

#### FINAL AGENDA

#### 206<sup>th</sup> ENGINEERS CANADA BOARD MEETING

February 24, 2021 | 10:00am – 5:00pm ET Virtual delivery | Zoom details are provided via outlook calendar invitation

#### Please refer to the **Board Policy Manual** and **Bylaw**

1.	Opening
	<b>1.1 Call to order and approval of agenda</b> – J. Boudreau THAT the agenda be approved and the President be authorized to modify the order of discussion.
	1.2 Declaration of conflict of interest (attachment pages 4 to 5)
	<ul> <li><b>1.3 Review of previous Board meeting</b> – J. Boudreau (attachment pages 6 to 7)</li> <li>a) Action item list</li> <li>b) Board attendance list</li> </ul>
2.	Executive reports
	2.1 President's report – J. Boudreau (attachment pages 8 to 9)
	2.2 CEO update – G. McDonald (verbal)
	<ul> <li>2.3 CEO Group report – K. King (attachment pages 10 to 17)</li> <li>a) October meeting presentation slides</li> <li>b) Verbal update from the February meeting to be provided onsite</li> </ul>
	<ul> <li>2.4 Presidents Group report (attachment pages 18 to 23)</li> <li>a) October meeting presentation slides</li> <li>b) Verbal update from the February meeting to be provided onsite</li> </ul>
3.	Consent agenda
	Board members may request that an item be removed from the consent agenda for discussion. THAT the consent agenda motions listed below (3.1 to 3.2) be approved in one motion.
	<b>3.1 Approval of minutes</b> (attachment pages 24 to 32) THAT the minutes of the December 7, 2020 Board meeting be approved as presented.
	<ul> <li>3.2 National Position Statements (attachment pages 33 to 54)</li> <li>a) THAT the following new National Position Statements be approved: <ul> <li>i. Role of engineers in Canada's long-term economic recovery</li> <li>ii. Building Canada's High-speed Broadband Through a Sustainable Digital Infrastructure</li> </ul> </li> <li>b) THAT the updated Research, Development and Innovation National Position Statement be approved.</li> </ul>
4.	Board business/required decisions
	<ul> <li>4.1 2020 Annual Strategic Performance Report and updates from CEAB and CEQB – B. Dony, M. Mahmoud, G. McDonald (attachment pages 55 to 84)</li> <li>THAT the Board approve the 2020 Annual Strategic Performance Report, for circulation to the Members for information at the 2021 Annual Meeting of Members.</li> </ul>

	<b>4.2 2022-2024 Strategic Plan</b> – J. Boudreau (attachment pages 85 to 117) THAT the Board recommend to the Members the 2022-2024 Strategic Plan, for approval at the 2021 Annual Meeting of Members, on recommendation of the Strategic Plan Task Force.							
	<b>4.3 2021 CEO objectives</b> – D. Lynch (attachment pages 118 to 1 THAT the Board approve the 2021 CEO objectives, on recommend	21) Idation of the HR Committee.						
	<b>4.4 Board policy updates</b> – N. Hill (attachment pages 122 to 192 THAT the Board, on recommendation of the Governance Commi a) approve the following revised Board policies: <i>i.4.12, Board Self-Assessment</i>	2) ittee: vi.6.8, Governance Committee Terms of Reference						
	ii.4.2, Directors' Responsibilities iii.4.3, Code of Conduct iv.6.1, Board Committees and Task Forces v.6.13, President-Elect nomination and election process	iii.7.1, Board, Committee and Other Volunteer Expenses iii.7.9, Process for In-camera Meetings ix.9.2, Qualifications Board Guidelines x.9.3, National Position Statements						
	b) approve the new Board policy 7.7, Investments c) rescind Board policy 8.1, Emerging Disciplines							
	<ul> <li>4.5 By-law amendments – N. Hill (attachment pages 193 to 202 THAT the Board recommend to the Members, for approval at the amendments to the By-law, on recommendation of the Governa 1.1 "Per Capita Assessment" means the annual amount to b Registrants, as further defined in Article <u>7-8</u>.</li> <li>5.8 "The Board shall submit recommendations to the Memb majority of not less than two-thirds of the votes cast, provid force or effect until approved by the Members in accordance </li> </ul>	2) e 2021 Annual Meeting of Members, the following ince Committee: e paid by each Member as determined by its number of ers on the following matters, by a vote passed by a led that no decision in respect thereof shall have any e with section 3.4 of this By-law:						
	<b>4.6 Director assessment</b> – D. Lynch (attachment pages 203 to 2 THAT the Board approve the content of the Director self- and pe Committee.	10) er-assessment survey, on recommendation of the HR						
	<b>4.7 Payout of excess affinity revenues</b> – C. Zinck (attachment p THAT the Board direct the Governance Committee, in consultat will pay out excess affinity sponsorship revenue, related to PEO accordance with their respective prorated Total Written Premiu	ages 211 to 217) ion with the FAR Committee, to develop a policy which members, to the affinity program partners in m Volume (TWPV).						
	<b>4.8 OIQ request to apply to host the World Engineers Convent</b> THAT the Board endorse Engineers Canada submitting a propos World Engineers Convention in Montreal in 2027.	ion 2027 – K. Baig (attachment pages 218 to 225) sal to the WFEO, on behalf of OIQ, to host the						
5.	Reports							
	5.1 Risk register – D. Gelowitz (attachment pages 226 to 241)							
	5.2 FAR Committee - D. Gelowitz (slides)							

	5.3 Governance Committee – N. Hill (slides)									
	5.4 HR Committee – D. Lynch (slides)									
	5.5 Board's 30 by 30 Champion – J. Dunn (slides)									
	<ul> <li>5.6 30 by 30 operational update – G. McDonald (attachment pages 242 to 275)</li> <li>a) Report on Regulators' best practices in EIT programs</li> <li>b) Aspirational scorecard</li> </ul>									
6.	Other business									
7.	Next meetings									
	Board meetings									
	<ul> <li>April 7, 2021 (virtual)</li> <li>May 28-29, 2021 (Halifax, NS)</li> </ul>	<ul> <li>October 1, 2021 (Ottawa, ON)</li> <li>December 13, 2021 (Ottawa, ON)</li> </ul>								
	2020-2021 committee meetings									
	<ul> <li>FAR Committee: February 25, 2021 (virtual)</li> <li>Governance Committee: March 3, 2021 (virtual)</li> <li>FAR Committee: March 17, 2021 (virtual)</li> <li>HR Committee: March 17, 2021 (virtual)</li> </ul>									
8.	In-camera sessions									
	<b>8.1 Board Directors, Direct Reports, CEO Group Advisor and staff</b> THAT the meeting move in-camera and be closed to the public at the recommendation of the Board. The attendees at the in-camera session shall include Board Directors, the Engineers Canada CEO, the chairs of the CEAB and CEQB, the CEO Group Advisor to the Board, the Secretary, and the Governance Administrator.									
	<b>8.2 Board Directors and CEO</b> THAT the meeting move in-camera and be closed to the public at the recommendation of the Board. The attendees at the in-camera session shall include Board Directors and the Engineers Canada CEO.									
	<ul> <li>8.3 Board Directors and HR Committee members</li> <li>THAT the meeting move in-camera and be closed to the public at the the in-camera session shall include Board Directors and HR Committee</li> <li>Board approval: HR Committee recommendations for CEO assesses</li> </ul>	recommendation of the Board. The attendees at e members. <b>ssment.</b>								
9.	Closing (motion not required if all business has been completed)									



#### **Board support document**

#### **Conflicts of interest**

Board members and members of Board committees have an ongoing obligation to identify and disclose actual, reasonably perceived, and potential conflicts of interest. These obligations are set out in case law and are also codified in statute, under the *Canada Not-for-profit Corporations Act* ("CNCA").

While not expressly defined in the CNCA, a conflict of interest is understood to comprise any situation where:

- a) an individual's personal interests, or
- b) those of a close friend, family member, business associate, corporation, or partnership in which the individual holds a significant interest, or a person to whom the individual owes an obligation, could influence their decisions and impair their ability to:
  - i. act in the best interests of the corporation, or
  - ii. represent the corporation fairly, impartially, and without bias.

Conflicts of interest exist if a director's decision could be, or could appear to be, influenced. *It is not necessary that influence actually takes place*. In cases where directors are in an actual, perceived, or potential conflict of interest, they are required to disclose the conflicting interest to the Board<sup>1</sup> or, in the case where membership approval is sought, to the members,<sup>2</sup> as well as abstain from voting.

#### Handling conflicts of interest

Directors may use the following checklist when faced with a situation in which they think they might have an actual, perceived, or potential conflict of interest.

#### Step 1 - Identify the matter or issue being considered and the potential conflicting situation in which you are involved.

E.g. There is an item before the Board requiring discussion and a decision that involves potential litigation between Engineers Canada and the engineering regulator with whom you are licensed. Whether or not you are in a conflict of interest is not automatic—it will depend upon the personal circumstances of each director.

#### Step 2 – Assess whether a conflict of interest exists or may exist.

In assessing whether you have an actual, reasonably perceived or potential conflict of interest, it may be helpful to ask yourself the following questions:

- □ Would I, or anyone associated with me benefit from, or be detrimentally affected by my proposed decision or action?
- □ Could there be benefits for me in the future that could cast doubt on my objectivity?
- Do I have a current or previous personal, professional, or financial relationship or association of any significance with an interested party?

<sup>&</sup>lt;sup>1</sup> Section 141(1) and (2) of the CNCA

<sup>&</sup>lt;sup>2</sup> Section 141(9)(a) of the CNCA



- □ Would my reputation or that of a relative, friend, or associate stand to be enhanced or damaged because of the proposed decision or action?
- Do I or a relative, friend, or associate stand to gain or lose financially in some way?
- Do I hold any personal or professional views or biases that may lead others to reasonably conclude that I am not an appropriate person to deal with the matter?
- □ Have I made any promises or commitments in relation to the matter?
- □ Have I received a benefit or hospitality from someone who stands to gain or lose from my proposed decision or action?
- Am I a member of an association, club, or professional organization, or do I have particular ties and affiliations with organizations or individuals who stand to gain or lose by my proposed decision or action?
- □ Could this situation have an influence on any future employment opportunities outside my current duties?
- □ Could there be any other benefits or factors that could cast doubts on my objectivity?
- □ Am I confident of my ability to act impartially in the best interests of Engineers Canada?

What perceptions could others have?

- □ What assessment would a fair-minded member of the public make of the circumstances?
- □ Could my involvement on this matter cast doubt on my integrity or on Engineers Canada's integrity?
- □ If I saw someone else doing this, would I suspect that they have a conflict of interest?
- □ If I did participate in this action or decision, would I be happy if my colleagues and the public became aware of my involvement?
- □ How would I feel if my actions were highlighted in the media?

#### Step 3 – Is the duty to disclose triggered?

If, in assessing the situation, you determine that you are in an actual, potential, or reasonably perceived conflict of interest, your duty to disclose is triggered. Directors disclosing a conflict must make the disclosure at the meeting at which the proposed contract or transaction is first considered and should request to have the disclosure entered into the minutes of the meeting.<sup>3</sup>

Disclosure must be made of the nature and extent of the interest that you have in the contract or transaction (or proposed contract or transaction).<sup>4</sup> The limited case law dealing with the nature and scope of the disclosure required by a conflicted director suggests that disclosure must make the other directors fully informed of the real state of affairs (e.g. what your interest is and the extent of the interest).<sup>5</sup> It will rarely suffice to simply declare that you have a conflict of interest.

#### Step 4 – What next?

Subject to limited exceptions, the general rule is that a conflicted director cannot vote on the approval of a proposed contract or transaction, even where their interest is adequately disclosed.<sup>6</sup> Further, as a best practice, they should leave the room and not participate in the salient part of the Board meeting.

6 Section 141(5) of the CNCA

<sup>3</sup> Section 141(1) of the CNCA

<sup>4</sup> Section 141(1) and 141(9)(b) of the CNCA

<sup>5</sup> Gray v. New Augarita Porcupine Mines Ltd., 1952 CarswellOnt 412 (Jud. Com. of Privy Coun.)

