Environment Canada Environnement Canada

NCR Procurement and Contracting
Finance Branch
351 Saint-Joseph Boulevard
Gatineau, Quebec
J8Z 1T3

July 23, 2014

Solicitation number K2AA0-14-0012

PROJECT TITLE: OVERVIEW OF AIRCRAFT INDUSTRY SECTOR IN CANADA

Dear Madam/Sir:

Environment Canada has a requirement for the services described in the attached "Terms of Reference". We are, as a result, soliciting proposals to perform this work.

If you are interested in providing these services, you must submit **three (3) copies of your technical proposal, two (2) copies of your completed signed Offer of Service, and two (2) copies of the former public servant certification** no later than **15:00 (local time)** on **September 2, 2014** to the following office:

Environment Canada (BIDS)
Mailroom
171 Jean-Proulx
Gatineau, Quebec
J8Z 1W5

in accordance with the following procedures:

1. Identify the solicitation number **K2AA0-14-0012** on the outside of all proposal/courier envelopes.

2. Include the following in your proposal, in sufficient detail for evaluation purposes:

   (a) a brief statement indicating your understanding of the work;

   (b) a summary of your related experience;

   (c) a listing of staff (professional, technical, administrative, sub-contractors) who will be assigned to the work, and their respective personal résumés;

(d) an explanation of the intended approach and/or methodology; and

(e) contingency plans to be implemented in the event assigned staff become unavailable during the period of the contract.

3. Environment Canada requests that bidders provide their bid in separately bound sections as follows:

SECTION I: SUBMIT THREE (3) HARD COPIES OF YOUR TECHNICAL PROPOSAL;
SECTION II: SUBMIT TWO (2) *SIGNED* HARD COPIES OF THE OFFER OF SERVICE (WHICH REPRESENTS THE FINANCIAL BID).
SECTION III: SUBMIT TWO (2) *SIGNED* HARD COPIES OF THE FORMER PUBLIC SERVANT CERTIFICATION.

Prices must appear in the Offer of Service (Financial Bid) only. No prices must be indicated in any other section of the bid. Offer of Service must be signed.

Bids must be submitted only to Environment Canada's Mailroom by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted to Environment Canada by facsimile or e-mail will not be accepted.

All questions concerning this project shall be submitted in writing by email: josee.francoeur@ec.gc.ca

Yours sincerely,

Josée Francoeur
Contracting Officer
Finance Branch

Attachments:
Offer of Service
Former Public Servant Certification
Mandatory Proposal Instructions
Terms of Reference
Evaluation Grid

MANDATORY PROPOSAL INSTRUCTIONS

1. Receipt

The specified office will receive the sealed proposals (including the Offer of Service) or revisions up until the time and date specified in the letter of invitation.

Environment Canada shall no longer accept the Offer of Service/technical portion of the bidders' proposals by facsimile or by electronic mail.

2. Unacceptable Proposals

Proposals received after the closing date and time will not be considered **and will be returned unopened.**

Proposals **NOT** submitted with duly completed Offer of Service forms in the format specified by the Department will not be accepted.

Incomplete proposals will be considered non-responsive and rejected.

Any Offer of Service that exceeds the stated ceiling or maximum price, if any, shall be considered non-responsive and rejected.

Any Offer of Service not signed in accordance with the letter of invitation shall be considered non-responsive and rejected.

3. Acceptance

The Department will not necessarily accept the lowest or any of the proposals submitted.

4. Completion

The Offer of Service form must be completed and submitted in the format presented by the Department.

Proposals must be submitted in accordance with these instructions and those contained in the letter of invitation.

It is the proposer's responsibility to ensure his/her complete understanding of the requirements and instructions specified by the Department. Enquiries concerning this solicitation must be submitted in writing to the contracting authority (Josée Francoeur) no later than five (5) working days prior to the bid closing date specified herein to allow sufficient time to provide a response.

5. Reference

The Department of Environment reserves the right, before awarding the Contract, to require the Contractor to submit such evidence of qualifications as it may deem necessary, and will consider evidence concerning the financial, technical and other qualifications and abilities of the contractor.

OFFER OF SERVICE

1. **Offer submitted by**: (Print or type complete business or corporate name, address, telephone number, fax number)

_____

_____

_____

_____

Tel. No. _____ Fax. No. _____

E-Mail _____

2. I (We), the undersigned, hereby offer to Her Majesty the Queen in Right of Canada, as represented by the Minister of Environment, to furnish all necessary expertise, supervision, materials, equipment and other things necessary to complete, to the entire satisfaction of the Minister or his/her authorized representative, the work as described in the Solicitation package according to the terms and conditions of the Department's service contract for the following prices:

2.1 Professional Services:

The following is a breakdown of the Professional Services (show fee structure all-inclusive of profit and overhead).

Category of Personnel	Per Diem Rates	Number of Days Assigned	Total

2.2 Administrative Expenses:

(Courier, long distance calls, reproduction, etc.).

