditions – Professional Services - Medium Complexity, apply to and form part of the Contract.

As applicable, replace references to Public Works and Government Services Canada (PWGSC) with Natural Resources Canada (NRCan).

7.2.2 Supplemental General Conditions

4006 (2010-08-16), Contractor to Own Intellectual Property Rights in Foreground Information

7.3 Dispute Resolution

Mediation

If a dispute arising from this contract cannot be settled amicably through negotiation, then the parties agree in good faith to submit the dispute to mediation as administered by the Arbitration and Mediation Institute of Canada Inc. (AMIC). The parties acknowledge receipt of the rules of AMIC. The cost of mediation shall be borne equally by the parties.

Arbitration

If the parties cannot resolve the dispute through mediation within sixty (60) days, the parties agree to submit the dispute to arbitration pursuant to the Commercial Arbitration Act (Canada). The party requesting such arbitration shall do so by written notice to the other party/parties. The cost of the arbitration and fees of the arbitrator shall be borne equally by the parties. The arbitration shall take place in the city where the contractor carries on business before a single arbitrator to be chosen jointly by the parties. If the parties cannot agree on the choice of arbitrator within thirty (30) days of written notice to submit the dispute to arbitration, each party will choose a representative who will select the arbitrator. The parties may determine the procedure to be followed by the arbitrator in conducting the proceedings, or may ask the arbitrator to do so. The arbitrator shall issue a written award within thirty (30) days of hearing the parties. The award may be entered in any court having jurisdiction and enforced as a judgment of that court.

Meaning of "Dispute"

The parties agree that the word "dispute" in this clause refers to a dispute of fact or of law, other than a dispute of public law.

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, on request or consent of the parties to participate in an alternative dispute resolution process to resolve any dispute between the parties respecting the interpretation or application of a term and condition of this contract and their consent to bear the cost of such process, provide to the parties a proposal for an alternative dispute resolution process to resolve their dispute. The Office of the Procurement Ombudsman may be contacted by telephone at 1-866-734-5169 or by e-mail at boa.opo.gc.ca.

7.4 Security Requirements

7.4.1 There is no security requirement applicable to this Contract.

7.5 Term of Contract

7.5.1 Period of the Contract

The period of the Contract is from date of Contract to August 30, 2018 inclusive.

7.6 Comprehensive Land Claims Agreements (CLCAs)

Not applicable.

7.7 Authorities

7.7.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Len Pizzi

Title: Procurement Officer
Organization: Natural Resources Canada

Address: 183 Longwood Road South, Hamilton, ON, L8P 0A5

Telephone: (905) 645-0676
Facsimile: (905) 645-0831
E-mail address: len.pizzi@canada.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.

7.7.2 Project Authority

The Project Authority for the Contract is:

Name:

Title:

Organization:

Address:

Telephone:

Facsimile:

E-mail address:

The Project Authority 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 Project Authority; however, the Project Authority 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.

7.7.3 Contractor's Representative

Name:
Title:
Organization:
Address:
Telephone:
Facsimile:
E-mail address

7.8 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 <u>Public Service Superannuation Act</u> (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.

7.9 Payment

7.9.1 Basis of Payment – Firm Price, Firm Unit Price(S) or Firm Lot Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price, as specified in Annex "B" for a cost of \$ _____. 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.

7.9.2 Method 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 claim for payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

7.10 Invoicing Instructions

Invoices shall be submitted using the following method:



Invoices and all documents relating to a contract must be submitted on the Contractor's own form and shall bear the following reference numbers: Contract number: _____

Invoicing Instructions to suppliers: http://www.nrcan.gc.ca/procurement/3485

7.11 Certifications

7.11.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing additional information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the additional information, or if 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.

7.12 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario.

7.13 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the supplemental general conditions **4006** Contractor to Own Intellectual Property Rights in Foreground Information (2010-08-16);
- (c) the general conditions **2010B** Professional Services Medium Complexity (2016-04-04);
- (d) Annex A, Statement of Work;
- (e) Annex B, Basis of Payment; and
- (f) the Contractor's bid dated .

7.14 Foreign Nationals (Canadian Contractor OR Foreign Contractor)

SACC Manual clause A2000C (2006-06-16) Foreign Nationals (Canadian Contractor)

OR

SACC Manual clause A2001C (2006-06-16) Foreign Nationals (Foreign Contractor)

7.15 Insurance

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.

7.16 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 supplier or the contractor or the name of the entity awarded this contract] respecting administration of this

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, and the interpretation and application of the terms and conditions and the scope of the work of this contract are not in dispute. The Office of the Procurement Ombudsman may be contacted by telephone at 1-866-734-5169 or by e-mail at boa.opo@boa.opo.gc.ca.