#### Engineers Canada Board of Directors action log

	Meeting date	Action	Responsible	Due date	Update
1.	Apr 8, 2020	Staff to review the motion text related to audited	Secretariat	March 1,	
		statements prior to the 2021 meeting.		2021	

		/						/ /				/ /						× /		/ /	/ /		/ /
Last updated:				etete Bel	limi dre	au sent	, and	Chui	·	n elow	with will	JIM	. Ins	, eqt	t mot	ne		lacent seid	520	A STAT		ale urger	on inch
February 6, 2021	/	Kathyb	a wine Be	histiant	23n BOUL	Victorb	Jett Ca.	Danny	IUSTIND	Jayne Ge	Nancy .	Jeff HO.	Sudhir	TIMIOSE	aroleLati	DavidLY	Nedoh	KellyRe	changit	Janeth	chard Th	colastu	Mikewi
			Ma.	CI.	1e			./	./	DW					Ca	·/	Dawn		~/		Rite	MIL	*
Decid Marstin er																							
Board Meetings	<ul> <li>✓</li> </ul>	×	✓	✓	<ul> <li>✓</li> </ul>	<b>√</b>	<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>	<b>√</b>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	$\checkmark$	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	×	<b>x</b>	<ul> <li>✓</li> </ul>	$\checkmark$
October 2 Virtual	$\checkmark$		 ✓	· · ·	· · ·		✓ <b>·</b>	 ✓			 ✓	· · · · · · · · · · · · · · · · · · ·	 ✓	✓ ·	· · ·	 ✓	 ✓	$\checkmark$	$\checkmark$	✓		✓ ×	$\checkmark$
December 7. Virtual	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	✓	✓	✓	✓	<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>	✓	<ul> <li>✓</li> </ul>	✓	✓	$\checkmark$	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	<ul> <li>✓</li> </ul>	$\checkmark$
														_						<u> </u>	_		
4 Seasons training Summit																							
November 1 to January 31, 2021 (90 days)	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	<b>V</b>	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	<b></b>		<b></b>	$\checkmark$	$\checkmark$
СЕАВ							<b>,</b>			_													
June 6-7, Virtual				✓	✓	<ul> <li>✓</li> </ul>	✓						✓		<ul> <li>✓</li> </ul>		✓	✓					
September 19-20, Virtual				✓		✓ ✓	✓						✓		✓			✓ ✓					
February 6, Virtual				V		v							~										
CEQB																							
July 31, Virtual											✓							<ul> <li>✓</li> </ul>					
September 21-22, Virtual				✓							<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>					
FAR Committee																							
June 15, Virtual			<ul> <li>✓</li> </ul>						$\checkmark$			$\checkmark$		$\checkmark$					$\checkmark$				$\checkmark$
August 14, Hybrid			✓	$\checkmark$			<ul> <li>✓</li> </ul>		×			$\checkmark$		✓	$\checkmark$			$\checkmark$	✓		$\checkmark$		$\checkmark$
October 21, Virtual			✓	$\checkmark$					✓			<ul> <li>✓</li> </ul>		×				✓	✓				$\checkmark$
November 10, Virtual			✓	$\checkmark$					✓			$\checkmark$		×				✓	<ul> <li>✓</li> </ul>				$\checkmark$
December 1, Virtual			✓	<ul> <li>✓</li> </ul>					<ul> <li>✓</li> </ul>			<ul> <li>✓</li> </ul>		×				<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>				$\checkmark$
January 26, Virtual			$\checkmark$	$\checkmark$					✓	$\checkmark$		<ul> <li>✓</li> </ul>		×					✓				$\checkmark$
									-			-		-			_	-	-				
Governance Committee								1						1									
June 15, Virtual		<ul> <li>✓</li> </ul>			V		<ul> <li>✓</li> </ul>			<ul> <li>✓</li> </ul>					✓ ✓					×			
September 9, Virtual		V V		• •	V V		•			v v					V V			V V		×			
November 17, Virtual		v		v	v					v					v			•		•			
HR Committee																							
Mav 23, Virtual				✓			✓								✓	✓	✓						
June 15, Virtual				<ul> <li>✓</li> </ul>			<ul> <li>✓</li> </ul>								✓	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>						
September 17, Virtual				$\checkmark$			$\checkmark$								$\checkmark$	$\checkmark$	$\checkmark$						
December 8, Virtual				$\checkmark$			$\checkmark$								$\checkmark$	$\checkmark$	$\checkmark$						
January 11, Virtual				$\checkmark$			<ul> <li>✓</li> </ul>								$\checkmark$	$\checkmark$	×						
Strategic Plan Task Force															1								
June 11, Virtual	<b>√</b>			<ul> <li>✓</li> <li>✓</li> </ul>		✓ ✓	<b>√</b>								<ul> <li>✓</li> <li>✓</li> </ul>			✓				✓ 	
July 16, Virtual	✓ ✓			✓ √		× ./	✓ √								v v							<b>v</b>	
September 10, Virtual	× ×			▼ ✓		▼ ✓	▼ ✓								~							• •	
December 8, Virtual	~			· ·		· ·	· · ·								· ·							×	
		_					1																
Attendance Required	✓	4																					

Attendance Not Required / Completed Attendance for Partial Meeting / In progress Attendance required, regrets

 $\checkmark$ ×

#### President's Report November 1, 2020 to December 31, 2020

Continued weekly calls with CEO

Nov. 1 – Participated in Queen's University Chapter of WISE Brunch with Industry event Since the event was revised to a virtual event, the "speaking" request was changed to providing a blog post about my career and how it has changed this year and how COVID-19 has affected my work or how I work. The focus of the event was on how women in STEM have been dealing with new challenges and changes in their professional environments. I was also asked to answer follow-up questions that came from the event participants.

Nov. 6 – PEO Government Relations Conference (virtual) Brought greetings from Engineers Canada and (virtually) attended the conference.

Nov. 10 – FAR Committee meeting

Nov. 12 – CCWESTT Speaker Series (virtual) As representative from sponsor Engineers Canada, introduced speaker Dr. Gina Cody.

Nov. 17 – Governance Committee meeting (virtual, to be continued)

Nov. 18 – CCWESTT Speaker Series (virtual, observer) Julie Argus (Explorer), Dream, Dare, Do – Leadership Tips to Achieve the Impossible.

Nov. 22 – CFES Conference on Diversity in Engineering 2020 (virtual) Participated as a speaker on Achieving Greater Diversity in the Engineering Profession with a focus on the topic of Women in Engineering.

Nov. 25 - Governance Committee meeting (continuation of Nov. 17 meeting)

Nov. 25 – OIQ Soiree d'Exellence Brought greetings from Engineers Canada.

Nov. 26 – CCWESTT Speaker Series (virtual, observer) Sherry Holmes, When Mike Holmes is your father and mentor: learning to love skilled trades.

Nov. 27 – PEI AGM (virtual) and Awards Ceremony

Dec. 1 – FAR Committee meeting

Dec. 3 - APEGNB Council meeting

Dec. 5 – Interview with Elisabetta Bianchini, News Editor with Yahoo Canada She was preparing a story about women in engineering in advance of the anniversary of the Ecole Polytechnique massacre.

Dec. 7 – Chaired Engineers Canada Board meeting (virtual)

- Dec. 8 HR Committee meeting
- Dec. 8 Chaired Strategic Plan Task Force meetings
- (virtual) Dec. 15 3P's meeting (virtual)

# Chief Executive Officers Group Report to the Board

Kimberley King, FEC (Hon.)

Executive Director, Engineers Yukon

October 2, 2020





## Background

- The CEO Group met virtually for over six hours on September 30 and October 1.
- We had representation from all regulators.



# Agenda items of note

The Group received presentations/updates on the following topics:

- Regulator data retention policies
- Proposed OIQ amendment to regulation on their unique transfer requirements
- Potential regulatory reforms in Alberta
- Alberta Health professions white paper
- 2021 Revenue Projections
- 2022-2024 Strategic Plan consultation sessions
- Regulatory research portfolio update
- Update on Strategic Engagement Working Groups
- Update on EC Projects (IIDD, NMDB, CBA)
- Update from Officials Groups



# International student exchanges and CEAB accreditation requirements

- At their September meeting, the National Admissions Officials Group (NAOG) considered a proposal for international student exchanges in accredited engineering programs put forth by Engineering Deans Canada.
- The proposed solution would have a P.Eng. instructor in Canada review the course syllabus of the relevant international courses and confirm that they meet requirements. In effect, this P.Eng. takes responsibility for the quality of the course(s), and the international course(s) can then be counted as specified AUs.
- The NAOG felt this proposal has merit and recommended to the CEOs that the CEAB's Policies and Procedures (P&P) Committee should consult with the regulators on a proposal to effect this change.
- The CEO Group agreed with NAOG's recommendation.



# **Meeting with Engineering Deans Canada**

- CEO Group invited EDC to attend part of the meeting to continue discussions that had started in February and continued through the CEO's May and July meetings.
- The CEO Group agreed that regular thematic discussions with the senior leadership of the EDC would be beneficial and that the senior leadership of the CEAB should be invited to these discussions as observers.
- This would not be a decision-making forum, but rather a way to discuss salient matters and connect to other groups who could effect direction (officials' groups, CEAB, EC Board, EDC)
- It was agreed that EC would organize a thematic meeting for the CEO Group with senior leadership of EDC and the CEAB for late October/Early November.
- A possible first theme would be the intersection between licensure and education.



# Linda Golding



The CEO Group was saddened to learn of the impending November 30, 2020 retirement of NAPEG Executive Director and Registrar, Linda Golding. We would like to recognize the invaluable contribution that she has made in her 20 years attending the Engineers Canada meetings and wish her well on her upcoming retirement.



### **Questions?**





•

Agenda book page 17

# Thank you





# **Presidents Group Report**

Marisa Sterling, P.Eng., FEC

President and Chair Professional Engineers Ontario

Lianna Mah, P.Eng., FEC

President Engineers and Geoscientists BC





Agenda book page 19

### **Attendees**

- **NAPEG** Justin Hazenberg
- Engineers Yukon Chris Dixon
- **APEGBC** Lianna Mah
- **APEGA** John Van der Put, Brian Pearse (President-elect)
- **APEGS** Drew Lockwood
- **EGM** Jitendra Paliwal, Jason Mann (vice-president)
- **PEO** Marisa Sterling
- **OIQ** Kathy Baig
- Engineers NS Crysta Cumming
- **EGNB** Marlo Rose, Maggie Stothart (vice-president)
- Engineers PEI Wendy Weeks
- PEGNL Natalie Hallett

ngineerscanada



- Appreciate value of this meeting platform to share experiences and learnings among Presidents peer group
  - Encourage president-elect/vice-presidents to attend with the President during the transition months
  - Request a shared online platform like Microsoft Teams, hosted by Engineers Canada, to facilitate ongoing discussions and provide yearover-year continuity. Presidents Group would be responsible to manage the team and all content.
  - Reimagine the virtual meeting logistics to ensure equal access, such as shift start time to 11am or 11:30am for Western Canada participants.



- Share advice re our governance responsibility to help lead the Direction and Control of the constituent regulators
  - Board management
  - Government relations
  - Process to consult with our Councils/Members on Engineers Canada questions/requests
  - Regulatory tools
  - Governance & strategic plan reviews
  - Cultures of inclusion, diversity and equity



- Covid-19 impacts/opportunities
  - CEAB plans for accreditation with increase in online learning during COVID and beyond
  - Online platforms provide opportunities to bring members from remote areas to webinars, conferences, and general meetings
  - Licence holder mobility
  - Member registration remains strong mostly



- Shared vision for engineering regulators
  - Professional Development per constituency vs. cloud-based opportunities for a National Professional Development Database for licence holders
  - Areas where all regulators can have a unified or more consistent national approach
  - Shared resources and ideas to ensure meet 30 by 30 goal





#### Draft MINUTES OF THE 205th ENGINEERS CANADA BOARD MEETING

December 7, 2020 10:00am-5:30pm (ET) via webinar

The following Directors were in attendance	
J. Boudreau, President (Chair), APEGNB	S. Jha, NAPEG
D. Lynch, Past President, APEGA	T. Joseph, APEGA
D. Chui, President-Elect, PEO	C. Lamothe, OIQ
K. Baig, OIQ	D. Nedohin-Macek, Engineers Geoscientists MB
M. Belletête, OlQ	K. Reid, PEO
C. Bellini, PEO	C. Sadr, PEO
V. Benz, APEGA	J. Tink, APEGA
J. Card, PEGNL	R. Trimble, Engineers Yukon
J. Dunn, Engineers PEI	N. Turgeon, OIQ
D. Gelowitz, APEGS	M. Wrinch, Engineers & Geoscientists BC
N. Hill, PEO	C. Zinck, Engineers Nova Scotia
J. Holm, Engineers & Geoscientists BC	
The following Directors sent regrets	
The following CEO Group Advisor was in attendance	
K. King, Chair, CEO Group	
The following Direct Reports to the Board were in attendance	
B. Dony, Chair, CEAB	G. McDonald, CEO
M. Mahmoud, Chair, CEQB	E. Spence, Legal Counsel and Corporate Secretary
The following observers were in attendance	
J. Bradshaw, CEO & Registrar, PEGNL	J. Mann, President, Engineers Geoscientists MB
E. Coles, President, Engineers PEI	P. Mann, CEO Engineers Nova Scotia
C. Cumming, President, Engineers Nova Scotia	J. Nagendran, Registrar & CEO, APEGA
L. Daborn, CEO, APEGNB	J. Nicell, Chair, EDC
C. Dixon, President, Engineers Yukon	B. Pearse, President-Elect, APEGA
A. English, CEO & Registrar, Engineers & Geoscientists BC	M. Rose, President, APEGNB
F. George, Vice-Chair, CEQB	L. Spence, President, Engineers & Geoscientists BC
P. Lafleur, Vice-Chair, CEAB	M. Stothart, Incoming President, APEGNB
J. Landrigan, Executive Director & Registrar, Engineers PEI	J. Van der Put, President, APEGA
L. Mah, Past President, Engineers & Geoscientists BC	J. Zuccon, CEO & Registrar, PEO
The following staff were in attendance	
K. Bouffard, Manager, Outreach	D. Menard, Director, Finance
J. Christou, Planning, Event, and Change Practitioner	M. Ouellette, Manager, Strategic & Operational Planning
S. Francoeur, Director, Human Resources	S. Price, Executive Vice President, Regulatory Affairs
R. Gauthier, Executive Assistant	C. Polyzou, Manager, Diversity, Equity, and Inclusion
B. Gibson, Manager, Communications	L. Scott, Manager, Member Services
C. Mash, Governance Administrator	J. Southwood, VP, Corporate Affairs & Strategic Partnerships
R. Melsom, CEQB Secretary	M. Warken, CEAB Secretary

#### 1. Opening

1.1 Call to order and approval of agenda

J. Boudreau called the meeting to order at 10:03am (ET). Participants were welcomed and the land was acknowledged.

#### Motion 2020-12-1D Moved by C. Sadr, seconded by S. Jha THAT the agenda be approved and the President be authorized to modify the order of discussion. Carried

Participants were reminded of the meeting rules:

- Raise hand to be added to the list of speakers.
- Speak for only two minutes (timer is projected on the screen).
- Speak a second time only if everyone else has had a chance to speak.
- Only new information is brought forward should individuals speak again.