$_____

2.3 Travel Expenses:

Reimbursable at cost in accordance with the attached Travel Directive, to a financial limitation of

$_____

My/Our estimate for travel expenses is based upon the following anticipated travel requirements:

2.4 TOTAL PROPOSAL PRICE (Canadian Currency)

$_____
(Total of 2.1 + 2.2 + 2.3 above)

+ G.S.T. $_____

TOTAL: $_____

3. I (We) agree that the Offer of Service will remain firm for a period of one hundred and twenty (120) calendar days after the tender closing date.

4. Payment for professional services and associated costs will be effected upon completion of each phase, submission of invoices detailing the work completed to date and upon confirmation by the departmental representative of the services rendered/deliverables received.

Claims for travel and accommodation expenses will be reimbursed at cost, in accordance with the Travel Directive, after they have been submitted with the aforementioned invoices and supported by receipts, vouchers, or other appropriate documents.

5. I (We) agree to submit herewith the following:

(a) a PROPOSAL to undertake the work, indicating an understanding of the objectives and responsibilities, a methodology and a time schedule as it relates to the requirements;

(b) a CORPORATE RESUME indicating relevant experience, the proposed personnel for the work team including their curriculum vitae;

(c) a list, if applicable, of SUBCONTRACTOR(S) including full names and addresses, portion(s) of work to be subcontracted and relevant firm experience;

(d) a duly completed OFFER OF SERVICE, **in two copies (2).**

(e) a duly completed former public servant certification, **in two copies (2).**

6. It is a condition that during the term of the contract all persons engaged in the course of carrying out this contract shall conduct themselves in compliance with the principles of the Conflict of Interest and Post-Employment Code for Public Office Holders. Should an interest be acquired or seem to cause a departure from the principles, the contractor shall declare it immediately to the departmental representative.

OFFERS WHICH DO NOT CONTAIN THE ABOVE-MENTIONED DOCUMENTATION OR DEVIATE FROM THE PRESCRIBED COSTING FORMAT SHALL BE CONSIDERED INCOMPLETE AND NON-RESPONSIVE AND SHALL BE REJECTED.

Dated this day of , 2014, at in the province of

_____ _____

by: (Signing Officer) Print & Sign Title

Former Public Servant Certification – Competitive Requirement

Contracts with 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.

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 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.

Work Force Reduction Program

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of a work force reduction program? **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 reduction 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 the Goods and Services Tax or Harmonized Sales Tax.

Certification

By submitting a bid, the Bidder certifies that the information submitted by the Bidder in response to the above requirements is accurate and complete.

_____

Print name

_____

Signed

_____

Date

TERMS OF REFERENCE

SOLICITATION K2AA1-14-0012

OVERVIEW OF AIRCRAFT INDUSTRY SECTOR IN CANADA

I. INTELLECTUAL PROPERTY & CONFIDENTIALITY

Intellectual Property

Environment Canada has determined that any intellectual property arising from the performance of the work under this Contract will be vested in Canada on the grounds that the main purpose of the Contract, or of the deliverables contracted for, is to generate knowledge and information for public dissemination (section 6.4.1 of the Treasury Board of Canada Secretariat *Policy on Title to Intellectual Property Arising under Crown Procurement Contracts*).

Confidentiality

It is understood and agreed that the Contractor shall, during and after the effective period of the ensuing contract, treat as confidential and not divulge, unless authorized in writing by the Departmental Representative or his/her delegate, any information obtained in the course of the performance of the ensuing contract.

Subject to the Access to Information Act, R.S. 1985, c.A-1, the parties agree that the terms of this Agreement are confidential and each party shall use the same degree of care to prevent disclosure of the terms of this Agreement to third parties as it uses to protect its own confidential information of similar nature. Any failure of the Contractor to respect the confidentiality obligations is a default of the Contractor for which the Minister may terminate the contract.

II. BACKGROUND

On December 8, 2006, the Prime Minister, along with the Ministers of the Environment and Health, unveiled the first phase of Canada's Chemicals Management Plan (CMP I). The plan takes immediate action to regulate chemicals that are harmful to human health or the environment.

A key element in CMP I was the collection of information on the properties and uses of the approximately 200 chemical substances identified through the categorization process as high priorities for action. This information is used to make decisions regarding the best approach to protect Canadians and their environment from risks these substances might pose. This initiative, known as the "Challenge", was announced in a Notice published in the *Canada Gazette*.

In October 2011, the Government of Canada announced the launch of the second phase of the Chemicals Management Plan (CMP II) to continue its commitment to protecting the health and environment of Canadians. As part of the second phase of the CMP, approximately 500 substances in nine groups have been identified as priorities for action.

These nine groups of substances are planned to be assessed and, if necessary, managed for potential risks to human health and the environment. Information gathering for these substance groupings was initiated in December 2011 and Environment Canada undertook a series of actions to early engage major producers, importers and users of these substances in

discussion. These stakeholders are expected to continue to provide information to support risk assessment and risk management and to demonstrate that chemicals are being used safely.

As a major user of chemicals, the aerospace industry is one of the industries impacted by the CMP. The aerospace industry has also been actively engage in various environmental initiatives that aim to minimize exposure to chemicals such as energy conservation and development of environmental management systems.

