



# Request for proposals: Software engineering practice area descriptions

Date issued: September 10, 2021

Proposal Submission Deadline: September 23, 2021 at 4:00pm ET

Questions concerning this RFP should be directed to:

Ryan Melsom

Manager, Qualifications and CEQB Secretary

[ryan.melsom@engineerscanada.ca](mailto:ryan.melsom@engineerscanada.ca)

613-809-6241

(the “Contact Person”)

# 1 Statement of purpose

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The Canadian Engineering Qualifications Board (“**CEQB**”) of Engineers Canada is seeking proposals from firms or individual consultants (“**Bidders**”) to develop 4-5 descriptions of practice areas in the field of software engineering (the “**Project**”). The Project will be developed through interview-based data gathering, with anticipated completion of the Project in November 2021.

Successful completion of this Project will entail several key deliverables, including the following:

- Phone interviews with 20-30 individuals working in the general area of software engineering
- Outline of 4-5 proposed software engineering practice areas
- 4-5 descriptions outlining practice areas in the field of software engineering

# 2 Background information

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Engineers Canada upholds the honour, integrity, and interests of the engineering profession by supporting consistent high standards in the regulation of engineering, encouraging the growth of the profession in Canada, and inspiring public confidence. For over 80 years, we have worked on behalf of the provincial and territorial engineering regulators that regulate engineering practice and license the country’s 300,000 members of the engineering profession.

Our work is focussed on ten core purposes, as established by Engineers Canada’s members, the engineering regulators:

- Accrediting undergraduate engineering programs.
- Facilitating and fostering working relationships between and among the regulators.
- Providing services and tools that enable the assessment of engineering qualifications, foster excellence in engineering practice and regulation, and facilitate mobility of practitioners within Canada.
- Offering national programs.
- Advocating to the federal government.
- Actively monitoring, researching, and advising on changes and advances that impact the Canadian regulatory environment and the engineering profession.
- Managing risks and opportunities associated with mobility of work and practitioners internationally.
- Fostering recognition of the value and contribution of the profession to society and sparking interest in the next generation of professionals.
- Promoting diversity and inclusivity in the profession that reflects Canadian society.
- Protecting any word(s), mark, design, slogan, or logo, or any literary, or other work, as the case may be, pertaining to the engineering profession or to its objects.

## 2.1 Canadian Engineering Qualifications Board (CEQB)

The CEQB develops national guidelines, Engineers Canada papers, examination syllabi, and other products as mandated by the Engineers Canada Board. CEQB deliverables serve the needs of Canada's engineering regulators, engineering licence holders, and applicants for licensure by enabling the assessment of engineering qualifications, fostering excellence in engineering practice and regulation, and facilitating mobility. Several standing sub-committees assist the CEQB in its work. Each is chaired by a CEQB member and consists of volunteers and, as needed, staff from the provincial and territorial engineering regulators.

## 2.2 Background on the Project to develop software practice area descriptions

In 2019, the CEQB's Task Force on Software Engineering received Board approval to revise the 2016 *Engineers Canada Paper on software engineering*, a public document that helps Canada's engineering regulators define the practice of software engineering in Canada. As part of the consultation on what needed to be included in this revision, Canada's engineering regulators requested that several appendices be added to describe key areas of practice in software engineering. This request primarily stemmed from the success of a similar approach used in the [2019 Engineers Canada Paper on Environmental Engineering](#).

The Task Force on Software Engineering subsequently developed a survey to support the development of the appendices, but due to the complexity of the topic, it became clear that it would be best to gather data through a series of 20-30 half-hour phone interviews with software engineers. The task force also decided that enlisting the services of a consultant to draft the appendices would be the most effective way to ensure that they are developed in a professional and consistent manner. These tasks were assigned to the CEQB Secretariat, which is comprised of Engineers Canada support staff, and form the impetus for this RFP.

# 3 Deliverables and Project timeline

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The successful Bidder (the "**Consultant**") will be required to conduct interviews and develop 4-5 appendices based on the data gathered. The CEQB Secretariat will provide the names and contact information of the interviewees, and the work will be broken into several stages.

Specifically, the Consultant shall:

- 1. Coordinate and conduct interviews with a provided list of software engineering experts. (Anticipated completion: October 31, 2021)**

With the support of the CEQB Secretariat, the consultant will contact 20-30 individuals practicing in the area of software engineering to conduct interviews. The interviews will be based on survey questions provided by the CEQB Secretariat.