ANNEX "A" - STATEMENT OF WORK

NRCan's Long-term Cross-Sectoral Economic and Policy Research Agenda

SW.1.0 TITLE: Impact of Disruptive Digital Technologies (D2Ts) on Productivity and Competitiveness in Canada's natural resources sectors.

SW.2.0 BACKGROUND

The Government of Canada has signaled the importance of developing a strong evidence base for policy development and future decision-making. In response, NRCan launched the development of a long-term Economic and Policy Research Agenda (The Research Agenda). The Research Agenda will help position the Department and the Government of Canada to respond to emerging risks and opportunities and support evidence-based decision making and policy development over the medium-term. This will be accomplished by contracting external researchers to complete socio-economic research to address priority knowledge and data gaps, and build a strong evidence-base for future planning processes. The impacts of digital disruptive technologies on natural resource industries is one topic that requires a deeper dive.

Innovation has been a significant contributing factor in Canada's economic prosperity, with direct impacts on improved living standards, and remains a source of enhanced productivity and competitiveness in Canada. According to the Senior Deputy Governor of the Bank of Canada, Carolyn A. Wilkins, (2017), the world is on the brink of a new industrial revolution. How we embrace innovation and its opportunities will change how we manage the demands of work, how we build our cities, and how we grow our economy in a clean and inclusive way.

The energy, forest, mining and metals industries, which are the backbone of Canada's economy, are facing the effects of this revolution. The development and application of digital disruptive technologies, including artificial intelligence and robotics are changing the way the natural resource industries operate. In the federal Budget 2017, the government emphasized its commitment to supporting innovation for a clean environment and a strong economy. In its new innovation and Skills Plan, innovation and clean growth were identified as key elements of the Government's priorities and different measures were proposed to help advance them:

- proposed investments to make Canada a global leader in technology development and to support innovation in key growth industries, including clean technology, digital and agri-food;
- establishment of a series of six industry-led Strategic Economic Tables, including for clean technology, clean resources and digital industries to identify innovation opportunities and set bold growth targets, and;
- commitment to invest \$21.9 billion in green infrastructure, including initiatives to support the implementation of the Pan-Canadian Framework on Clean Growth and Climate Change.

Natural Resources Canada (NRCan) is working closely with other government departments to support innovation and the use of clean technologies in our natural resource sectors, including the forest, fisheries, mining, energy, and agricultural sectors. One area of innovation that was specifically targeted in Budget 2017 is Artificial Intelligence (AI). The Government committed to launch both the Pan-Canadian Artificial Intelligence Strategy and Superclusters. Funding, through the Strategic Investment Fund and the Venture Capital Catalyst Initiative, has also been allocated to build a leading-edge AI ecosystem and make Canada one of the 'core intellectual centers of AI research in the world'.

Al has been defined as the theory and development of computer systems able to perform tasks that normally require human intelligence. It is applying intelligence to information. For the purposes of this research paper, artificial intelligence, its enabling digital systems and applications will be referred to as

D2Ts. These have the potential to significantly alter the way businesses operate (e.g., Internet of Things, Autonomous vehicles, BlockChain, 3D Printing, Digital Twins).

The rate of technological progress is rapid. Over the next ten years, D2Ts have the potential to drive major market disruptions in most industries, including energy, forest, metals and minerals. They will bring profound changes not only in the way tasks are performed, how resources are developed, but, more broadly, by supporting business and operation decision, saving costs and increasing efficiency. Whether it is with improving energy supply and efficiency, smarter grids, optimization of forest management/exploitation and mining operations, D2Ts will lead to improvements in data gathering, productivity, efficiency and cleaner resource extraction and growth. These innovations will help support the GOC's commitment to being a world leader by improving environmental performance, opening new market opportunities, and developing and implementing novel approaches that will increase competitiveness of the Natural Resources sector in Canada.

NRCan is seeking to contract external researchers to conduct research related to the **Impact of Disruptive Digital Technologies on productivity and competitiveness in Canada's natural resources industries.** This topic was identified as a key research priority for the 2017-2018 Economic and Policy Research Agenda.

Results and recommendations from this paper will help bridge the knowledge and data gaps and inform discussions of the Energy and Mines Ministers Conference(s), the Economic Strategy Tables on Clean Growth and Clean Resources, as well as the follow up to the Generation Energy cross-country dialogue.