The Canadian aircraft industry is faced with several challenges with respect to the implementation of the CMP due to number of factors:

- Ascertaining the precise chemical content of the thousands of component parts that comprise aircrafts, through the different equipment/system provided to Original Equipment Manufacturers (OEM).
- Complex nature of the supply chain, particularly given that they are usually the users of these material and chemicals; and
- Different sources of release and exposure sources through the aircraft lifecycle (e.g., exposure associated with manufacturing, maintenance and end-of-life) and manufacturing processes through the supply chain (metal finishing, painting, foundry operations, etc.).

The Canadian firms supply a broad spectrum of products and services, including regional and corporate aircraft, avionics, commercial helicopters, aircraft engines, flight simulation, landing gears, satellites, space robotics, and earth observation.

- Canada's aerospace manufacturing sector employs more than 80,000 people. From 2000 to 2009 the sector's productivity growth was four times the average among Canadian manufacturers and was also larger than that recorded by the U.S. aerospace industry.
- Annual Research & Development (R&D) investment in the sector grew by 46 percent to reach $1.5 billion in 2010.
- As a member of the North American Free Trade Agreement (NAFTA), Canada is integrated into the North American market, which it serves through a multi-modal transportation system.

Canada's aerospace sector is dynamic; exports account for approximately 80 percent of the industry's annual revenues of more than approximately $22 billion. Canadian aerospace firms have a long history of innovation and global success, and are suppliers within the global supply chain.

III. OBJECTIVE

To undertake a review of environmental and health issues related to the use, releases of and exposure to chemicals of interest and identifying best practices/forums within the aerospace sector addressing chemicals management and related issues.

For the purpose of this contract, the aerospace industry sector is defined as:

- OEM assembling and distributing (including within Canada and exporting) of civilian fixed wing and rotary wing aircraft (referred to as "aircraft").
- OEM's with assembly operations located outside of Canada that are involved in the importation, distribution and servicing of these aircraft in Canada.

- Aircraft parts manufacturing and accessories: This includes the fabrication of all components or sub-assemblies used by the aircraft OEM sector in the assembly of, as well as parts intended for the replacement of damaged or defective components in aircraft operations and maintenance.
- Aircraft maintenance, including overhaul and refurbishment activities.
- Aircraft recyclers (commercial enterprises that crushes, flattens, disposes of or dismantles for parts end-of-life aircraft products).

For the purpose of this contract, chemicals of interest include substances or groups of substances used or released during the lifecycle of the aerospace industry sector that are:

- Concluded / proposed toxic under the *Canadian Protection Environmental Act 1999 (CEPA 1999),* excluding: Greenhouse Gases[1], and Ozone-Depleting Substances (ODSs)*,*
- Concluded / proposed non-toxic on the CEPA 1999, but for which a Significant New Activity (SNAc) Notice is planned or has been published (notice of intent or order),
- Under assessment or planned to be assessed under the Challenge initiative, the Non-Challenge initiative, the CMP substance grouping initiative, and the Petroleum Sector Stream Approach (PSSA), and
- Under consideration for the next phase of the CMP.

Base on available information, initial lists of chemicals of interest are included in ANNEX A. Please, note that these **lists are not exhaustive**.

IV. SCOPE OF WORK

The contractor will:

1. Develop a Canadian aircraft industry sector profile including:
    - Size and geographical distribution of the industry per revenue, number of employees, number of establishments, type of aircraft products and quantity, market perspective and evolution. This data must also be broken down for each tier;
    - Products characterization; and
    - Economic trends over the past 10 years and future economic outlook for the 5 coming years.

2. Identify chemicals of interest for the aircraft industry sector.

3. For the chemicals of interest:
    - Map the supply, distribution, usage / function, exposure and emission during the lifecycle of an aircraft from lower tier manufacturing of parts to end-of-life (EoL) processing;
    - Identify emerging industry trends and pollution prevention opportunities; and
    - Compare levels of risks of releases and exposure at all stages of the aircraft life cycle.

[1] Kyoto Protocol greenhouse gases namely carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF_6).

4. Provide a review of industry driven information exchange tools that could provide insight into the chemical content of aircraft products. This includes a description of these tools and their relevance and limitations regarding data gathering initiatives under the CMP;

5. Provide a comprehensive review of existing control measures and practices in Canada, U.S., European Union, Asia and Latin America (for example, Brazil) which aims to reduce health and environmental impacts of chemicals of interest.

6. Provide a review of existing industry driven tools that aim to better design aircraft products and their components by optimizing chemical selection and minimizing issues associated with EoL processing. This includes a description of these systems, their relevance, and their limitations regarding future risk management activities under the CMP.

7. Articulate roles and responsibilities between various tiers within the aircraft sector and supportive industries (plastics, rubber, electronics, paints, etc.) regarding the chemical content of aircraft parts or products used as part of the aircraft manufacturing processes.

8. Identify existing government-industry practices / forums in Canada, U.S., European Union, Asia and Latin America (for example, Brazil) which aim to engage with the aircraft industry in addressing environmental and health issues.

In order to achieve the objectives outlined above, the contractor must complete all the tasks described and provide the results of this research to the Departmental Representative in the form of a written report and an oral presentation.

This list of tasks is comprehensive, but may not necessarily be exhaustive. The Contractor is encouraged and expected to provide any additional information discovered during the contract period that is deemed relevant in fulfilling the objectives of this contract.