The Secretariat will supply a list of contacts, and will also facilitate introductions with interviewees, via the engineering regulators. The Consultant will be responsible for booking interviews. The interviews are expected to be roughly one half-hour each.

The **intended outcome** of this requirement is to gather information that will be needed for the successful development of the practice area descriptions.

The **deliverable** is the completed interviews.

**2. Develop an outline of software engineering practice areas to be covered in the Project. (Anticipated completion: Mid-November 2021)**

Based on data gathered during the interview process, the Consultant will define 4-5 practice areas of software engineering to be covered in the descriptions, and a brief outline of the content for each. Notably, the practice areas to be defined are only intended to provide an **example** of software engineering practice areas, not an exhaustive list covering the entire field.

The Secretariat will use this deliverable to validate the overall approach before work begins. There may be a 1-2 week delay at this stage while feedback on the proposed areas is gathered.

The **intended outcome** is to validate the Consultant's approach to the practice area descriptions.

The **deliverable** is the outline.

**3. Develop descriptions of 4-5 practice areas in software engineering. (Anticipated completion: End of November 2021)**

Once the approach from stage 2 is confirmed by the Secretariat, the Consultant will draft descriptions of 4-5 software engineering practice areas, following a similar format to Appendices A-D of the [2019 Engineers Canada Paper on Environmental Engineering](#).

The **intended outcome** of the descriptions is to provide appendices to the forthcoming revised Engineers Canada Paper on software engineering.

The **deliverable** is 4-5 descriptions of software engineering practice areas.

## 4 Budget

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Proposals should cite a total Project cost not exceeding \$12,000 plus taxes.

## 5 RFP submission and evaluation process

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### 5.1 Submission schedule

The following is a list of key dates from Request for Proposal (RFP) issuance through to Notice of Award. The dates are subject to change by Engineers Canada, at its sole discretion.

Description	Key Dates
Issue RFP	September 10, 2021
Proposal Submission Deadline	September 23, 2021
Evaluation of proposals, including reference checks	September 24 to October 4, 2021
Notice of Award	October 4, 2021

### 5.2 Inquiries

Questions concerning this RFP may be directed by email to the Contact Person, Ryan Melsom, Manager, Qualifications and CEQB Secretary, at [ryan.melsom@engineerscanada.ca](mailto:ryan.melsom@engineerscanada.ca).

### 5.3 Proposal submission

Electronic copies of proposals must be submitted by the Proposal Submission Deadline via email to the Ryan Melsom, Manager, Qualifications and CEQB Secretary, at [ryan.melsom@engineerscanada.ca](mailto:ryan.melsom@engineerscanada.ca).

### 5.4 Required proposal content

In responding to this RFP, all Bidders are required to provide the following information:

- **Qualifications and relevant experience:** Detail your experience in providing services similar to those required for this Project. Provide a brief description of your company's history, including its size, the number of years it has been in operation, and the names of personnel who would be assigned to work on this Project, including their qualifications and experience as they relate to the Project. Also include your full contact information, including mailing address, telephone number and email address, as well as the name and contact information for the individual who would be the main point of contact for the Project.
- **Approach and methodology:** Describe how you will approach the Project. Include recommended methodology and work to successfully achieve the objectives of the Project and provide the deliverables. Include a timeline that identifies Project milestones and when they would be completed. Describe potential additional services the Bidder recommends be

provided, if any. Identify any expected challenges for the Project and the proposed mitigation strategies, and provide the communication process you will use to engage with Engineers Canada throughout the Project.

- **Fees:** Include the total cost of the Project, as well as a cost breakdown of the various services to be provided.

In addition to the above, Bidders must supply the name, email address and phone number of two recent clients who have received services similar to those requested in this RFP and who may be contacted as references. Include a short description of the work performed, including how it is similar to this Project.

Engineers Canada will communicate with the successful Bidder throughout this Project in English. All submissions must therefore be submitted in English.

## 5.5 Evaluation process

Upon the closing of the Proposal Submission Deadline, all proposals received by Engineers Canada will be assessed by a Review Team comprised of Engineers Canada staff and volunteers, which may include:

- Manager, Qualifications and CEQB Secretary
- Chair, Task Force on Software Engineering
- Any other individuals(s) that the Review Team deems necessary.