J. Boudreau shared a safety minute with the Board, focused on how to avoid injuries when walking outside in winter conditions.

J. Boudreau also presented a diversity moment to bring awareness to the United Nations' International Day of People with Disabilities, which took place on December 3, as an opportunity to celebrate and learn from the experiences of people living with disability. Engineering work intersects with disability through the creation and building of spaces, infrastructures, tools and other solutions that must be accessible to all. Even though human rights legislation requires that companies and organizations accommodate employees or students living with disabilities, most of the world is inaccessible to many people living with disabilities. To honour this year's theme of 'Not all Disabilities are Visible' and to help eliminate unintended biases around invisible and visible disabilities in their projects and workplaces, meeting participants were challenged to consider the misconceptions, stigma, and stereotyping that students and professionals with disabilities face on a day-to-day basis. It was further noted that the primary barrier to inclusion and accessibility for students with disabilities in postsecondary institutions within STEM disciplines is attitudinal.

1.2 Declaration of conflict of interest

No conflicts were declared.

#### 1.3 Review of previous Board meeting

a) Action item list

The action list was pre-circulated, no questions were received.

#### b) Board attendance list

The attendance list was pre-circulated, no questions were received.

#### 2. Executive reports

#### 2.1 President's report

A detailed report was pre-circulated, no questions were received.

#### 2.2 CEO Update

G. McDonald noted the CEO Updates that are emailed weekly as the source for important news. No questions were received.

2.3 <u>Q3 Interim Strategic Performance Report to the Board and updates from CEAB and CEQB</u> The Q3 report was pre-circulated.

It was clarified that the reported disruption on the SP4 Competency-Based Assessment project is due to COVID-19 and many Regulators not being able to dedicate the resources required for implementation. This disruption has been known since 2020-Q2, and it is expected that the project will be completed in 2021-Q1.

#### 3. Consent agenda

3.1 <u>Approval of minutes</u> THAT the minutes of the October 2, 2020 Board meeting be approved as presented.

3.2 CEQB document

THAT the Public Guideline on Risk Management be approved for publication on the Engineers Canada public website.

#### 3.3 CEQB Leadership

THAT the Board approve the appointment of the Qualifications Board leadership for the period July 1, 2021 to June 30, 2022:

a) Margaret Anne Hodges as Vice-Chair;

b) Frank George as Chair; and,

c) Mahmoud Mahmoud as Past-Chair.

#### 3.4 CEAB Leadership

THAT the Board approve the appointment of the Accreditation Board leadership for the period July 1, 2021 to June 30, 2022:

a) Paula Klink as Vice-Chair;

b) Pierre Lafleur as Chair; and,

c) Bob Dony as Past-Chair.

#### Motion 2020-12-2D

Moved by J. Card, seconded by J. Dunn THAT the consent agenda items be approved. Carried

#### 4. Board business/required decisions

4.1 2021 budget and 2023 Per Capita Assessment fee

D. Gelowitz presented the pre-circulated Budget. Minor adjustments made since the October Board meeting have been reviewed by the Finance, Audit, and Risk Committee (FAR). Due to the current unknowns, including uncertainty resulting from COVID-19, PEO's participation in the affinity program, and capital required following the approval of the 2022-2024 strategic priorities, FAR recommends that the 2023 Per Capita Assessment fee remain at \$10.21. This fee is re-considered annually.

#### Motion 2020-12-3D

#### Moved by C. Bellini, seconded by D. Gelowitz

THAT the Board approve the 2021 Budget on recommendation of the FAR Committee including:

- a) The 2021 operational budget of \$11.0 million in revenue and \$12.3 million in expenses
- b) The 2021 capital budget of \$59,500

- c) The 2021 project budget of \$1,251,718 to be drawn from reserve funds for the:
  - Accreditation Improvement Program;
  - International Institutions and Degrees Database Improvement Project;
  - Competency-Based Assessment Project;
  - Space Program (IT infrastructure); and,
  - National Membership Database Improvement Project.

#### Carried

#### Motion 2020-12-4D

Moved by D. Gelowitz, seconded by S. Jha THAT the Board recommend to the Members that the 2023 Per Capita Assessment fee remain at \$10.21 per licence holder, on recommendation of the FAR Committee. Carried

#### 4.2 CEAB 2021 work plan

B. Dony introduced the work plan and highlighted the minor additions made since the draft was presented to the Board in October. The following discussion was captured:

- In response to a question about how the CEAB is considering electronic course delivery, it was noted that a task force (which includes representatives from EDC and CEAB) is considering the COVID-19 impact on undergraduate education. Five (5) broad areas are being considered by the group, including the Accreditation Unit (AU) and how it measures contact time with professor and student. A report will be submitted for discussion at the CEAB meeting in February, with ongoing work on this topic scheduled through 2021. B. Dony also referenced the interpretive statement on distance learning, that indicates if the rigor of the online program is equivalent to face-to-face program, then it is considered equivalent in terms of AUs.
- It was suggested that the CEAB consider a more action-oriented approach to studying how measures taken by programs to respond to the pandemic are supported by the accreditation criteria, with recommendations provided on how the criteria can become more pro-active. B. Dony noted that the first phase is to study the current situation, with recommendations to follow.
- A discussion was had on how to handle questions raised by deans in different jurisdictions, and it was noted they should be directed back to the CEAB for response. The CEAB is in constant contact with EDC, ensuring they are aware of findings. Any recommended changes that result from the pandemic response study will require fulsome consultation with all stakeholders, including Regulators, HEIs, students, admissions officials, and others.
- B. Dony updated the Board on virtual visits. One hybrid visit has taken place to date, where much of the initial data collection was done prior to the pandemic. Lessons learned are being collected and will be compared against the guide to virtual visits. The Virtual Visit Task Force is meeting frequently to ensure the approach is appropriate for all parties involved; flexibility is being encouraged. The CEAB will be discussing how to move forward with the next round of visits in February.

#### Motion 2020-12-5D

Moved by J. Card, seconded by R. Trimble THAT the Board approve the CEAB work plan. Carried

#### 4.3 CEQB 2021 work plan

M. Mahmoud introduced the work plan, originally presented as draft to the Board in October. No questions were received.

#### Motion 2020-12-6D Moved by J. Holm, seconded by V. Benz THAT the Board approve the CEQB work plan. Carried

#### 4.4 Governance effectiveness survey

N. Hill presented the approach and content for the survey, where stakeholders will be asked to evaluate the results of the Governance, Strategic Planning and Consultation (GSPC) Project. The Governance Committee was commended for streamlining evaluation efforts by incorporating elements of the Board self-assessment process.

#### Motion 2020-12-7D

Moved by M. Wrinch, seconded by K. Reid

THAT the Board approve a deviation from the Board self-assessment process, as is set out in Board policy 4.12, to incorporate key aspects of the assessment within the 2021 governance effectiveness survey, on recommendation of the Governance Committee.

Carried

Motion 2020-12-8D Moved by N. Hill, seconded by C. Bellini THAT the Board approve the content of the governance effectiveness survey, on recommendation of the Governance Committee. Carried

#### 4.5 Board Consultation Plan

D. Chui presented the Consultation Plan. The following discussion was captured:

- The consultation lists included in the agenda book are summaries only. Granular details for each Consultation will be included on Engineers Canada's comprehensive consultation website, including specific response timelines for each stakeholder group, and context on what problem is being fixed or what product is being improved. Regulator CEOs are notified each fall of the consultation website and process.
- Consultations are generally open for a minimum of two months, to respect Regulator council deliberations. One-month timelines are reserved for topics that only affect Regulator staff. CEQB items require short consultation timelines to meet their work plan objectives.
- Since it does not shape a specific product offered by Engineers Canada, the governance effectiveness survey was intentionally left off the consultation summary and is instead included on an internally maintained list of Regulator touchpoints.
- Beginning in 2021, the Board will receive a summary of consultation results.

#### Motion 2020-12-9D

Moved by D. Chui, seconded by M. Wrinch THAT the Board approve the 2021 Board Consultation Plan. Carried 4.6 Policy updates

N. Hill provided an overview of the Governance Committee's recommendations.

The proposed adjustment to the definition of "President" (from "presiding officer" to "chair" of the Board) was discussed, with a concern raised that the new definition is too brief and not fully representative of the role, i.e., the President is not "just" the chair. The revision was explained as being more reflective of Engineers Canada's practices and supports the references made throughout the policy manual to the role of President (often referred to as the "Chair"). Additionally, it was noted that the role is more fully defined and expanded in Board policy 4.9 – *President's Role*. This feedback will be considered in the next review of Board Policy 2 - *Definitions*.

#### Motion 2020-12-10D

#### Moved by N. Hill, seconded by C. Sadr

THAT the Board approve the following revised policies, on recommendation of the Governance Committee:

- a) 5.3, Financial condition
- b) 5.5, Asset protection
- c) 5.6, Planning
- d) 5.7, Compensation and benefits
- e) 2, Definitions
- f) 1.5, About this manual

Carried with two-thirds majority

g) 4.11, Board management delegation

- h) 4.9, President's role
- i) 5, Executive duties and limitations
- *j)* 7.11, Board consultation
- k) 4.13, Individual director assessment
- I) 4.7, Monitoring of CEO
- m) 4.8, Board competency profile
- n) 1.4, Strategic plan

#### 4.7 Chair assessment

D. Lynch presented the survey, and highlighted minor improvements made since the inaugural chair assessment concluded in March 2020. No questions were received.

#### Motion 2020-12-11D

#### Moved by D. Lynch, seconded by S. Jha THAT the Board approve the content of the chair assessment survey, on recommendation of the HR Committee.

#### Carried

#### 4.8 Amendments to the 2020 CEO objectives

D. Lynch presented the amendments made in consultation with the CEO. D Gelowitz noted that the FAR Committee was consulted on the postponement of the assessment of the long-term financial and operational viability of Engineers Canada and has agreed that the activity should be reconsidered at the end of 2021, for inclusion with the 2022 objectives. No questions were received.

#### Motion 2020-12-12D Moved by D. Lynch, seconded by R. Trimble THAT the Board approve the amended 2020 CEO objectives, on recommendation of the HR Committee. Carried

#### 5. Reports

Board committees provided updates, with supporting slide presentations available on the Engineers Canada website. The CEAB and CEQB presented their updates in conjunction with the interim report.

#### 5.1 <u>Risk register</u>

D. Gelowitz presented the risk register, highlighting the changes made since October's reporting. Risks #19 – *Financial* and #26 – *Accreditation Process* remain critical, with review summaries included in the agenda book. The following discussion was captured:

- Although the assessment of the long-term financial and operational viability of Engineers Canada is on hold for the next year, it was noted that this area of risk is low for the short-term given the state of reserves. Additionally, tools to manage reserve levels by adjusting the Per Capita Assessment are in place moving forward.
- Concern was raised about the CEAB improvement timeframe proposed in the 2022-2024 Strategic Plan, particularly that it may not be agile enough to meet the needs of the evolving online education environment. It was suggested that the likelihood score for Risk #26 Accreditation Process be considered for increase, from moderate to likely, to recognize the significant pivot underway in undergraduate education.

#### 5.2 FAR Committee

D. Gelowitz provided the update on behalf of the FAR Committee, and noted that the following improvements are being considered:

- Purpose and value of risk management: A review is underway to determine how the risk management process can better meet the Board's needs. The heat map and summary have proven helpful, but other information in the current reporting is not well understood. Improvements will consider what an acceptable level of risk is for each area, and for how long each of the risks could impact the organization. Frequency of oversight is also being considered, where it may be more appropriate for FAR to review risks quarterly, with the Board performing a "deep-dive" annually. This approach would clarify where risk management efforts need to be applied, and how to measure their impact. It would encourage a more holistic understanding of organizational risks and provide an opportunity to identify new ones. More information on this work will be reported on at a future Board meeting.
- Socially responsible investing: Environmental, social and governance (ESG)-focused investing is available through RBC vision funds, which complement Engineers Canada's organizational goals and mandate. It was noted that some of the ESG funds already exist in Engineers Canada's portfolio, and no increase in RBC management fees will be incurred to integrate more such funds.