All the economic information must be provided in Canadian dollars. When monetary estimates are not available in Canadian dollars, foreign currency estimates must be converted and presented in Canadian dollars accompanied by an explanation of the exchange rates used.

Use of Canadian data should be prioritized over those from foreign jurisdictions (e.g., United States and European Union). When only foreign data is available, the Contractor should extrapolate the data for the Canadian market and support the extrapolation with valid assumptions (e.g., based on Gross Domestic Product (GDP), market share and demand in North America). All assumptions must be validated by two (2) industry experts.

A clear explanation of any assumptions used and calculations made must accompany any data provided.

Tasks:

The Contractor shall complete the following tasks and provide their outcomes as indicated in the section entitled ***Deliverables and Schedule***.

Task 1: Information Gathering

Through literature reviews, the contractor must gather relevant information to achieve objectives of the study. The contractor must undertake at a minimum the following steps:

- Survey of existing literature including governmental and non-governmental databases and papers on:
    - Socio-economic data on the Canadian aircraft industry including a breakdown by OEMs, aircraft part manufacturers and aftermarket;
    - Environmental and health issues associated with the aircraft industry including risks and exposure of chemicals of interest;
    - Use pattern of chemicals of interest;
    - Existing control measures and practices in Canada, U.S., European Union, Asia and Latin America (for example, Brazil) which aim to reduce health and environmental impacts of chemicals of interest;
    - Best management practices driven by industry with respect to chemicals of interest; and
    - Existing supply chain management practices.
- Analyse information gathered and identify data gaps.

Task 2 – Address Data Gaps

In order to address gaps identified in task 1, the contractor must undertake at a minimum the following steps:

- In collaboration with the Departmental Representative, develop a list of a minimum of 15 stakeholders to be interviewed. This list should be representative of key industry, government and non-governmental stakeholders (for example: aircraft manufacturers, importers, parts manufacturers, associations, Transport Canada, Industry Canada, Environment Canada, U.S. EPA, etc.).
- Develop an interview questionnaire. The interview questionnaire must be approved by the Departmental Representative prior to distribution to stakeholders.
- Manage the survey with identified stakeholders including carry out appropriate follow-up.
- Complete the data analysis initiated in Task 1

Task 3 – Sector Profile

Based on information gathered in tasks 1 and 2, develop a sector profile of the Canadian aerospace industry including:

- Geographical and size distribution of the Canadian aircraft industry (e.g., revenue, the number of employees, number of establishments by size and region, type of aircraft products and quantity)
- Canadian market perspective and evolution;
- Information on the key aerospace industry trade associations:
    - Association name, purpose, mission, key members, number of members, contact information name, etc.).
- A review and analysis of the roles, interactions, synergies and methods used between the particular industries within the aircraft assembly and aircraft parts manufacturing sectors from stages of lower tier manufacturing of parts to final aircraft assembly. In articulating roles and interactions, the contractor must clearly identify how the decisions are made throughout the supply chain with respect to chemicals of interest being used, either as part of the manufacturing process and / or as a component in the item**.**
- A comprehensive review of existing control measures and practices in Canada, U.S., the European Union and Latin America (for example, Brazil) which aims to reduce health and environmental impacts of chemicals of interest.

- Graphics such as process flow diagrams, narrative, and analysis of the main processes in both aircraft product assembly and aircraft parts manufacturing operations in Canada

must support the environment review. One example each should be provided for a fixed wing and rotary wing aircraft. Where commonalities are found in the review of fixed wing and rotary wing aircraft, they should be identified, and duplication of narration/rendering process flows and so on be minimized.

***Task 4* – Environmental Health and Issues Scan**

In order to examine opportunities for integrated and sustainable pollution prevention actions, a comprehensive review of the environmental and health issues associated with the aerospace sector must be completed by the Contractor both from the manufacturing operations, through the aircraft life cycle to identify exposure and/or releases, wholly or partially resulting from the aerospace industry sector activities or products.

This environmental review must include:

- Review of current and emerging industry processes;
- Identify chemicals of interest for the sector;
- Identification / explanation of the functions and the process stages where chemicals of interest are used, either as part of the process itself and/or as a component in the item;
- Identification / explanation of possible releases and/or exposure during the aircraft lifecycle stages (e.g. manufacture, use, maintenance, repair, overhaul, and EoL processing);
- Comparison of levels of risks of releases and exposure at all stages of the aircraft life cycle;
- Identification of opportunities for pollution prevention at each stage of aircraft life cycle;
- Develop a comprehensive review of existing industry driven pollution prevention measures and practices within the aircraft sector that aim to minimize exposure / releases of chemicals to the environment from the design to EoL of aircraft. This review must include domestic and international practices.

Graphics such as process flow diagrams, narrative, and analysis of the main processes in both aircraft assembly and aircraft parts manufacturing operations in Canada must support the environmental review.