The assessment of each proposal will be based on the contents of the Bidders' written proposal and any statements provided in writing, if needed, in response to requests for clarification made by Engineers Canada. The Review Team will ensure compliance with the stated mandatory requirements and will score each proposal, in accordance with Section 5.8 (Scoring Legend).

The Review Team may conduct interviews with Bidder(s) to further confirm their ability and fit to deliver the services related to the Project. The references of the Bidder(s) may also be contacted.

Once the Review Team completes its assessment, Engineers Canada will select and notify the successful Bidder. Thereafter, Engineers Canada will draft and provide the successful Bidder with an agreement governing the provision of services.

## 5.6 Mandatory requirements

Engineers Canada has several requirements that are deemed mandatory when submitting a response to this RFP. The following criteria have been identified as mandatory:

- Proposals must be received prior to the Proposal Submission Deadline.
- Proposals must indicate that the Bidder is able to deliver the services and complete the Project within the stated timelines.
- Proposals must include the information requested in Section 5.4 (Required Proposal Content) of this RFP.
- Proposals must clearly state the total Project cost, including all fees and expenses, in Canadian funds, and that cost must fall within Budget.

Proposals which fail, in the sole discretion of Engineers Canada, to meet any mandatory requirement will be eliminated from further consideration in the evaluation process. However, Engineers Canada reserves the right to waive any mandatory requirements if it deems fit and appropriate to meet the interests of and provide best value to Engineers Canada. This clause should be interpreted solely for the benefit of Engineers Canada and not for the benefit of the Bidders.

## 5.7 Scoring

Proposals will be evaluated and scored by Engineers Canada, using predetermined criteria to determine which proposal potentially provides the best value. Scoring of proposals and evaluation comments are confidential and will not be disclosed.

In terms of relative importance, each criterion is given a pre-assigned weight, as outlined in section 5.9 (Proposal Evaluation), by which each proposal will be evaluated. Each criterion is rated on a scale of 0 to 10 (see section 5.8, Scoring Legend, below). Each criterion’s rating is then multiplied by the assigned weight to yield a total for that element. Summation of the individual totals yields a total score, which represents the overall degree of satisfaction for the respective submission.

## 5.8 Scoring legend

<b>0 Points Deficient</b>	<b>1-3 Points Poor</b>	<b>4-6 Points Fair</b>	<b>7-8 Points Good</b>	<b>9-10 Points Excellent</b>
The proposal fails to meet the requirements of the applicable scoring criteria in a suitable and documented manner.	The proposal fails to meet the requirements of the applicable scoring criteria in a suitable and documented manner.	The proposal barely meets the requirements of the applicable scoring criteria in a suitable and documented manner.	The proposal reasonably demonstrates that the requirements of the applicable scoring criteria are met in a documented and suitable manner.	The proposal fully demonstrates that the requirements of the applicable scoring criteria are met in a documented and suitable manner.
The proposal fails to demonstrate that the Project will be performed in an acceptable manner	The proposal reveals significant weaknesses that could result in unacceptable shortcomings in performance of the Project.	The proposal reveals weaknesses that could result in tolerable or reasonably correctable shortcomings in performance of the Project.	The proposal reveals minor weaknesses that should not significantly impact performance of the Project.	There are no apparent weaknesses.

## 5.9 Proposal evaluation

The proposals will be evaluated based on the following criteria:

No.	Criteria/Factor	Weight
1	Mandatory requirements	Elimination
2	Qualifications and Relevant Experience	40
3	Approach and Methodology	40
4	Proposed cost	15
5	Quality of submission	5
	<b>Total</b>	<b>100</b>

## 6 Confidentiality

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Proposals and information submitted by Bidders will be treated as proprietary, held confidential, and used only for evaluating the ability of the Bidder to handle the Project. The details of any proposals will be shared only with the persons involved in the Project evaluation and any others, as may be deemed necessary from time to time (for example, to our legal advisors for the purpose of conducting contract negotiations with the successful Bidder).