The committee was commended for their work and dedication to continual improvement.

#### 5.3 Governance Committee

N. Hill provided the update on behalf of the Governance Committee.

The committee identified a challenge during their review of Board Policy 6.13, *President-Elect Nomination and Election* and will be recommending an amendment to the eligibility criteria, where Directors serving their second term will require a minimum of one year remaining in their term of office to run for President-Elect. This will address a potential issue that would be realized if a Director running for President-Elect in their final year of office is unsuccessful, and there is no alternate Director to fill the vacancy. The Board will be asked to approve this amendment in February, although the change in criteria will not come into effect until 2022.

The committee members and staff were thanked for their work and oversight.

#### 5.4 HR Committee

D. Lynch provided the update on behalf of the HR Committee. The committee members and staff were commended for their efforts.

#### 5.5 Strategic Plan Task Force

J. Boudreau provided the update on behalf of the task force. No major changes resulted from the consultation sessions, and the task force will be recommending that the Board approve the 2022-2024 Strategic Plan at the February meeting. The plan will then be shared with the Members for approval at the Annual Meeting of Members (AMM) in May.

#### 5.6 Board's 30 by 30 Champion

J. Dunn provided the update. The following discussion was captured:

- 30 by 30 data by province will be provided in the pending report from PRA Inc. (scheduled for presentation at the February Board meeting). This report will assist in better understanding how 30 by 30 is being handled across the country, and isolate national best practices.
- Engineers Nova Scotia is experiencing success, with confidence that they will achieve the 30 by 30 goal. J. Southwood discussed some best practices taking place in Nova Scotia, where focus is made on reaching women at an early stage in their lives through initiatives such as Girl Guides and high school programming. Best practices will be shared amongst the Regulators so they understand what has contributed to success, and how to emulate within their own jurisdictions.
- Communications to ensure continued dedication to the 30 by 30 goal are needed, which will also assist in mitigating reputational risks should the goal not be achieved.
- A list of the various male-dominated engineering fields is available and includes information about the barriers that exist.
- Currently, 30 by 30 statistics take on average one year to compile and publish. This is mostly related to the timing of data delivery from each of the Regulators, while ensuring that Engineers Canada staff can compile and analyze the information before circulation. A new process is being introduced in 2021 to promote faster reporting.

C. Polyzou and J. Southwood were commended for their leadership in this work.

#### 6. Other business

No other business was brought forward.

#### 7. Next meetings

The next meetings of the Engineers Canada Board are scheduled as follows:

- February 24, 2021 (Virtual)
- April 7, 2021 (Virtual)
- May 28-29, 2021 (Halifax, NS)

- October 1, 2021 (Ottawa, ON)
- December 13, 2021 (Ottawa, ON)

#### 8. In-camera sessions

8.1 Board Directors, direct reports, CEO Group advisor and staff

#### Motion 2020-12-13D

Moved by C. Sadr, seconded by T. Joseph

THAT the meeting move in-camera and be closed to the public at the recommendation of the Board. The attendees at the in-camera session shall include Board Directors, the Engineers Canada CEO, the chairs of the CEAB and CEQB, the CEO Group advisor to the Board, the secretary, the governance administrator, the director of finance, and the vice president of corporate affairs and strategic partnerships.

Carried

#### 8.2 Board Directors and CEO

Motion 2020-12-14D

Moved by D. Lynch, seconded by M. Wrinch THAT the meeting move in-camera and be closed to the public at the recommendation of the Board. The attendees at the in-camera session shall include Board Directors, and the Engineers Canada CEO. Carried

8.3 Board Directors only

Motion 2020-12-15D Moved by C. Sadr, seconded by M. Wrinch THAT the meeting move in-camera and be closed to the public at the recommendation of the Board. The attendees at the in-camera session shall include Board Directors. Carried

Motion 2020-12-16D Moved by D. Lynch, seconded by D. Gelowitz THAT the meeting move out of in-camera. Carried

#### 9. Closing

With no further business to address, the meeting closed at 2:05pm ET, and directors were invited to join the virtual happy hour.

Minutes prepared by C. Mash for:

Jean Boudreau, FEC, P.Eng. President

Evelyn Spence, LL.B., CIC.C, Corporate Secretary



#### **BRIEFING NOTE:** For decision

National Position Statements	National	Position	Statements
------------------------------	----------	----------	------------

Purpose:	Approval of new and updated National Position Statements								
Link to the Strategic Plan:	Operational imperative 5: Advocating to the federal government								
Motion(s) to consider:	<ul> <li>a) THAT the following new National Position Statements be approved: <ol> <li>Role of engineers in Canada's long-term economic recovery</li> <li>Building Canada's high-speed broadband through a sustainable digital infrastructure</li> </ol> </li> <li>b) THAT the updated Research, development, and innovation National Position Statement be approved.</li> </ul>								
Vote required to pass:	Simple majority								
Transparency:	Open session								
Prepared by:	Joey Taylor, Manager, Public Affairs								
Presented by:	Gerard McDonald, Chief Executive Officer								

#### Problem/issue definition

- National Position Statements (NPSs) are positions on key issues relating to the public interest. These are consensus positions of the provincial and territorial engineering Regulators. These statements:
  - o Represent the collective position of the engineering profession
  - o Influence public policy
  - o Facilitate discussion with government
  - o Provide information for our Members and those of the engineering profession
- Engineers Canada's Public Affairs Advisory Committee (PAAC) is tasked with creating the NPSs. This committee is comprised of volunteers with multi-disciplinary backgrounds and expertise.
- Each year, PAAC develops NPSs on new and existing issues facing the engineering profession. In addition, PAAC works to update the current NPSs to ensure they remain up-to-date and relevant. This helps ensure that parliamentarians and the federal government consider the expertise of the engineering profession in policy-making.
- The current process for deciding which topics PAAC will be developing in the upcoming year starts with a discussion of the potential topics during PAAC's May meeting. This process includes reviewing all existing NPSs and deciding which ones require updating as part of the annual update cycle. The topics identified by PAAC are circulated for approval by the Engineers Canada Board and the CEO Group. Once approved, PAAC develops and/or updates the NPSs and presents them to the Engineers Canada Board and the Regulators for approval. The process for the identification and development of public policies supported by the Regulators is available in Board policy 9.3, *National Position Statements*.
- The NPSs for review are linked to Operational imperative 5: Advocating to the Federal Government of the 2019-2021 Strategic Plan, and include:
  - New statements for approval:
    - Role of engineers in Canada's long-term economic recovery
    - Building Canada's high-speed broadband through a sustainable digital infrastructure
  - Updated existing statement for approval:
    - Research, development, and innovation This statement was updated to include the "innovation and productivity" NPS, which will be archived upon approval of this motion.

#### Proposed action/recommendation

• PAAC recommends that the Engineers Canada Board approve the attached NPSs.

• Once approved, the NPSs will be made public on Engineers Canada's website and will be relied upon when Engineers Canada staff and volunteers consult with the federal government on these issues.

#### **Other options considered**

• N/A

#### Risks

- Should the NPSs not be approved, the advocacy strategy would be impacted until a unified approach is agreed upon.
- Engineers Canada is currently planning for its annual Hill Day, which will likely take place in the spring of 2021. Given the federal government's commitment and investments in a broadband strategy, a national position on this topic will be helpful in advancing our position.

#### **Financial implications**

• N/A

#### **Benefits**

- To engineering Regulators:
  - A national position on key issues is beneficial as these issues affect the Regulators and the regulation of the engineering profession. Regulators strongly benefit from unified, national positions.
  - Engineers Canada will have a unified position on topics in which the federal government is heavily engaged; therefore, it will potentially increase our profile with parliamentarians and public servants.
- To the engineering profession:
  - The update of these national positions provides clarity of the role of the engineering profession in helping tackle these issues.
- To others (public, government, higher education institutions, individual engineers, etc.):
  - These will provide the federal government with awareness on issues that Engineers Canada is currently working on that are linked to the federal government's mandate.

#### Consultation

- Our multi-disciplinary PAAC, provincial and territorial Regulators (via the CEOs) and the Engineers Canada Board members were asked, by email, to review and provide comments and updates to the presented NPSs; 5 of the 12 Regulators and 4 Engineers Canada Board members responded with comments via e-mail.
- In addition, technical and advocacy experts from TELUS Communications were consulted in the review of the *Building Canada's high-speed broadband through a sustainable digital infrastructure* NPS. Their comments have been incorporated.
- There were no objections or concerns regarding the engineering profession's position as laid out in the NPSs being presented.

#### Next steps (if motion approved)

• If the motion is approved, the NPSs will be made public on Engineers Canada's website and will be relied upon when consulting with the federal government on these issues.

#### **Appendices**

The following NPSs are included; tracked-change versions of the documents highlight areas of adjustment resulting from Consultation feedback:

- Role of engineers in Canada's long-term economic recovery (new)
- Building Canada's high-speed broadband through a sustainable digital infrastructure (new)
- Research, development, and innovation (updated)



#### **National Position Statements**

The role of engineers in Canada's long-term economic recovery	. 2
Building Canada's high-speed broadband through a sustainable digital infrastructure	. 5
Research, development, and innovation	. 8

# The role of engineers in Canada's long-term economic recovery

#### The engineering profession's position

- To ensure Canada's long-term economic recovery, the federal government should make strategic economic investments in infrastructure, the natural resources and energy, sustainable development and innovation sectors, and diversity initiatives.
- Engineers and the engineering profession play a vital role in Canada's response and long-term economic recovery from COVID-19.
- To have a lasting effect and ensure the protection of the public, the economic recovery must be part of an approach that will ensure the integrity and quality of investments.
- The federal government's willingness to coordinate and collaborate with key stakeholders, particularly the engineering profession, is essential to Canada's economic recovery.
- Public confidence and safety are at risk when engineers are not involved in the planning, development, and implementation of a wide range of regulations that require the application of engineering expertise.

#### The challenge(s)

The COVID-19 virus has spread with alarming speed around the world, infecting millions of individuals and bringing economic activity to a near-standstill as countries impose restrictions on movement to halt the spread. The economic damage of the COVID-19 pandemic is evident and represents one of the largest economic impacts the world has experienced in decades.

Globally, the baseline forecast, provided by the World Bank in their June 2020 <u>Global Economic Prospects</u>, outlines a 5.2 per cent contraction in global GDP in 2020—the deepest global recession in decades— despite the extraordinary efforts of the international community to counter the pandemic with fiscal and monetary policy support.<sup>1</sup> COVID-19 has prompted an urgent need for governments to cushion the pandemic's economic consequences while setting the stage for lasting economic recovery. With the uncertainty surrounding the second wave of the virus, or the availability of a vaccine, the pandemic is sure to impact Canadians for several years to come.

As governments grapple with an unprecedented global health crisis, it is undeniable that Canada's federal government must continue its pandemic management while also focusing its attention towards rebuilding Canada's economy.

<sup>&</sup>lt;sup>1</sup> The World Bank (June 2020). "The Global Economic Outlook During the COVID-19 Pandemic: A Changed World." Retrieved July 16, 2020 from: <u>https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world</u>.
# How Engineers Canada has contributed

Engineers Canada submitted <u>budget recommendations</u> to the House of Commons Standing Committee on Finance in August 2020, and submitted <u>recommendations</u> to the House of Commons Standing Committee on Industry, Science and Technology on the Canadian response to the COVID-19 pandemic. Through these submissions, Engineers Canada re-iterated the need for investment in green infrastructure, support for women's role in Canada's economic recovery, and improved broadband connectivity for increased participation in the Canadian economy for everyone.

# Recommendations to the federal government

COVID-19 is testing the resilience and adaptability of governments, industries, and societies across the globe. To ensure Canada's long-term recovery, the federal government should focus on the following:

# Investing in Infrastructure

Economic recovery in the long term requires the federal government to accelerate planned infrastructure projects through the *Investing in Canada Plan* program and other legacy programs into the next two or three years as stimulus. By accelerating approvals, jobs will be created, and the economy will continue to be supported, while ensuring that the conditions for success are in place to ensure that increased construction does not come at the expense of the quality of the engineering works and the integrity of the process leading to their construction. To this end, public agencies should develop in-house engineering and procurement expertise, set multiple criteria for awarding contracts and weigh them appropriately, maximize the potential participation of bidders, adequately protect whistleblowers, and intensify the monitoring of the work.

Additionally, the federal government must continue to invest in green infrastructure and new environmental technologies as a recovery strategy to help benefit both the economy, as well as to deliver on Canada's climate commitments. In 2018, green building activity contributed approximately \$48 billion towards Canada's GDP—an increase of 50 per cent in four years. Investing in green infrastructure has proven to offer both high economic returns and a positive climate impact.

# Continued investments in natural resources and energy sectors

Supporting natural resources and energy sectors as they work to transform to meet a net zero future, creating good-paying and long-lasting jobs remains critical to Canada's economy. Increasing support for such projects will reduce the need and cost of importation, support the labour force, and increase Canada's self-sufficiency.