***Task 5* – Identify and describe existing government-industry best practices/forums in Canada and the U.S. which aim to engage with the aerospace industry in addressing environmental issues**

To complete this task, the contractor must:

- Identify and explain how practices/forums are being implemented elsewhere within the Government of Canada and other jurisdictions including provincially and at the federal level within the United States.
- Identify the top five (5) government-industry practices / forums aiming to engage with the aircraft industry in risk management or data gathering initiatives in North America (Canada, U.S., and Mexico). For each practice / forum, the contractor must provide a description of the practices / forums; identify key players' roles and responsibilities, provide pros and cons of the approach and recommendations or its implementation in the context of the CMP.

V. Information Source Requirements

The primary objectives of interviews are to fill data gaps from the literature review and obtain stakeholders' feedback. Therefore, the contractor must have exhausted all other possible

methods of gathering the required information before contacting industry or industry associations with specific questions.

Prior to contacting stakeholders, the Departmental Representative must review the content of, interview questions and contact lists. The Contractor is responsible for developing a contact list and ensuring the accuracy and completeness of the information. If available, the Departmental Representative may provide additional contact information to the Contractor. If needed, Environment Canada may also provide a letter to help the Contractor gather data from stakeholders.

Any information and reports provided to the Contractor by Environment Canada are to be treated as confidential. The information and documentation provided must only be used for the purpose of this contract and shall not be used for any other purposes unless duly authorized, in writing, by the Department Representative.

The Contractor must keep a record of discussion following any communication with the industry. These records must contain the industry contact information, the subject of discussion, the questions posed or raised during the discussions, and any feedback received on the subject. The final report must include a list of persons contacted while gathering the information as well as their contact information including email addresses if available.

VI. Deliverables and Schedule

Regular feedback (at least every two weeks) through email, and/or phone calls must be maintained between the Contractor and the Departmental Representative.

The Contractor shall provide the following deliverables:

Deliverable #1 – A detailed methodology and work plan: Based on discussions with the Departmental Representative during the initial meeting, the contractor must provide a final methodology and work plan

This document must describe, in details, the methodology and the work plan with respect to requirements outlined in Tasks 1 to 5. This document must also reflect interactions with the Departmental Representative during the initial meeting.

Environment Canada will review this document and provide comments to the contractor within ten (10) working days after receiving the document.

Deliverable #2 – Draft Table of Contents: The Contractor must provide a draft Table of Contents which describes the structure of the proposed report and the content of the final report and a comprehensive bibliography that will support the study.

This must describe the structure of the proposed content of the report including an executive summary. The titles of chapters, sections and subsections must be indicated with a brief description of their contents, and how they link to requirements of tasks 1 to 5.

Environment Canada will review and provide comments to the Contractor within ten (10) working days after receiving the document.

Deliverable #3 – Final Table of Contents: The Contractor must address and incorporate all the Departmental Representative's comments on Deliverable #2 in the Final Table of Contents.

This must describe the structure of the proposed content of the final report including an executive summary. The titles of chapters, sections and subsections must be indicated with a brief description of their contents, and how they link to requirements of tasks 1 to 5. This document must also include a comprehensive bibliography that will support the study.

Environment Canada will review and provide comments to the Contractor within ten (10) working days after receiving the documents.

Deliverable #4 – Interim Report: The Contractor must provide one electronic copy of the Interim report. The interim report must contain all the study findings and reflect work on tasks 1, 2, 3 and 4 as per the Statement of Work.

The interim report must cover tasks 1, 2, 3 and 4. The report must provide all the findings, the interpretation and the analysis of data including but not limited to identification of the gaps, correlation with existing data, assumptions and their supportive rationales and the limitations of the study. This interim report must also consider and address comments received during regular progress of the project and comments provided on Deliverables #1, #2 and #3.

Environment Canada will review this document and provide comments to the contractor within ten (10) working days after receiving the document.

Deliverable #5 – Draft Report: The Contractor must provide one electronic copy of the draft report. The draft report must contain all the study findings and reflect work on tasks 1, 2, 3, 4 and 5 as per the Statement of Work. It must incorporate / address all comments provided by the Departmental Representative on Deliverable #4.

Environment Canada will review this document and provide comments to the contractor within ten (10) working days after receiving the document.

Deliverable #6 – The Final Report is required in three versions;

- Full final report;
- Final report unabridged with protected Confidential Business Information (CBI) clearly identified; and
- A summary of the final report that is CBI-free (i.e., where individual company information is not revealed or cannot be revealed through deduction).

The final report must address all comments provided by the Department Representatives on the Draft report. It must be provided in three versions (one full report, one report with CBI and third party confidentiality-requested information highlighted and properly sourced, and one summary report that is CBI free). The Contractor must provide the report in hard copy and electronically in Microsoft Word (compatible with Microsoft Office Suite 2010) and Adobe Acrobat (PDF). The final report must cover all aspects of the Terms of Reference. The Contractor should take into consideration all the comments provided on previous deliverables.

All versions of the Final Report must incorporate / address all comments provided by the Departmental Representative on Deliverable #5.

Deliverable #7 – Oral presentation of the results: In person, the Contractor must give a 90 minute presentation including a question period to selected EC staff using Microsoft PowerPoint, and present the key findings of the report.

The Contractor must provide a deck and make oral presentation using Microsoft PowerPoint ((compatible with Microsoft Office Suite 2010). This presentation should last at least an hour and a half including a 30 minutes question period.