## 7 RFP terms and conditions

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### 7.1 Process conditions

This RFP is not an offer by Engineers Canada to any person, and no contract of any kind whatsoever (including, without limitation, no "Contract A") is formed between Engineers Canada and any Bidder upon the submission of a proposal in response to it. For greater certainty, nothing in this RFP, including without limitation, the use of mandatory language, language reserving rights to Engineers Canada, or other language that might, but for this clause, be indicative of contractual intention, is intended by Engineers Canada to indicate an intention to be contractually bound to any Bidder in any manner whatsoever. Engineers Canada retains the right, in its absolute discretion, to consider and analyze the proposals, negotiate with any Bidder at any time, select a preferred Bidder, or enter a service contract with a Bidder. Without limiting the foregoing, since this clause precludes Contract A, none of the usual Contract A terms apply, and Engineers Canada may:

- Reject or accept any proposal, whether or not complete, and whether or not it contains all the required information;
- Require clarification of any proposal;
- Request additional information on any proposal;



- Reject any or all proposals without any obligation, or any compensation or reimbursement to the Bidders;
- Refuse to enter into a service contract with any of the Bidders;
- Re-advertise for new submissions, or call for tenders for this work or for work of a similar nature.

Engineers Canada may, in its sole discretion, independently verify any information in any proposal. The proposals submitted by Bidders must be offers made in good faith, and Engineers Canada reserves the right to make a choice from the various proposals, or not choose any. Engineers Canada shall not be obligated in any manner until a written agreement relating to an approved proposal has been duly executed.

## 7.2 Competitive process

With the issuance of this RFP, Engineers Canada is making a business opportunity available to Bidders having the experience, competence, and managerial sophistication to enter into a service contract to complete the work.

## 7.3 Proposal revisions

All proposal revisions must be received by Engineers Canada prior to the RFP submission/closing date and time stated in Section 5 (RFP Submission and Evaluation Process), above.

## 7.4 Cost of preparing proposals

Bidders are solely responsible for all costs they incur in preparing and submitting proposals.

## 7.5 Clarification of proposal

Engineers Canada reserves the right, but does not have an obligation, to request clarification of a proposal or request further information from any or all Bidders. In addition, if, in the opinion of Engineers Canada, any proposal contains a minor defect or irregularity or fails in some way to comply with any requirement of the RFP in a way that, in the opinion of Engineers Canada can be remedied without providing an unfair advantage to one or more Bidders, the Engineers Canada contact person (identified in Section 5.3) or their delegate may request rectification from the Bidder(s).

Engineers Canada, upon receipt of appropriate clarification and/or rectification, may waive the minor defect or irregularity and accept the proposal. Failure by a Bidder to provide a written response that, in the opinion of Engineers Canada, properly clarifies or rectifies its proposal, within the time specified in the request for clarification or rectification, may result in disqualification of the proposal.

## 7.6 Acceptance of RFP conditions

Receipt of a proposal by Engineers Canada will be considered acceptance by the Bidder of the RFP terms and conditions, and will be incorporated in the Bidder's proposal.

## 7.7 Notification of success

A written Notice of Award shall be the only valid form of notification of success in response to this RFP.

## 7.8 Negotiation delay

If a written agreement in the form developed by Engineers Canada cannot be concluded within fifteen (15) business days of notification to the successful Bidder, Engineers Canada may, in its sole discretion, terminate negotiations with that Bidder and either negotiate a service agreement with another Bidder of its choice or choose to terminate the RFP process and not enter into a contract with any of the Bidders.

## 7.9 Reservation of rights

Engineers Canada reserves the right, in its sole discretion, to:

- modify, amend, delay, cancel or suspend the selection process, or any or all stages of the selection process, including before or after provision of a Notice of Award, at any time for any reason;
- accept or reject any proposal based on the evaluation criteria in section 5, above, as determined in the sole discretion of Engineers Canada;
- not accept any proposal; and
- reject or disqualify all or any proposal without any obligation, compensation, or reimbursement to any Bidder.

## 7.10 Limitation of damage

Each Bidder, by submitting a proposal, agrees that:

- In the event any or all proposals are rejected or disqualified, or the Project or selection process is modified, delayed, suspended or cancelled for any reason, neither Engineers Canada, nor its employees, agents, officers, or directors will be liable under any circumstances for any claim, or to reimburse or compensate any person in any manner whatsoever, including but not limited to costs of preparation of the proposal, loss of anticipated profits, loss of opportunity, or for any other matter; and
- The Bidder waives any claim for loss of profits or loss of opportunity if: (i) the Bidder is rejected or disqualified or is not successful in the selection process; (ii) the selection process for the Project is delayed, suspended, cancelled or modified at any time; or (iii) cancellation occurs per the above.

## 7.11 Proposal Documents

All documents submitted by Bidders will become the property of Engineers Canada.