# Continued support for diversity initiatives

In May 2020, Statistics Canada reported that 1.5 million women disproportionately lost their jobs over a two-month period, when compared to men, due to the COVID-19 pandemic. Women are disproportionately bearing the brunt of childcare responsibilities and have therefore been most impacted by the pandemic when compared to their male counterparts. To serve the economy, as well as Canadian society at large, the federal government must continue to support efforts to attract and retain talented individuals from Canada's diverse populations. Engineers Canada is encouraged by the federal

government's support for an Action Plan for Women in the Economy to get women back into the workforce. With women making up approximately half of Canada's workforce, it is imperative that the federal government continue to support diversity and inclusion initiatives to kick-start Canada's economic recovery.

# Role of engineers in Canada's long-term recovery

During the COVID-19 pandemic, many engineers—as part of listed essential services—have played a critical role, both on the frontline and in supporting frontline workers and communities across Canada. Engineers possess the skillset for innovative solutions to flourish in complex global situations, such as the design of personal protective equipment or the development of diagnostic tools to effectively screen large populations. On the frontlines, engineers have also played an important role in developing sustainable infrastructure that mitigated COVID-19 exposure, such as heating, ventilation, and air conditioning systems, physical distancing design, maintenance of facilities and others. Engineers will continue supporting Canadians by playing an important role in the immediate-, short-, and long-term economic recovery of Canada.

The federal government's willingness to coordinate and collaborate with key stakeholders, particularly the engineering profession, is essential as Canada continues to cope with pandemic response, while shifting its focus towards the country's economic recovery. Engineers are essential in the design, implementation, construction supervision and maintenance of all types of infrastructure, making the engineering profession critical in connecting communities, driving our economy, and keeping Canadians safe.

The engineering profession also plays a critical role in safely and sustainably extracting, processing, and delivering natural resources, such as minerals, water, wood, soil, oil, and gas. Finally, Engineers Canada is actively working to support the recruitment, retention, and professional development of women in the engineering profession, primarily through its <u>30 by 30</u> initiative.

# How Engineers Canada will contribute

Engineers Canada will continue to:

- Provide input from engineers on federal legislation and regulations to ensure that federal policy is grounded in cutting edge technology and research and helps to build a more resilient and inclusive economy.
- Offer advice and technical expertise to ensure the federal government is informed on the needs of the engineering regulators and the engineering profession in Canada.
- Share recommendations from the engineering regulators and the engineering profession regarding Canada's long-term economic recovery and bring concerns to the attention of the federal government.

# Building Canada's high-speed broadband through a sustainable digital infrastructure

# The engineering profession's position

- Engineers Canada believes that broadband connectivity must be reliable, sustainable, secure, protected, and accessible to all Canadians, particularly for those residing in rural, remote, and northern communities. The viability of many of these communities will in some measure be dependent on this access and thereby their ability to contribute to Canada's overall success.
- The unbiased and expert advice of engineers skilled in this area is essential in supporting and implementing a national sustainable broadband strategy, as well as maintaining Canada's digital infrastructure.
- Incorporating engineers' accountability into federal legislation related to broadband infrastructure weaves the engineering regulatory process into the fabric of government and thereby keeps Canadians and their data safe, secure, and protected.

# The challenge(s)

Canadians from all communities, both urban and rural, need access to reliable, affordable, high-speed internet and mobile connectivity. This access is essential for personal and professional communications, for business sustainability and growth, and for access to government services. However, Canada currently faces a national connectivity gap as Canadians living in rural, remote, or Northern communities face daily challenges of slower and unreliable internet access when compared to their urban counterparts. Equitable and affordable access to sustainable digital infrastructure helps create equal opportunity for Canadians and is a vital component of an inclusive and progressive economy. These remote communities have identified that unreliable broadband connectivity has been the number one issue impeding their economic growth.<sup>2</sup> At the end of 2019, 63 per cent of rural and remote households in Canada did not have access to speeds that are considered standard. This large divide prevents individuals residing in these communities from participating in the digital economy.<sup>3</sup>

The spread of COVID-19 demonstrates an increased need for reliable high-speed broadband connectivity in these communities. Many industries have shifted their employees to virtual work, and many continue with virtual work, making reliable internet access imperative for continued productivity, while simultaneously helping to spur economic recovery. Broadband connectivity continues to be critical in the delivery of essential services across Canada, such as telemedicine, online government services, and

<sup>&</sup>lt;sup>2</sup> Innovation, Science and Economic Development Canada (2019). "High-speed access for all: Canada's connectivity strategy." Retrieved August 10, 2020 from: <u>https://www.ic.gc.ca/eic/site/139.nsf/vwapj/ISEDC\_19-</u>

<sup>170</sup> Connectivity Strategy E Web.pdf/\$file/ISEDC 19-170 Connectivity Strategy E Web.pdf

<sup>&</sup>lt;sup>3</sup> Policy Option (2019)."All Canadians deserve reliable high-speed internet." Retrieved August 14, 2020 from: <u>https://policyoptions.irpp.org/magazines/october-2019/all-canadians-deserve-reliable-high-speed-</u>

internet/#:~:text=lt's%20almost%202020%2C%20and%20everyone,Period.&text=The%20government%20must%20follow%20t hrough,service%20in%20EVERY%20Canadian%20household.

banking to name a few. Wireless technology, including 5G and higher frequency spectrums, have the potential to massively change the way industry and businesses will function in the future. Despite the strong progress that has been made, such as the federal government's development of the Universal Broadband Fund, investing in sustainable broadband infrastructure must remain a top priority for the federal government.

# How Engineers Canada has contributed

Engineers are essential in the planning, design, implementation, and maintenance of physical broadband infrastructure, making the engineering profession essential in connecting rural and remote communities to broadband internet in Canada. They provide innovative and practical solutions to complex problems and support the building of Canada's high-speed broadband by providing professional and unbiased expertise. Ensuring that engineers included in the consultation process consulted in the development of all wireless technology, specifically 5G is critical<sup>4</sup>. The lack of technical guidance may result in the federal government making wrong or very restrictive decision which could greatly hamper how the technology is deployed and in the long run result in technological disadvantage to all Canadians.

Engineers Canada actively participates in federal consultations regarding legislation and regulations that impact the work of engineers and that address initiatives requiring the expertise of engineers. In August 2020, our organization submitted its comments to the <u>House of Commons Standing Committee on</u> <u>Finance</u> regarding the need to continue to support efforts to build Canada's high-speed broadband connectivity through sustainable digital infrastructure, while ensuring public safety.

# Recommendations to the federal government

With the uncertainty that COVID-19 brings, sustainable broadband connectivity is important in creating economic productivity, while simultaneously building an inclusive, equitable, and progressive economy. Engineers Canada was encouraged by the federal government's commitment towards supporting high-speed internet access for all Canadians, particularly in rural and remote communities, through the <u>High</u> <u>Speed Access for All: Canada's Connectivity Strategy</u>. Additionally, Engineers Canada was pleased by the government's commitment to accelerate the connectivity timelines and ambitions of the Universal Broadband Fund to ensure that all Canadians, no matter where they live, have access to high-speed internet.

As broadband comes within telecommunications, the federal government has a particular responsibility for broadband as telecommunications is a federally regulated activity. This gives the federal government both the incentive and the legislative tools to make this access available to all. In addition, Indigenous peoples should not be put in the position where they would need to move elsewhere because of the lack of basic infrastructure and services to pursue education or find employment. The federal government must continue to work with Indigenous communities to implement connectivity projects to meet their unique needs.

<sup>&</sup>lt;sup>4</sup> Note: A separate national position statement addressing the use of 5G is under development.

To further support high-speed access and broadband connectivity across Canada, the federal government should:

- Ensure that engineers in Canada are used in all aspects of making this access available, especially in the planning, development, maintenance, rehabilitation, and commissioning of sustainable broadband infrastructure.
- Encourage the integration of broadband deployment within all infrastructure renewal programs.
- Incentivize the use of all available technologies to connect rural Canada on an expedited timeline including 5G technology, fibre and copper, fixed wireless, and low earth orbit satellites (LEOs).
- Create the conditions for increased private sector investment through:
  - Robust deployment conditions on new spectrum licenses, and stricter enforcement of existing spectrum license deployment conditions
  - Expediting auctions for critical spectrum needed to deploy rural 5G technology, fixed wireless, and LEOs
  - Maximizing the amount of contiguous spectrum available to improve efficiency, range, and cost associated with building rural wireless and LEO technology on an expedited timeline
- Look for opportunities to partner with provincial and municipal funding programs to maximize the efficacy of federal funding programs
- Continue to engage with Canadians, the provinces and territories, and Indigenous communities to support connectivity and broadband investments.

# How Engineers Canada will contribute

Engineers Canada will continue to:

- Monitor the government agenda, legislative initiatives, and proposed broadband connectivity
  regulations and activities to bring recommendations on demand-side legislation to the attention
  of the government.
- Advocate for decision-makers to ensure that broadband legislation retains explicit references to the inclusion of engineers licensed with provincial regulators, in the interest of public safety across Canada.
- Provide input from engineers on federal legislation and regulations where engineering work would be in the public interest.
- Support the work of the engineering regulators to enforce the provincial and territorial engineering acts as they pertain to the practice of engineering disciplines impacting broadband infrastructure.

# Research, development, and innovation

# The engineering profession's position

- In this rapidly changing and highly competitive world, improvements to research, development, and innovation must remain a national priority. Industry and government investment in these activities contributes to both economic prosperity and quality of life.
- Engineers are and must continue to be at the forefront of innovative solutions in order to help Canadians meet the environmental, social, and economic challenges of the 21st century.
- Through enhancing innovation and productivity, engineers play a vital role in building and sustaining Canada's economy.

# The challenge(s)

In 2019, the Bloomberg Innovation Index saw Canada advance two spots to break into the top 20 innovative countries for the first time in three years.<sup>4</sup> However, countries that are more innovative and increasingly productive are passing Canada on measures such as income per capita, exports, imports, and the quality of social programs. Falling behind on research, development and innovation greatly stunts our country's productivity, which consequentially has a large impact on the Canadian workforce and economy. Engineers Canada supports the federal government's increased investments in research, development, and innovation to ensure that Canada continues to advance to world leader status in innovation and productivity.

Innovation can drive and improve productivity across all industrial sectors, and engineers are oftentimes at the forefront of this innovation and these productivity enhancements. Many industries that are essential to the economic growth of the country, such as construction, mining, telecommunications, and manufacturing, depend on innovative engineering thinking. The research, development, and innovation sectors across Canada are critical to adapting to life under COVID-19 conditions and are essential in keeping the Canadian economy running.

# How Engineers Canada has contributed

Engineers Canada is supportive of and encourages all levels of government investment in research, development, and innovation in Canada, and strongly supports the streamlining of those funding opportunities to maximize the benefits to all Canadians. Cooperation between the engineering profession and the federal government is invaluable in accomplishing this. Federal government support for research, development, and innovation helps to ensure that adequate funds are available to support the procurement and retention of talent, particularly during COVID-19.

Engineers Canada actively works to advance the attraction, retention, and equitable participation of women and Indigenous peoples in Canada's high-productivity sectors. Increased diversity within the

<sup>&</sup>lt;sup>4</sup> Bloomberg (2019). "U.S. and Canada make strides in Bloomberg 2019 Innovation Index." Retrieved September 4, 2020 from: <u>https://www.bloomberg.com/news/articles/2019-01-28/u-s-canada-make-strides-in-bloomberg-2019-innovation-index</u>.

engineering workforce provides significant benefits to Canadians by delivering a solution to overcoming skills shortages, increased innovation capacity, ensuring that engineering research is aligned with societal needs, and a greater return on human resource investment. Moreover, advancing and supporting the equitable participation of women and Indigenous peoples in Canada's high-productivity sectors has the potential to add \$150 billion to Canada's GDP by 2026, or an annual increase of 0.6 per cent to the country's GDP growth.<sup>5</sup> The benefits of diversity extend beyond innovation as well. Welcoming and retaining more women and Indigenous peoples into engineering creates a positive voice for the profession in communities and encourages engineering role models for future generations.

Engineers Canada has contributed expertise to:

- Meetings organized by the federal government to explore ways to improve Canada's competitiveness, output, and quality of life.
- Federal submissions outlining recommendations to support innovation initiatives, research, and development, and economic prosperity in Canada.
- Initiatives to develop long-term approaches for sustained growth and prosperity by supporting practices, multidisciplinary research, and new techniques.

# Recommendations to the federal government

The federal government must continue to invest in research and development and innovation in Canada. The technology sector is a key driver of Canada's economic competitiveness on the global stage and will form an important part of Canada's recovery post-COVID-19. The technology sector has contributed greatly to Canada's COVID-19 mitigation efforts through vaccine research, personal protective equipment innovations, COVID-resilient infrastructure, and more. Engineers are at the forefront of many technology companies and are key drivers of innovation.