The background material, information or other material used to develop the main report must be documented in the report and be available to the Departmental Representative over the course of 5 years after completion of the report.

In addition to the final report, the Contractor must provide the Departmental Representative with:

- Hard and electronic copies (compatible with Microsoft Office Suite 2010) all notes, text, graphics, surveys, raw data, spreadsheets and records of discussion used for the delivery of this Contract upon request.

All deliverables shall be provided no later than twenty-six (26) weeks after contract award.

Schedule

Task	Dates
Initial Meeting	Within five (5) working days of Contract Award Date (CAD).
Final detailed methodology & work plan (Deliverable #1)	No later than three (3) weeks after CAD
Draft Table of contents (Deliverable #2)	No later than five (5) weeks after CAD
Final Table of contents (Deliverable #3)	No later than eight (8) weeks after CAD
Interim report (Deliverable #4)	No later than fourteen (14) weeks after CAD
Draft Report (Deliverable #5)	No later than twenty-one (21) weeks after CAD
Final report (Deliverable #6)	No later than twenty-four (24) weeks after CAD
Oral Presentation (Deliverable #7)	No later than twenty-six (26) weeks after CAD

Deliverables 1 through 6 inclusive must be provided electronically in Microsoft Word (compatible with Microsoft Office Suite 2010).

VII. ACCEPTANCE OF DELIVERABLES

All discussion papers, reports and correspondence produced by the contractor will be subject to review by persons designated by the Department Representative. All work is to be performed in accordance to recognized industry or academic standards and to the satisfaction of the Department Representative.

VIII. TRAVEL

One trip to Gatineau (Quebec) is required in order to present the results of the study.

The request for travel must be made to the Department Representative prior to the trip, and must be pre-approved in writing.

The Contractor will be paid its authorized travel and living expenses, reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit, in accordance with the negotiated meal, private vehicle and incidental allowances specified in Appendices B, C and D of the Treasury Board (TB) Travel Directive http://www.tbs-sct.gc.ca/hr-rh/gtla-vgcl/index_e.asp and with the other provisions of the directive referring to "travellers," rather than those referring to "employees."

IX. PROJECT BUDGET

Environment Canada has established funding for this project at a maximum amount of $100,000.00 excluding (HST). Travel expenses will be reimbursed up to a maximum of $2,500.00 (excluding HST) and must be included in the total cost of the project.

X. PROPOSAL REQUIREMENTS

The proposal should be clear, logical and consistent with the terms of reference and demonstrate an understanding of the requirements of the study and the approach to be taken to achieve the contract objectives. The proposal should be original in wording with minimal quotes or paraphrases from the terms of reference.

Note: Any sections copied from the Statement of Work will not be assessed. The Technical Proposal should not exceed 25 pages excluding annexes.

Technical proposal
The technical proposal **should include the information required to evaluate the bid** including, but not limited to:

1. Understanding of the study's objectives and scope
The proposal must demonstrate an understanding of the:

- Purpose and the objectives of the contract;
- Environmental issues associated with aircraft manufacturing and aircraft parts manufacturing sector;
- Understanding of both aircraft assembly and aircraft parts manufacturing operations and the roles of key stakeholders in the sector;
- Understanding of the role and objectives of the CMP; and
- Challenges and risks associated with the contract.

2. Methodology
The methodology should detail the following for each task:

- Approach for collecting and analysing other relevant data;
- List of data sources, description of their content and brief explanation of their relevance to the associated task or sub-tasks; and
- Approach and solutions to overcome challenges, data gaps and to mitigate risks.

3. Work plan
The proposal should include:

- The name and responsibilities of each team member;

- A breakdown of each project task and sub-task including timelines and team member responsibilities for completing each task;
- The total time commitment per team member; and
- A detailed plan to overcome challenges or mitigate risks identified.

4. Team experience and expertise relevant to the project
The proposal should provide a description of the project manager and all team members including their contribution, experience, expertise, and qualification directly relevant to their role.

5. Annexes
The annexes should include all other information the bidder finds relevant for evaluating the bid including:

- Resumes of all project team's members

XI. PROPOSAL EVALUATION CRITERIA

Proposals will be evaluated in accordance with the requirements listed below. Proposals that do not meet all Mandatory Criteria and the minimum required points for every section of the Point-Rated Criteria will be deemed non-compliant. In addition, the proposals will be evaluated on a weighted basis with the technical score being worth 80% and the financial score being worth 20%. The company with the highest total score will be recommended for contract award. An example is presented at the end of this section.

The proposal must include a detailed description of the approach, methodology and the work plan describing how the Contractor would carry out the study to fulfill the tasks described above. Any relevant information to enable Environment Canada to adequately score the proposal based on the criteria listed below should be included.

If no acceptable bids are received, Environment Canada has the right to not award this contract.

	MANDATORY CRITERIA	**Met/Not Met**
	Security Requirements:	
M1	Each resource proposed by the bidder must hold a security accreditation to the level of Reliability at the time of response to this request for proposal. In order to demonstrate this requirement, each resource must be listed, along with their clearance level and the security clearance number or a confirmation letter from the issuing department.	
M2	The Bidder must hold a valid Designated Organization Screening (DOS), with approved document safeguarding at the level of PROTECTED B issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC) at the time of response to this request for proposal. In order to demonstrate this requirement, the bidder must provide a copy of the confirmation letter from CISD for the DOS with Document Safeguarding – PROTECTED B registration with the proposal.	