SW.3.0 OBJECTIVES

The objective of this research is to conduct an analysis of how the adoption of digital disruptive technologies can help advance the clean growth agenda while also increasing productivity and competitiveness of the natural resources industries (i.e. energy, forest, metals and minerals). The paper will also identify policy levers that the Government of Canada could potentially use to support businesses (upstream companies and supply chain for them) in the natural resource sectors to remain competitive on the global market while also advancing clean growth objectives.

Competitiveness refers to any cost that firms in an industry might incur in producing goods and getting them to market (including capital costs, costs of labour and other inputs, regulatory compliance costs, taxes, tariffs and other trade barriers, transportation costs), and how such costs compare with those of producers in other countries. The full range of costs is relevant to the ability of an industry to attract investment and to profitably export its products.

Research findings will serve to advance NRCan priorities of supporting innovation and clean growth, competitiveness, and clean technology. From a competitiveness perspective, the paper will help identify opportunities for cost and productivity savings, and increased access to world markets for Canadian natural resources. The paper may also help identify other potential domestic and international markets for D2T technologies developed in Canada (e.g. agri-food).

SW.4.0 PROJECT REQUIREMENTS

SW.4.1 Tasks, Deliverables and Schedule

Using a forward-looking and policy-focused approach, the study will examine the effects of D2Ts on the productivity and competitiveness of Canadian industries in energy, forest, metals and minerals sectors in the context of the transition a low-carbon economy. The study will:

1. Provide a concise literature review of incidences and impacts of D2Ts on the productivity and competitiveness of these natural resource industries in Canada and globally.

- 2. Examine the rate of adoption of D2Ts over time in Canada's natural resource industries (e.g. Are we lagging behind or ahead of the competition)
- 3. Using qualitative and quantitative methodologies, develop detailed case studies to identify and describe the main D2Ts that are being adopted, or are likely to be adopted, by industries in each of the natural resources sectors.
 - examine the effects of the developed technology on the productivity and competitiveness
 of natural resource industries (relative to baseline, defined as the technology currently in
 use in each industry), and highlight which of the technologies will help advance the
 transition to a low-carbon economy. Consider medium to long term scenarios (5,15, 25
 years) of the impacts of D2Ts on productivity and competitiveness of Canada's natural
 resource sectors.
- 4. Finally, assess challenges associated with D2Ts and provide policy recommendations to overcome these barriers or maximize opportunities in the natural resources sectors.

Proposals will be assessed based on their ability to address the above mentioned activities, balancing breadth of coverage across natural resources sectors and depth within each of them given timelines and money available. Timelines and deliverables are listed below.

Deliverable	Timeline	Description
Project Launch Meeting	Jan 2018	Meeting with NRCan's Working Group to launch the project
Project Outline	January 2018	Detailed outline of the report, research methodology and timelines.
1 st Draft report	March 2018	Preliminary report on initial findings submitted to NRCan for review and comments.
Follow up meeting with NRCan	April 2018	Follow up meeting to discuss the first draft report (comments) with the Working Group and with Action Learning Team on Al.
2 nd Draft report	April 2018	Updated draft including comments of the Working Group to be shared with the department.
Follow up meeting with NRCan	May 2018	Follow up meeting to discuss the second draft report (comments) with the Working Group and with Action Learning Team on AI.
Final Report and Executive Summary	May 2018	Final Report of 60 pages minimum excluding annexes, an Executive summary (5 pages max.) are submitted to NRCan.
Dissemination	August 2018	Deck and presentation to NRCan stakeholders and senior management

SW.5.0 OTHER TERMS AND CONDITIONS OF THE SOW

SW 5.1 Contractor's Obligations

- 1. Keep all documents and proprietary information confidential;
- 2. Maintain all documents in a secure area;
- Return all documents and material belonging to NRCan upon completion of the contract;
- 4. Attend meetings with stakeholders, as required;

- 5. Participate in teleconferences, as needed;
- 6. Attend meetings at NRCan sites, as needed;
- 7. Consult with NRCan in advance of any planned interviews or dissemination activity;
- 8. Submit all written reports in electronic Microsoft Office Word and/or PowerPoint format, and;
- 9. Participate in one or more knowledge dissemination activities organized by NRCAN, as agreed upon.

5.1.1 Contractor's Experience

Note that collaborative proposals are welcome. One of the proposed resources MUST demonstrate that they have expertise in productivity and/or competitiveness preferably related to natural resources industries (focused on energy, forest, metals and minerals) in Canada and/or internationally. Among the applicants, at least two or more of the areas listed below need to be demonstrated.