Engineers Canada supports Canada's Innovation and Skills Plan, which focuses on propelling Canada forward as a leader in science, technology, and innovation, and being recognized as one of the most innovative and competitive economies in the world. As of 2019, the federal government has worked diligently to increase Canada's innovative capacity, which in turn has led to:

- 55 per cent of workers completing post-secondary education the highest proportion of all OECD member countries.<sup>6</sup>
- Canada holding the second position in the G7 for attracting venture capital financing.<sup>7</sup>
- Canada holding the first position in the G7 for higher-education sector research and development performance.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> Global Affairs Canada (2019). "Trade and gender connection." Retrieved September 4, 2020 from: <u>https://www.international.gc.ca/trade-commerce/gender\_equality-egalite\_genres/trade\_gender-commerce\_genre.aspx?lang=eng</u>.

<sup>&</sup>lt;sup>6</sup> Government of Canada (2019). "Canada's innovation strengths and priorities." Retrieved September 4, 2020 from: <u>https://www.tradecommissioner.gc.ca/innovators-innovateurs/strategies.aspx?lang=eng</u>.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid.

We believe the federal government must continue to make significant investments into a strategic innovation agenda and frameworks to support the growth of incubators, accelerators, and emerging national networks for business and engineering innovation. The strategy must include rewarding the parts of our society, both public and private, that achieve or enable greater levels of innovation and productivity. Such examples include investments in green infrastructure while continuing to build a more inclusive economy or modernizing the federal government's procurement process to incentivize innovation. Finally, green infrastructure investments are key to achieving the post-pandemic economic recovery, clean growth, and climate change commitments made by the federal government.

# How Engineers Canada will contribute

With its network of expert volunteers, Engineers Canada will:

- Provide advice on funding priorities for innovation and productivity in existing and emerging disciplines.
- Participate in government forums, national roundtables, and appear before House of Commons standing committees to advance innovation policies.
- Provide advice in the early stages and facilitate the development of legislation and federal regulatory frameworks that promote innovation and productivity.
- Continue working with our members to improve equity, diversity and inclusion in the profession.



# **National Position Statements**

The role of engineers in Canada's long-term economic recovery	. 2
Building Canada's high-speed broadband through a sustainable digital infrastructure	. 5
Research, development, and innovation	. 8

# The role of engineers in Canada's long-term economic recovery

# The engineering profession's position

- To ensure Canada's long-term economic recovery, the federal government should make strategic economic investments in infrastructure, the natural resources and <u>energy</u>, <u>sustainable development</u> <u>and</u> innovation sectors, and diversity initiatives.
- Engineers and the engineering profession play a vital role in Canada's response and long-term economic recovery from COVID-19.
- <u>To have a lasting effect and ensure the protection of the public, the economic recovery must be part</u> of an approach that will ensure the integrity and quality of investments.
- The federal government's willingness to coordinate and collaborate with key stakeholders, particularly the engineering profession, is essential to Canada's economic recovery.
- Public confidence and safety are at risk when engineers are not involved in the planning, development, and implementation of a wide range of regulations that require the application of engineering expertise.

# The challenge(s)

The COVID-19 virus has spread with alarming speed around the world, infecting millions of individuals and bringing economic activity to a near-standstill as countries impose restrictions on movement to halt the spread. The economic damage of the COVID-19 pandemic is evident and represents one of the largest economic impacts the world has experienced in decades.

Globally, the baseline forecast, provided by the World Bank in their June 2020 <u>Global Economic Prospects</u>, outlines a 5.2 per cent contraction in global GDP in 2020—the deepest global recession in decades— despite the extraordinary efforts of the international community to counter the pandemic with fiscal and monetary policy support.<sup>1</sup> COVID-19 has prompted an urgent need for governments to cushion the pandemic's economic consequences while setting the stage for lasting economic recovery. With the uncertainty surrounding the second wave of the virus, or the availability of a vaccine, the pandemic is sure to impact Canadians for several years to come.

As governments grapple with an unprecedented global health crisis, it is undeniable that Canada's federal government must continue its pandemic management while also focusing its attention towards rebuilding Canada's economy.

<sup>&</sup>lt;sup>1</sup> The World Bank (June 2020). "The Global Economic Outlook During the COVID-19 Pandemic: A Changed World." Retrieved July 16, 2020 from: <u>https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world</u>.

# How Engineers Canada has contributed

Engineers Canada submitted <u>budget recommendations</u> to the House of Commons Standing Committee on Finance in August 2020, and submitted <u>recommendations</u> to the House of Commons Standing Committee on Industry, Science and Technology on the Canadian response to the COVID-19 pandemic. Through these submissions, Engineers Canada re-iterated the need for investment in green infrastructure, support for women's role in Canada's economic recovery, and improved broadband connectivity for increased participation in the Canadian economy for everyone.

# Recommendations to the federal government

COVID-19 is testing the resilience and adaptability of governments, industries, and societies across the globe. To ensure Canada's long-term recovery, the federal government should focus on the following:

# Investing in Infrastructure

Economic recovery in the long term requires the federal government to accelerate planned infrastructure projects through the <u>Investing in Canada Plan</u> program and other legacy programs into the next two or three years as stimulus. By accelerating approvals, jobs will be created, and the economy will continue to be supported, while ensuring that the conditions for success are in place to ensure that increased construction does not come at the expense of the quality of the engineering works and the integrity of the process leading to their construction. To this end, public agencies should develop in-house engineering and procurement expertise, set multiple criteria for awarding contracts and weigh them appropriately, maximize the potential participation of bidders, adequately protect whistleblowers, and intensify the monitoring of the work.

Additionally, the federal government must continue to invest in green infrastructure<u>and new</u> <u>environmental technologies</u> as a recovery strategy to help benefit both the economy, as well as to deliver on Canada's climate commitments. In 2018, green building activity contributed approximately \$48 billion towards Canada's GDP—an increase of 50 per cent in four years. Investing in green infrastructure has proven to offer both high economic returns and a positive climate impact.

# Continued investments in natural resources and energy sectors

Supporting natural resources and energy sectors as they work to transform to meet a net zero future, creating good-paying and long-lasting jobs remains critical to Canada's economy. Increasing support for such projects will reduce the need and cost of importation, support the labour force, and increase Canada's self-sufficiency.

# Continued support for diversity initiatives

In May 2020, Statistics Canada reported that 1.5 million women disproportionately lost their jobs over a two-month period, when compared to men, due to the COVID-19 pandemic. Women are disproportionately bearing the brunt of childcare responsibilities and have therefore been most impacted by the pandemic when compared to their male counterparts. To serve the economy, as well as Canadian society at large, the federal government must continue to support efforts to attract and retain talented individuals from Canada's diverse populations. Engineers Canada is encouraged by the federal

government's support for an Action Plan for Women in the Economy to get women back into the workforce. With women making up approximately half of Canada's workforce, it is imperative that the federal government continue to support diversity and inclusion initiatives to kick-start Canada's economic recovery.

# Role of engineers in Canada's long-term recovery

During the COVID-19 pandemic, many engineers—as part of listed essential services—have played a critical role, both on the frontline and in supporting frontline workers and communities across Canada. Engineers possess the skillset for innovative solutions to flourish in complex global situations, such as the design of personal protective equipment or the development of diagnostic tools to effectively screen large populations. On the frontlines, engineers have also played an important role in developing sustainable infrastructure that mitigated COVID-19 exposure, such as heating, ventilation, and air conditioning systems, physical distancing design, maintenance of facilities and others. Engineers will continue supporting Canadians by playing an important role in the immediate-, short-, and long-term economic recovery of Canada.

The federal government's willingness to coordinate and collaborate with key stakeholders, particularly the engineering profession, is essential as Canada continues to cope with pandemic response, while shifting its focus towards the country's economic recovery. Engineers are essential in the design, implementation, <u>construction supervision</u> and maintenance of all types of infrastructure, making the engineering profession critical in connecting communities, driving our economy, and keeping Canadians safe.

The engineering profession also plays a critical role in safely and sustainably extracting, processing, and delivering natural resources, such as minerals, water, wood, soil, oil, and gas. Finally, Engineers Canada is actively working to support the recruitment, retention, and professional development of women in the engineering profession, primarily through its <u>30 by 30</u> initiative.

# How Engineers Canada will contribute

Engineers Canada will continue to:

- Provide input from engineers on federal legislation and regulations to ensure that federal policy is grounded in cutting edge technology and research and helps to build a more resilient and inclusive economy.
- Offer advice and technical expertise to ensure the federal government is informed on the needs of the engineering regulators and the engineering profession in Canada.
- Share recommendations from the engineering regulators and the engineering profession regarding Canada's long-term economic recovery and bring concerns to the attention of the federal government.

# Building Canada's high-speed broadband through a sustainable digital infrastructure

# The engineering profession's position

- Engineers Canada believes that broadband connectivity must be reliable, sustainable, secure, protected, and accessible to all Canadians, particularly for those residing in rural, remote, and northern communities. The viability of many of these communities will in some measure be dependent on this access and thereby their ability to contribute to Canada's overall success.
- The unbiased and expert advice of engineers skilled in this area is essential in supporting and implementing a national sustainable broadband strategy, as well as maintaining Canada's digital infrastructure.
- Incorporating engineers' accountability into federal legislation related to broadband infrastructure weaves the engineering regulatory process into the fabric of government and thereby keeps Canadians and their data safe, secure, and protected.

# The challenge(s)

Canadians from all communities, both urban and rural, need access to reliable, affordable, high-speed internet and mobile connectivity. This access is essential for personal and professional communications, for business sustainability and growth, and for access to government services. However, Canada currently faces a national connectivity gap as Canadians living in rural, remote, or Northern communities face daily challenges of slower and unreliable internet access when compared to their urban counterparts. Equitable and affordable access to sustainable digital infrastructure helps create equal opportunity for Canadians and is a vital component of an inclusive and progressive economy. These remote communities have identified that unreliable broadband connectivity has been the number one issue impeding their economic growth.<sup>2</sup> At the end of 2019, 63 per cent of rural and remote households in Canada did not have access to speeds that are considered standard. This large divide prevents individuals residing in these communities from participating in the digital economy.<sup>3</sup>

The spread of COVID-19 demonstrates an increased need for reliable high-speed broadband connectivity in these communities. Many industries have shifted their employees to virtual work, and many continue with virtual work, making reliable internet access imperative for continued productivity, while simultaneously helping to spur economic recovery. Broadband connectivity continues to be critical in the delivery of essential services across Canada, such as telemedicine, online government services, and

<sup>&</sup>lt;sup>2</sup> Innovation, Science and Economic Development Canada (2019). "High-speed access for all: Canada's connectivity strategy." Retrieved August 10, 2020 from: <u>https://www.ic.gc.ca/eic/site/139.nsf/vwapj/ISEDC\_19-</u>

<sup>170</sup> Connectivity Strategy E Web.pdf/\$file/ISEDC 19-170 Connectivity Strategy E Web.pdf

<sup>&</sup>lt;sup>3</sup> Policy Option (2019)."All Canadians deserve reliable high-speed internet." Retrieved August 14, 2020 from: <u>https://policyoptions.irpp.org/magazines/october-2019/all-canadians-deserve-reliable-high-speed-</u>

internet/#:~:text=lt's%20almost%202020%2C%20and%20everyone,Period.&text=The%20government%20must%20follow%20t hrough,service%20in%20EVERY%20Canadian%20household.

banking to name a few. <u>Wireless technology, including 5G and higher frequency spectrums, have the</u> <u>potential to massively change the way industry and businesses will function in the future.</u> Despite the strong progress that has been made, such as the federal government's development of the Universal Broadband Fund, investing in sustainable broadband infrastructure must remain a top priority for the federal government.

# How Engineers Canada has contributed

Engineers are essential in the planning, design, implementation, and maintenance of physical broadband infrastructure, making the engineering profession essential in connecting rural and remote communities to broadband internet in Canada. They provide innovative and practical solutions to complex problems and support the building of Canada's high-speed broadband by providing professional and unbiased expertise. Ensuring that engineers included in the consultation process consulted in the development of all wireless technology, specifically 5G is critical<sup>4</sup>. The lack of technical guidance may result in the federal government making wrong or very restrictive decision which could greatly hamper how the technology is deployed and in the long run result in technological disadvantage to all Canadians.

Engineers Canada actively participates in federal consultations regarding legislation and regulations that impact the work of engineers and that address initiatives requiring the expertise of engineers. In August 2020, our organization submitted its comments to the <u>House of Commons Standing Committee on</u> <u>Finance</u> regarding the need to continue to support efforts to build Canada's high-speed broadband connectivity through sustainable digital infrastructure, while ensuring public safety.

# Recommendations to the federal government

With the uncertainty that COVID-19 brings, sustainable broadband connectivity is important in creating economic productivity, while simultaneously building an inclusive, equitable, and progressive economy. Engineers Canada was encouraged by the federal government's commitment towards supporting high-speed internet access for all Canadians, particularly in rural and remote communities, through the <u>High</u> <u>Speed Access for All: Canada's Connectivity Strategy</u>. Additionally, Engineers Canada was pleased by the government's commitment to accelerate the connectivity timelines and ambitions of the Universal Broadband Fund to ensure that all Canadians, no matter where they live, have access to high-speed internet.