	Qualification Requirements:	
M3	The proposal must demonstrate that a minimum of one team member has a university degree in one of the following fields: chemical engineering, mechanical engineering, or environmental engineering. Proof of degree must be provided upon request.	
M4	The proposal must demonstrate that the team member, who meets the M3 qualification requirement, has a minimum of seven years of experience working in one of the following fields: chemical engineering, mechanical engineering, or environmental engineering. Experience must be clearly demonstrated on the team member's resume.	
M5	The proposal must demonstrate that a minimum of one team member has a university degree in one of the following fields: economics, sociology or statistics. Proof of degree must be provided upon request.	
M6	The proposal must demonstrate that the team member, who meets the M5 qualification requirement, has three years of experience working in one of the following fields: economics, sociology or statistics. Experience must be clearly demonstrated on the team member's resume.	

Scoring worksheet

Criteria	Factor	Score Ranges	Score
UNDERSTANDING OF THE REQUEST FOR PROPOSAL **(MAX: 12 POINTS) MINIMUM REQUIRED: 8 POINTS**	**R1. The proposal demonstrates the following:**	**Max: 12**	
	Sound understanding of the purpose and the objectives of the study	**2**	
	Sound understanding of the environmental issues and the existing control measures related to the aircraft manufacturing and aircraft parts manufacturing sector	**3**	
	Sound understanding of aircraft assembly and aircraft parts manufacturing operations and the roles of key stakeholders	**3**	
	Sound understanding of the roles of the Canadian industry and government stakeholders with respect to the policy development and implementation	**2**	

	Identification of challenges and risks associated with the work to be completed under the contract	**2**	
APPROACH AND METHODOLOGY, **(MAX: 30 POINTS)** **MINIMUM REQUIRED: 20 POINTS**	**R2. a) The approach to complete the task is clear, logical and realistic** Points per task ○ Task 1 ○ Task 2 ○ Task 3 ○ Task 4 ○ Task 5 **b) Data sources are identified and their relevance to the associated tasks are demonstrated** • Points per task ○ Task 1 ○ Task 2 ○ Task 3 ○ Task 4 ○ Task 5 **c) The approach to overcome challenges and data gaps and to mitigate risks are clear and easily understood** • Points per task ○ Task 1 ○ Task 2 ○ Task 3 ○ Task 4 ○ Task 5	**Max: 30** **2** **2** **2** **2** **2** **2** **2** **2** **2** **2** **2** **2** **2** **2** **2**	
(MAX: 15 POINTS) **MINIMUM REQUIRED: 10 POINTS**	**R3. Proposal provides a detailed schedule and work plan which demonstrates a commitment to meeting the project objectives and deliverables on time. (15 points maximum)** The following rating scheme will be used to evaluate this criterion: ▪ Proposal clearly identifies the major	**Max 15**	

	tasks and sub-tasks, timelines and milestones/deliverables for all of the requirements in the Statement of Work (15)	**15**	
	▪ Proposal clearly identifies the major tasks, timelines and milestones/deliverables for most of the requirements in the Statement of work, but is missing some details (10)	**10**	
	▪ Proposal clearly identifies the tasks, timelines and milestones/deliverables for some of the requirements in the Statement of Work, but is missing many details (5)	**5**	
	▪ Proposal does not present a schedule and work plan (0)	**0**	
(MAX: 10 POINTS) MINIMUM REQUIRED: 5 POINTS	**R4: Proposal provides details on the allocation of professional time by task for each member of the project team. (10 points maximum)**	**Max: 10**	
	The following rating scheme will be used to evaluate this criterion:		
	Proposal presents details on the level of effort in person-days for each key team member by each major task (10)	**10**	
	Proposal presents details on the level of effort in person-days for each key team member for most major tasks, but details on some major tasks are missing (5)	**5**	
	Proposal does not present details on the allocation of professional time by task (0)	**0**	

(MAX: 13 POINTS) MINIMUM REQUIRED: 7 POINTS	**R5: Proposal provides details on project management procedures. (13 points maximum)** Points will be awarded for each of the following aspects included in the proposal (no partial points will be given): **a)** Details on procedures for: I. project management (e.g., monitoring project progress) (2) II. quality assurance (3) **b)** Details on coordination and communication: I. internally among the project team members (3) II. externally with the Project Authority (2) **c)** Details on back-up arrangements, in case some team members cannot devote all of the time to this project as proposed (3)	**Max: 13** **2** **3** **3** **2** **3**	
PROJECT MANAGER SKILL SET **(MAX. 6 POINTS) MINIMUM REQUIRED: 4 POINTS**	**R6. The Project Manager has the appropriate experience and skill set to manage projects of this nature? (13 points maximum)** **a)** Points will be awarded for up to three (3) projects related to socio-economic data gathering and analysis, and/or sector profile analysis and/or lifecycle analysis of chemicals in products that the Project Manager performed in the	**Max: 13** **6**	