- o Jobs of the future, innovation or disruptive technologies.
- o Clean growth or cleantech
- o Scenario modelling, economic trends and forecasting.
- o Public Policy

One of the proposed resources must also demonstrate that they have:

- extensive experience in quantitative and qualitative research methodology (at least 5 years)
- experience conducting research related to natural resources sectors (in the Canadian context preferably)
- An awareness of existing research and literature in the field of D2Ts (in both natural resource sectors and with the larger Canadian economy).
- Experience publishing academic and/or non academic papers discussing issues related to natural resources, productivity, and/or competitiveness
- Access to an appropriate economic model

Each of the following would be considered an asset:

- Able to demonstrate high-quality results from past research undertaken (e.g., provide a sample of work or has significant experience undertaking research for Government entities).
- Can work (or has experience) collecting data from leading organizations/stakeholders from each natural resource sector (energy, forest, and mining).

SW 5.2 NRCan's Obligations

- 1. Provide access to necessary internal research and documentation to support the research;
- Provide access to a key contact that will coordinate all information transfers and necessary supports;
- 3. Help the contractor define the scope of the model
- 4. Provide comments on draft reports within 10 working days; and
- 5. Liaise with contractor and provide other assistance and support as needed.

SW.5.3 Estimated Period of the Contract

The estimated period of the contract is from the date of Contract Award to August 30, 2018.

SW.5.4 Location of Work, Work Site and Delivery Point

The work is expected to be completed at the contractor's place of business. All progress reports and presentations of research findings will be held at NRCan facilities in Ottawa, ON (in-person or via teleconference) unless agreed to otherwise.

SW.5.5 Special Requirements

- In addition to the full report, the contractor will provide an executive summary of no more than 5 pages.
- Bidders have to provide a firm all inclusive price for professional fees (which includes all overhead fees), not exceeding the funding limitation including taxes.

ANNEX "B" - BASIS OF PAYMENT

(to be completed at contract award)

APPENDIX "1" - EVALUATION CRITERIA

Bidders are advised to address these criteria in the following order and in sufficient depth in their proposals to enable a thorough assessment. NRCan's assessment will be based solely on the information contained within the proposal. NRCan may confirm information or seek clarification from bidders.

Bidders are advised that only listing experience without providing any supporting data to describe responsibilities, duties and relevance to the criteria will not be considered demonstrated for the purpose of this evaluation.

The Bidder should provide complete details as to where, when (month and year) and how (through which activities/ responsibilities) the stated qualifications/experience were obtained. Experience gained during formal education shall not be considered work experience. All criteria for work experience shall be obtained in a legitimate work environment as opposed to an educational setting. Co-op terms are considered work experience provided they are related to the required services.

Bidders are also advised that the month(s) of experience listed for a project whose time frame overlaps that of another referenced project will only be counted once. For example: project one time frame is July 2001 to December 2001; project two time frame is October 2001 to January 2002; the total months of experience for these two project references is seven (7) months.

1. TECHNICAL CRITERIA

1.1 Mandatory Evaluation Criteria

The Mandatory Criteria listed below will be evaluated on a simple pass/fail basis. Proposals which fail to meet the mandatory criteria will be deemed non-responsive.

Criterion ID	Mandatory Criteria	Proposal Page #	Pass/Fail
M1	The bidder(s) MUST demonstrate that they have excellent knowledge of questions related to productivity and competitiveness, preferably of Canada's natural resource industries (focused on energy, forest, metals and minerals) in Canada and/or internationally. Among the applicants, at least two or more of the areas listed below need to be demonstrated.		
	☐ Jobs of the future, innovation or disruptive technologies		
	☐ Clean technology or Clean growth.		
	☐ Scenario modelling, economic trends and forecasting.		
	☐ Public Policy		
	Evidence MUST be provided in the bidder's resume.		



Criterion **Proposal Mandatory Criteria** Pass/Fail ID Page # **M2** At least one of the proposed team member named in the proposal, MUST demonstrate that they possess knowledge of "Artificial Intelligence" or disruptive technologies, its applications and how they relate to Canada's natural resource sectors (specifically, energy, mineral and metals, and forest industries)). Evidence MUST be provided in the bidder's resume. **M3** At least one of the team members named in the proposal, MUST demonstrate that they have extensive experience in quantitative and qualitative research methodology (at least five (5) years) At least one of the team members MUST demonstrate that they have **M4** experience conducting research related to natural resources sectors (in the Canadian context preferably) **M5** At least one of the team members **MUST** demonstrate that they have an awareness of existing research and literature in the field of D2Ts (in both natural resource sectors and with the larger Canadian economy). **M6** At least one of the team members **MUST** demonstrate that they have experience publishing academic and/or non academic papers discussing issues related to natural resources, productivity, and/or

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1.2 EVALUATION OF RATED CRITERIA

competitiveness

The criteria contained herein will be used by NRCan to evaluate each proposal that has met all of the mandatory criteria.