As broadband comes within telecommunications, the federal government has a particular responsibility for broadband as telecommunications is a federally regulated activity. This gives the federal government both the incentive and the legislative tools to make this access available to all. In addition, Indigenous peoples should not be put in the position where they would need to move elsewhere because of the lack of basic infrastructure and services to pursue education or find employment. The federal government must continue to work with Indigenous communities to implement connectivity projects to meet their unique needs.

<sup>&</sup>lt;sup>4</sup> <u>Note: A separate national position statement addressing the use of 5G is under development.</u>

To further support high-speed access and broadband connectivity across Canada, the federal government should:

- Ensure that engineers in Canada are used in all aspects of making this access available, especially in the planning, development, maintenance, rehabilitation, and commissioning of sustainable broadband infrastructure.
- Encourage the integration of broadband deployment within all infrastructure renewal programs.
- Incentivize the use of all available technologies to connect rural Canada on an expedited timeline including 5G technology, fibre and copper, fixed wireless, and low earth orbit satellites (LEOs).
- Create the conditions for increased private sector investment through:
  - <u>Robust deployment conditions on new spectrum licenses, and stricter enforcement of existing spectrum license deployment conditions</u>
  - Expediting auctions for critical spectrum needed to deploy rural 5G technology, fixed wireless, and LEOs
  - Maximizing the amount of contiguous spectrum available to improve efficiency, range, and cost associated with building rural wireless and LEO technology on an expedited timeline
- Look for opportunities to partner with provincial and municipal funding programs to maximize the efficacy of federal funding programs
- Continue to engage with Canadians, the provinces and territories, and Indigenous communities to support connectivity and broadband investments.

# How Engineers Canada will contribute

Engineers Canada will continue to:

- Monitor the government agenda, legislative initiatives, and proposed broadband connectivity
  regulations and activities to bring recommendations on demand-side legislation to the attention
  of the government.
- Advocate for decision-makers to ensure that broadband legislation retains explicit references to the inclusion of engineers licensed with provincial regulators, in the interest of public safety across Canada.
- Provide input from engineers on federal legislation and regulations where engineering work would be in the public interest.
- Support the work of the engineering regulators to enforce the provincial and territorial engineering acts as they pertain to the practice of engineering disciplines impacting broadband infrastructure.

# Research, development, and innovation

# The engineering profession's position

- In this rapidly changing and highly competitive world, improvements to research, development, and innovation must remain a national priority. Industry and government investment in these activities contributes to both economic prosperity and quality of life.
- Engineers are and must continue to be at the forefront of innovative solutions in order to help Canadians meet the environmental, social, and economic challenges of the 21st century.
- Through enhancing innovation and productivity, engineers play a vital role in building and sustaining Canada's economy.

# The challenge(s)

In 2019, the Bloomberg Innovation Index saw Canada advance two spots to break into the top 20 innovative countries for the first time in three years.<sup>4</sup> However, countries that are more innovative and increasingly productive are passing Canada on measures such as income per capita, exports, imports, and the quality of social programs. Falling behind on research, development and innovation greatly stunts our country's productivity, which consequentially has a large impact on the Canadian workforce and economy. Engineers Canada supports the federal government's increased investments in research, development, and innovation to ensure that Canada continues to advance to world leader status in innovation and productivity.

Innovation can drive and improve productivity across all industrial sectors, and engineers are oftentimes at the forefront of this innovation and these productivity enhancements. Many industries that are essential to the economic growth of the country, such as construction, mining, telecommunications, and manufacturing, depend on innovative engineering thinking. The research, development, and innovation sectors across Canada are critical to adapting to life under COVID-19 conditions and are essential in keeping the Canadian economy running.

# How Engineers Canada has contributed

Engineers Canada is supportive of and encourages all levels of government investment in research, development, and innovation in Canada, and strongly supports the streamlining of those funding opportunities to maximize the benefits to all Canadians. Cooperation between the engineering profession and the federal government is invaluable in accomplishing this. Federal government support for research, development, and innovation helps to ensure that adequate funds are available to support the procurement and retention of talent, particularly during COVID-19.

Engineers Canada actively works to advance the attraction, retention, and equitable participation of women and Indigenous peoples in Canada's high-productivity sectors. Increased diversity within the

<sup>&</sup>lt;sup>4</sup> Bloomberg (2019). "U.S. and Canada make strides in Bloomberg 2019 Innovation Index." Retrieved September 4, 2020 from: <u>https://www.bloomberg.com/news/articles/2019-01-28/u-s-canada-make-strides-in-bloomberg-2019-innovation-index</u>.

engineering workforce provides significant benefits to Canadians by delivering a solution to overcoming skills shortages, increased innovation capacity, <u>ensuring that engineering research is aligned with societal needs</u>, and a greater return on human resource investment. Moreover, advancing and supporting the equitable participation of women and Indigenous peoples in Canada's high-productivity sectors has the potential to add \$150 billion to Canada's GDP by 2026, or an annual increase of 0.6 per cent to the country's GDP growth.<sup>5</sup> The benefits of diversity extend beyond innovation as well. Welcoming and retaining more women and Indigenous peoples into engineering creates a positive voice for the profession in communities and encourages engineering role models for future generations.

Engineers Canada has contributed expertise to:

- Meetings organized by the federal government to explore ways to improve Canada's competitiveness, output, and quality of life.
- Federal submissions outlining recommendations to support innovation initiatives, research, and development, and economic prosperity in Canada.
- Initiatives to develop long-term approaches for sustained growth and prosperity by supporting practices, multidisciplinary research, and new techniques.

# Recommendations to the federal government

The federal government must continue to invest in research and development and innovation in Canada. The technology sector is a key driver of Canada's economic competitiveness on the global stage and will form an important part of Canada's recovery post-COVID-19. The technology sector has contributed greatly to Canada's COVID-19 mitigation efforts through vaccine research, personal protective equipment innovations, COVID-resilient infrastructure, and more. Engineers are at the forefront of many technology companies and are key drivers of innovation.

Engineers Canada supports Canada's Innovation and Skills Plan, which focuses on propelling Canada forward as a leader in science, technology, and innovation, and being recognized as one of the most innovative and competitive economies in the world. As of 2019, the federal government has worked diligently to increase Canada's innovative capacity, which in turn has led to:

- 55 per cent of workers completing post-secondary education the highest proportion of all OECD member countries.<sup>6</sup>
- Canada holding the second position in the G7 for attracting venture capital financing.<sup>7</sup>
- Canada holding the first position in the G7 for higher-education sector research and development performance.<sup>8</sup>

<sup>&</sup>lt;sup>5</sup> Global Affairs Canada (2019). "Trade and gender connection." Retrieved September 4, 2020 from: <u>https://www.international.gc.ca/trade-commerce/gender\_equality-egalite\_genres/trade\_gender-commerce\_genre.aspx?lang=eng</u>.

<sup>&</sup>lt;sup>6</sup> Government of Canada (2019). "Canada's innovation strengths and priorities." Retrieved September 4, 2020 from: <u>https://www.tradecommissioner.gc.ca/innovators-innovateurs/strategies.aspx?lang=eng</u>.

<sup>&</sup>lt;sup>7</sup> Ibid.

<sup>&</sup>lt;sup>8</sup> Ibid.

We believe the federal government must continue to make significant investments into a strategic innovation agenda and frameworks to support the growth of incubators, accelerators, and emerging national networks for business and engineering innovation. The strategy must include rewarding the parts of our society, both public and private, that achieve or enable greater levels of innovation and productivity. Such examples include investments in green infrastructure while continuing to build a more inclusive economy or modernizing the federal government's procurement process to incentivize innovation. Finally, green infrastructure investments are key to achieving the post-pandemic economic recovery, clean growth, and climate change commitments made by the federal government.

# How Engineers Canada will contribute

With its network of expert volunteers, Engineers Canada will:

- Provide advice on funding priorities for innovation and productivity in existing and emerging disciplines.
- Participate in government forums, national roundtables, and appear before House of Commons standing committees to advance innovation policies.
- Provide advice in the early stages and facilitate the development of legislation and federal regulatory frameworks that promote innovation and productivity.
- Continue working with our members to improve equity, diversity and inclusion in the profession.



# **BRIEFING NOTE:** For decision

#### 2020 Annual Strategic Performance Report

Purpose:	To approve the 2020 Annual Strategic Performance Report
Link to the Strategic Plan:	Board Responsibility #1: Hold itself, its Directors, and its Direct Reports accountable Board responsibility #3: Provide ongoing and appropriate strategic direction
Motion(s) to consider:	THAT the Board approve the 2020 Annual Strategic Performance Report, for circulation to the Members for information at the 2021 Annual Meeting of Members.
Vote required to pass:	Simple majority
Transparency:	Open session
Prepared by:	Board committees and Task Forces Gerard McDonald, Chief Executive Officer
Presented by:	Gerard McDonald, Chief Executive Officer

# **Issue definition**

- The Annual Strategic Performance Report highlights to Members how the Engineers Canada Board and its Direct Reports are progressing toward achieving objectives and outcomes set in the 2019-2021 Strategic Plan.
- The Board must report to the Regulators, annually, and demonstrate to the Members that they are providing appropriate governance of the organization and are achieving their own Board responsibilities.

# **Proposed action/recommendation**

• That the Board review and approve the report, with amendments if necessary, so that it can be provided to the Members for information at the Annual Meeting of Members in May 2021.

# Other options considered:

• No other options were considered. This is the accountability and reporting plan that the Board put into place in 2018 as an outcome of the Governance, Strategic Planning, and Consultation project.

# **Risks**

• Failing to report progress and demonstrate accountability to the Members could lead to a loss of trust.

# **Financial implications**

• None.

# Benefits

- The development, review, and concurrence of an annual strategic performance report provides an opportunity for the Board to reflect on its performance and that of the organization.
- The annual strategic performance report demonstrates to the Regulators that the Board members understand who they are accountable to, and that they are committed to their role of delivering value to the Regulators.

# Consultation

- The 2019-2021 Strategic Plan and its objectives and outcomes resulted from extensive consultation with Regulators and was approved by them in May 2018.
- This report on progress towards achieving those objectives and outcomes was developed by staff and volunteers, with the Governance, FAR, and HR committees reviewing their results, in respect of their specific Board responsibilities, to ensure accuracy.
- The primary consultation is the Board meeting, where Directors will agree on what level of achievement to report to the Regulators.

# Next steps (if motion approved)

- Based on input from the Board, staff will finalize (and amend, if necessary) the 2020 Annual Strategic Performance Report, and ensure that it is included in the agenda materials for the 2021 Annual Meeting of Members.
- The introductory letter will be drafted by staff and approved by the Engineers Canada President.

# **Appendices**

• Appendix 1: 2020 Annual Strategic Performance Report



# 2020 Engineers Canada Annual performance report

300–55 Metcalfe Street, Ottawa, Ontario K1P 6L5 613.232.2474 | t-f: 877.408.9273 ♥@EngineersCanada engineerscanada.ca 55, rue Metcalfe, bureau 300, Ottawa (Ontario) K1P 6L5 613.232.2474 s. f. : 877.408.9273 ♥@EngineersCanada ingenieurscanada.ca

# Introduction

This is where the introductory letter goes, once the report is approved by the Board.

Sincerely,

Jean Boudreau, FEC, P.Eng. President Engineers Canada Photo of Jean goes here

"Pull quote goes here. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam,"

# **Summary of 2020 performance**

	Q1		Q2		Q3		2020	
Strategic priorities	Objectives	Outcomes	Objectives	Outcomes	Objectives	Outcomes	Objectives	Outcomes
SP1 Accreditation Improvement Program	<b>&gt;&gt;&gt;&gt;</b>	>	<b>&gt;&gt;&gt;&gt;</b>		>>>	<b>&gt;&gt;&gt;&gt;</b>	>	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
SP2 Accountability in Accreditation	<b>&gt;&gt;&gt;</b>						<b>&gt;&gt;&gt;</b>	
SP3 Recruitment, Retention, and Professional Development of Women in the Profession		<b>&gt;&gt;&gt;&gt;&gt;</b>		<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>		<b>&gt;&gt;&gt;&gt;&gt;</b>
SP4 Competency Based Assessment Project	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	>	<b>&gt;&gt;&gt;&gt;&gt;</b>	>	<b>&gt;&gt;&gt;&gt;</b>	>	<b>&gt;&gt;&gt;&gt;</b>
Operational imperatives		- -		- -				
OP1 Accreditation	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>		<b>&gt;&gt;&gt;&gt;&gt;</b>			<b>&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
OP2 Regulator relationships	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>
OP3 Services and tools (QB and NMDB)	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>		<b>&gt;&gt;&gt;&gt;&gt;</b>		<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
OP4 National programs (affinity, devolving PIEVC and IRP)		<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>}</b>		<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
OP5 Advocating to the federal government	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>}}</b>		<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>
OP6 Monitoring, researching, and advising	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
OP7 International mobility	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>}</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
OP8 Promotion and outreach		<b>}</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>}</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
OP9 Diversity	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>
OP10 Protecting official marks	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>}}</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
Board responsibilities								
BR1 Hold itself, its Directors, and its Direct Reports accountable							<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
BR2 Sustain a process to engage with Regulators through regular communication that facilitates input, evaluation, and feedback							<b>&gt;&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>
BR3 Provide ongoing and appropriate strategic direction							<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
BR4 Ensure the development and periodic review of Board policies							<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;</b>
BR5 Ensure the CEO maintains and acts on a robust and effective risk management system which reflects the Board's risk tolerance level and directs Board-approved mitigation strategies							<b>&gt;&gt;&gt;&gt;</b>	<b>&gt;&gt;&gt;&gt;&gt;</b>
BR6 Provide orientation of new Directors, and continuing development of Directors and others who work closely with the Board							<b>}}</b>	<b>}</b>