	past 7 years. To be awarded points, a project description must contain at a minimum the following information: • Project title, client name and industry sector; • Planned and actual dollar values; • Planned start and finish dates and actual start and finish dates; • Nature of services provided for the project or study, methodologies and approaches employed; • Project team members involved and their roles; • Summary of the project; and • Name of contact who may be contacted as a reference. **2 points per project, up to 3 projects.**		
(MAX. 7 POINTS) MINIMUM REQUIRED: 4 POINTS	**b)** The Project Manager has experience in leading data collection, analysis and interpretation. **1 point per year, up to 7 years.**	**7**	
TEAM MEMBER EXPERIENCE AND QUALIFICATIONS	**R7. The project team (excluding the Project Manager) has a balance of team members who have the experience required to meet the objectives of this work. Proof of experience must be provided in the team members' resumes according to the Team Experience section of the Proposal Instructions (20 points maximum)**	**Max: 20**	
(MAX. 5 POINTS) MINIMUM REQUIRED 3 POINTS	**a)** The team has experience in socio-economic data gathering and analysis. **0.5 point per year per team member, up to 10 years.**	**5**	
(MAX. 5 POINTS) MINIMUM REQUIRED 3 POINTS	**b)** The team have experience in conducting sector profile analysis.	**5**	

	0.5 point per year per team member, up to 10 years.		
(MAX. 5 POINTS) MINIMUM REQUIRED 3 POINTS	**c)** The team has experience in conducting lifecycle analysis of chemicals in products. **0.5 point per year per team member, up to 10 years.**	**5**	
(MAX. 5 POINTS) MINIMUM REQUIRED 3 POINTS	**d)** The team has experience in the aerospace sector. **0.5 point per year per team member, up to 10 years.**	**5**	
CORPORATE EXPERIENCE	**R8.** Points will be awarded for up to 3 projects **The bidding company has experience in projects or studies completed since January 2005 related to socio-economic data gathering and analysis, and/or sector profile analysis and/or lifecycle analysis of chemicals in products. (18 points maximum)** To be awarded points, a project description must contain at a minimum the following information: • Project title, client name and industry sector; • Planned and actual dollar values; • Planned start and finish dates and actual start and finish dates; • Nature of services provided for the project or study, methodologies and approaches employed; • Project team members involved and their roles; • Summary of the project; and • Name of contact who may be contacted as a reference.	**Max: 18**	
(MAX. 6 POINTS) MINIMUM REQUIRED: 4 POINTS	**a)** Topics addressed in the projects are relevant to the study. **2 points per project, up to 3 projects.**	**6**	

(MAX. 6 POINTS) MINIMUM REQUIRED: 4 POINTS	**b)** The projects were completed under or at budget. **2 points per project, up to 3 projects.**	**6**	
(MAX. 6 POINTS) MINIMUM REQUIRED: 4 POINTS	**c)** The deliverables were accepted by the client by the expected delivery date. **2 points per project, up to 3 projects.**	**6**	
TOTAL		**Max: 131**	

Evaluation Criteria		Maximum Points Available	Minimum Points required
R1	**UNDERSTANDING OF THE REQUEST FOR PROPOSAL**	**12**	**8**
R2	**APPROACH AND METHODOLOGY**	**a) 10** **b) 10** **c) 10**	**20**
R3	**SCHEDULE AND WORK PLAN**	**15**	**10**
R4	**TEAM MEMBERS LEVEL OF EFFORT BY TASK**	**10**	**5**
R5	**PROJECT MANAGEMENT PROCEDURES**	**a) 5** **b) 5** **c) 3**	**7**
R6	**PROJECT MANAGER'S EXPERIENCE**	**a) 6** **b) 7**	**a) 4** **b) 4**
R7	**PROJECT TEAM'S EXPERIENCE**	**a) 5** **b) 5** **c) 5** **d) 5**	**a) 3** **b) 3** **c) 3** **d) 3**
R8	**CORPORATE EXPERIENCE**	**a) 6** **b) 6** **c) 6**	**a) 4** **b) 4** **c) 4**
	Maximum Points for Rated Criteria	**131**	

Example of Highest Combined Rating of Technical Merit and Price

The *responsive* (compliant) Bidder with the highest combined rating of technical merit and price will be recommended for award of a contract. In this example, technical merit and price weighting are **70% and 30%** respectively. Contractor Selection Method is based on the Responsive Bidder achieving the highest total points.

Formula:

Bidder's Rated Score	x 70	+	Lowest Bidder Price	x 30
Maximum Possible Score			Bidder's Price	

Example:

Description	Bidder A	Bidder B	Bidder C
Bidder Technical Points Received	137	110	127
Bidder Proposed Price	$39,000	$28,000	$33,000

Final Evaluation Score Calculation:

Bidder	Points for Technical Score	Points for Price	Total Points
Bidder A	(137 / 146) x 70 = 65.68	(28,000 / 39,000) x 30 = 21.53	87.21
Bidder B	(110 / 146) x 70 = 52.73	(28,000 / 28,000) x 30 = 30	82.73
Bidder C	(127 / 146) x 70= 60.89	(28,000 / 33,000) x 30 = 25.45	86.34

In this example, Bidder A will be recommended for Contract award.