Proposals must achieve the stated minimum points required overall for the rated criteria to be assessed as responsive under the point rated technical criteria section; proposals not meeting the minimum required points will be deemed non-responsive.

Proposals will be evaluated based on the following criteria:

Criterion ID	Point Rated Technical Criteria	Minimum Points /Maximum Points	Proposal Page #
R1	R1- Description of Approach and Methodology Presented	30	
	The following areas will be considered:		
	1) Understanding of the requirement;		
	2) Demonstrated knowledge of applications of disruptive technologies in each of the natural resources sectors.		
	3) Demonstrated knowledge of productivity and competitiveness of the natural		



	resource industries.		
	4) Proposed data source and methodology meet proposal requirements.		
	Points breakdown:		
	(30 points) - the submission demonstrates an excellent understanding of the requirements (addresses all elements with no apparent weakness).		
	(25 points) - the submission demonstrate a very good understanding of the requirements (addresses all elements with no significant weakness).		
	(20 points) - the submission demonstrates a good understanding of the requirement (addresses most of the elements).		
	(10 points) – The submission demonstrates a basic understanding of the requirements (addresses some elements).		
	(5 points) – the submission demonstrates a low understanding of the requirements (does not address the important factors).		
R2	R2- A demonstrated specialized understanding of the issue and its dimensions	20	
	 Productivity and Competitiveness of Canada's natural resource sectors. Clean growth /clean technologies. Trends of D2T in Canada's natural resource sectors. 		
	Points breakdown:		
	(20 points) - the submission demonstrates an excellent understanding of the requirements (addresses all elements with no apparent weakness).		
	(15 points) - the submission demonstrate a very good understanding of the requirements (addresses all elements with no significant weakness).		
	(10 points) - the submission demonstrates a good understanding of the requirement (addresses most of the elements).		
	(5 points) – The submission demonstrates a basic understanding of the requirements (addresses some elements).		
	(3 points) – the submission demonstrates a low understanding of the requirements (does not address the important factors).		
R3	Research direction and research objectives	20	
	The goal states the purpose of the project, and what the project is ultimately expected to achieve.		
	The objectives clearly define the proposed lines of inquiry and/or activities required to meet the goal.		
	The proposed project outputs (i.e., the anticipated results of the project) are clearly described and aligned to the objectives.		
	Points breakdown:		

	Total points	85	
	(3 points) – the submission demonstrates a low understanding of the requirements (does not address the important factors).		
	(10 points) – The submission demonstrates a basic understanding of the requirements (addresses some elements).		
	(15 points) - the submission demonstrates a good understanding of the requirement (addresses most of the elements).		
	Points breakdown:		
	Proposed activities are feasible given the duration of the project.		
	 Key milestones and deliverables are aligned with the objectives of the project 		
	activities.		
R4	 Work plan and feasibility Timelines for the project are appropriate in relation to the proposed project 	15	
	(3 points) – the submission demonstrates a low understanding of the requirements (does not address the important factors).		
	(5 points) – The submission demonstrates a basic understanding of the requirements (addresses some elements).		
	(10 points) - the submission demonstrates a good understanding of the requirement (addresses most of the elements).		
	(15 points) - the submission demonstrate a very good understanding of the requirements (addresses all elements with no significant weakness).		
	(20 points) - the submission demonstrates an excellent understanding of the requirements (addresses all elements with no apparent weakness).		

2. FINANCIAL CRITERIA

2.1 MANDATORY FINANCIAL CRITERIA

2.1.1 FUNDING LIMITATION

The maximum funding available for the Contract resulting from the bid solicitation is \$79,000.00 (Applicable Taxes extra). Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

This maximum included a) the Price to perform the Work, b) any Travel and Living and c) Miscellaneous Expenses that may be required.

Any bids received in excess of this maximum funding will be automatically deemed non-responsive and will not be evaluated.

APPENDIX "2" - FINANCIAL PROPOSAL FORM

1. FIRM PRICE - Milestone Payments

Bidder tendered all-inclusive firm price to perform the work is in Canadian funds, applicable taxes excluded. Any Travel and Living Expenses and other miscellaneous expenses must be included in the firm price.

Milestone #	Description of Milestone	Milestone Firm Price (applicable taxes excluded)
1	1st Draft report – March 31, 2018 – 60% of the overall contract	\$
2	Final report – May 31, 2018 – 40% of the overall contract	\$
	Total Firm Price for Financial Proposal Evaluation:	\$