# Legend

Scorin	g					
Assess	ment of the progress of the annual objectives:	Assessment of the probability of achieving the intended strategic outcomes by the end of the strategic plan period:				
~	100% (i.e. all objectives have been achieved)	<ul> <li>100% (i.e. the outcomes have been achieved)</li> </ul>				
<b>&gt;&gt;&gt;&gt;&gt;</b>	90 to 100% of the initiatives are on track	<b>&gt;&gt;&gt;&gt;&gt;</b>	90 to 99% probability of achieving the intended outcomes			
<b>&gt;&gt;&gt;&gt;</b>	70 to 89% of the initiatives are on track	<b>&gt;&gt;&gt;&gt;</b>	80 to 89% probability of achieving the intended outcomes			
<b>&gt;&gt;&gt;&gt;</b>	Some disruption; close monitoring required. 50 to 69% of the initiatives are on track	<b>&gt;&gt;&gt;&gt;</b>	70 to 79% probability of achieving the intended outcomes			
>>	Significant disruption; close monitoring required. The majority of the initiatives are not on track	>>	60 to 69% probability of achieving the intended outcomes			
>	Obstacles being encountered that put progress and success at risk; corrective action required	>	Less than 60% probability of achieving the intended outcomes			

# **SP1: Accreditation Improvement Program**

Accountability: CEO
Weight: 4 (highest)

# Intended outcomes:

- Improved performance of the accreditation management process.
- Improved performance of the Enrolment and Degrees Awarded Survey process.
- Improved stakeholder consultation process associated with accreditation management and Enrolment and Degrees Awarded Survey processes.
- Improved user experience(s) associated with accreditation management and the Enrolment and Degrees Awarded Survey. This includes both operationally and for those stakeholders directly involved in these processes.
- Improved reliability of accreditation and the Enrolment and Degrees Awarded Survey.
- Users are enabled to more quickly adopt changes to the accreditation management and Enrolment and Degrees Awarded Survey Processes.
- Sustainable methods are established to ensure ongoing operational continual improvement.

# Probability of achieving the intended outcomes by December 2021

- Five intended outcomes have been achieved: sustainable methods of ongoing continual improvement have been operationalized; the Enrolment and Degree Awarded (EDA) Survey process has improved reliability, user experience and performance; and the stakeholder consultation process for the EDAS work was also improved.
- We remain confident that the Tandem accreditation management process will offer improved reliability and performance and will enable users to more quickly adopt changes. Tandem is being developed with ongoing stakeholder consultation through an advisory team of users, and feedback to date has been positive.

# 2020 Objectives:

- Initiate configuration and testing of our accreditation management system (Tandem) considering the needs of HEIs and Engineers Canada.
- Plan the transition of the accreditation management system by higher education institutions (HEIs), CEAB, and Engineers Canada.
- Design, build, and plan implementation of improvements to Engineers Canada's accreditation volunteer management process, ensuring alignment to the Engineers Canada's volunteer management process.
- Incorporate improvements to the 2020 Enrolment and Degrees Awarded Survey (EDAS) from the 2019 survey cycle.

# Achievement of the objectives:

- The 2020 Enrolment and Degrees Awarded Survey was improved, based on learning from the 2019 survey.
- The continual improvement process has been operationalized and is being managed by the accreditation team.
- Work on the accreditation volunteer management process remains on hold, pending the development and implementation of Engineers Canada's volunteer management system (which is on hold due to lack of resources associated with the COVID-19 pandemic).
- Discovery work on the Tandem accreditation management system concluded, and a new scope of work was agreed to. Configuration started in 2020 and will conclude in 2021.
- Planning the internal (staff) transition to Tandem started in 2020 and will conclude in 2021.
- Testing and planning of the transition to the Tandem system for HEIs and the CEAB will conclude in 2021.

# Comments:

The Tandem accreditation system did not launch in fall 2020 due to delays associated with discovery with the vendor, related to vendor resource shortages. The system will launch in 2021.

Annual Objectives: 📎

Strategic Outcomes:

Work on the volunteer management process remains on hold pending development of Engineers Canada's overall volunteer management strategy, which was not completed due to lack of internal resources related to the COVID-19 pandemic.

# SP2 Accountability in accreditation

Accountability: CEAB Weight: 4 (highest)

# Intended outcomes:

- The criteria established by the Accreditation Board are data-driven, reflect the requirements of the Regulators, and support excellence in engineering education.
- Engineering Regulators are provided with annual, data-driven reporting that demonstrates that the CEAB measures transparency and effectiveness, enabling clarity of conversations around potential improvements and changes.
- Higher education institutions (HEIs):
  - Understand and recognize that the CEAB is taking them through a structured, rigorous, and fair process.
  - Feel supported in their efforts to incorporate educational innovation into their programs in a timely manner.
  - Report greater knowledge and predictability of accreditation visits and decisions, and satisfaction with the Accreditation Board's collaborative approach to change.

# Probability of achieving the intended outcomes by December 2021

- We remain confident that Regulators, the Board and the CEAB will be able to demonstrate that criteria are datadriven, and that feedback regarding the transparency and effectiveness of the CEAB process will enable clarity of conversations about potential improvements.
- We are also confident that the Accountability in Accreditation work will enable clarity of conversations with HEIs and demonstrate that the CEAB is taking them through a structured, rigorous and fair process.
- However, the demands on HEIs and their requests of the CEAB have greatly increased throughout the COVID-19
  pandemic period. Despite the fact that the CEAB's work related to COVID-19 accommodations has demonstrated a
  collaborative approach to change, HEIs continue to request even more support and a faster rate of change in
  accreditation criteria and processes turn-arounds. Given the volunteer structure of the CEAB and the lengthy cycle
  of accreditation, this may not be achievable.

# 2020 Objectives:

- A first annual measurement of the accreditation system is conducted, based on the process established in 2019.
- Results of the first measurement cycle are communicated to all stakeholders, including both quantitative and qualitative measures.
- Both the measures and the measurement process itself are reviewed, refined, and updated based on lessons learned and feedback from stakeholders.
- (2019 objective) The issue of the required number of AUs is addressed to the satisfaction of all stakeholders, based on data and collaboration with all stakeholders.
- (2019 objective) Assessment process to assess transparency and effectiveness of accreditation system is completed.

# Achievement of the objectives:

- The required number of AUs were reduced, based on CEAB recommendation and stakeholder input, through a motion of the Board at the May 2020 meeting.
- The Accountability in Accreditation annual assessment process was completed in Q2, approved at the June CEAB meeting, and launched immediately thereafter.
- The first annual measurement of the accreditation system is underway and will conclude when the current decision cycle concludes in June 2021.

# Comments:

The objectives for this strategic priority are out of sync with the cycle of accreditation visits and decisions, which span over two calendar years. As a result, although the assessment is underway (as originally foreseen in the strategic plan),

Annual Objectives:

Strategic Outcomes:

all data will not be gathered until June 2021. Improvements can only be identified and implemented after this date not in 2020.

While most strategic outcomes are likely to be achieved by the end of the strategic plan period, the HEIs' desire for quick and supportive changes to accreditation criteria and processes may not be achieved.

# SP3 Recruitment, retention, and professional development of women in the profession

Strategic Outcomes:

Accountability: CEO Weight: 4 (highest)

# Intended outcomes:

- A national program with high visibility among targeted stakeholders.
- Engineering Regulators are provided the opportunity to fully participate in the program.
- Barriers to entry and retention for women in the profession are understood and mechanisms for addressing them are developed to be applied both nationally and with Regulators in their provinces and territories.

# Probability of achieving the intended outcomes by December 2021

• Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

# 2020 Objectives:

- All Engineers Canada Board members and staff have equity, diversity and inclusion training.
- All remaining HEIs approached by our President to participate on 30 by 30 network by end of 2020.
- Publish best practice report on Regulators' EIT/MIT programs, licensure assistance programs, and employer awareness programs on Engineers Canada's public website.
- Publish, for the use of the Board and the Regulators, an aspirational scorecard for 30 by 30 with yearly targets.
- 30 by 30 network is expanded to include all HEIs.
- Engineers Canada explores the development of an equity, diversity, and inclusion training module that is available to Regulators.

# Achievement of the objectives:

- Staff have completed equity, diversity and inclusion (EDI) training. The EDI training scheduled for fall 2020 for the Board, CEO Group, and Presidents Group was postponed to 2021 due to COVID-19; this training will be provided virtually.
- Due to the impacts of COVID-19, it was not feasible for our President to approach all remaining HEIs to participate on the 30 by 30 network by end of 2020.
- The best practice report on Regulators' EIT/MIT programs, licensure assistance programs, and employer awareness programs was published on Engineers Canada's public website.
- An aspirational scorecard for 30 by 30 with yearly targets was published for the use of the Board and the Regulators.
- COVID-19 impacted the activities planned to expand the 30 by 30 network to include all HEIs.
- Engineers Canada is exploring the development of an EDI training module that is available to Regulators.

# Comments:

Four of the five initiatives in SP3 have been completed (i.e., 80%). The initiative regarding development of an EDI training module that is available to Regulators has been moved to 2021 due to the impacts of COVID-19 on potential training providers and capacity limitations in 2020.

# SP4 Competency Based Assessment (CBA) project

Accountability: CEO Weight: 2

#### Intended outcomes:

- The administrative burden of processing applicants is reduced for Regulator staff.
- Applicants have greater clarity regarding the engineering work experience requirement and how to report their work experience.
- Applicants and validators report greater confidence in their own assessments.
- Application processing resources are refocused on only those applicants requiring additional assistance.

# Probability of achieving the intended outcomes by December 2021

• Regulators already using the system report that the outcomes are achieved. We therefore remain extremely confident that the intended outcomes will be achieved by December 2021 for all participating Regulators.

#### 2020 Objectives:

- Complete the project, fully bilingual, with the Canadian environment competencies included.
- The online competency-based assessment system is available in English and French.
- Project completion and closeout.

# Achievement of the objectives:

- Engineers & Geoscientists BC has completed work on all major deliverables, and the system is operational and in use by three Regulators.
- An inter-rater reliability pilot was launched to measure the consistency of assessors' work, with the goal of informing future assessor training, and improving pan-Canadian consistency.
- The Canadian competencies (scope addition) were completed and launched in 2020.
- Three additional Regulators were not able to join in 2020, and will be coming online in 2021. Translation work is also pending.

# Comments:

The project was not completed in 2020 due to lack of Regulator resources brought on by the COVID-19 pandemic. Remaining items include the translation of all content into French, and the project completion and close-out.

# **OP1 Accreditation**

Accountability: CEAB Weight: 3 Annual Objectives:

Strategic Outcomes:

#### Intended outcomes:

• Ensure the Canadian accreditation process is credible in the eyes of Regulators, higher education institutions (HEIs), and engineering students to effectively and efficiently accredit Canadian undergraduate engineering programs.

# Probability of achieving the intended outcomes by December 2021

• Despite challenges from the COVID-19 pandemic, we remain confident that the process remains credible in the eyes of Regulators, HEIs, and students and will continue to do so through December 2021.

#### 2020 Objectives:

- Conduct accreditation business:
  - Visits to 4 HEIs from the 2019/2020 cycle and 10 HEIs from the 2020/2021 cycle.
  - 74 program decisions rendered for Canadian undergraduate engineering programs (51 visits + 13 notices of significant change + 10 reports).
- Develop and maintain accreditation policies:
  - o General visitors report template.
  - AU alternative (i.e. learning units).
  - New definition of engineering design.
  - o Overall document review in preparation for Tandem.
  - o Develop appropriate ways within the accreditation process to incorporate the goals of the 30 by 30 initiative
  - o Review on-site material documentation requirements.
  - Respond to Engineering Deans Canada (EDC)'s request regarding international exchanges and CEAB accreditation requirements.
  - Respond to EDC's request regarding the Interpretive Statement on Licensure's clauses regarding restrictions on AU distributions.
  - Study and make recommendations regarding the Terms of reference of the Policies & Procedures Committee (as per Recommendation #17 from the Nominations Task Force).

#### Achievement of the objectives:

- Due to COVID-19, the Engineers Canada Board approved the deferral of all 2020/2021 accreditation visits by one year and the extension of all accreditation decisions by one year.
- At the June 6 CEAB meeting, decisions were made regarding 51 programs at 13 institutions, and the recommendation to address EDC's concerns about restrictions on AU distribution was discussed. A consultation on the topic was launched in Q4.
- Visit materials for the 2021/2022 visit cycle were posted, and the website was updated to increase clarity of requirements for different visit cycles.
- The consultation on the definition of engineering design closed, and a new proposal will be finalized in 2021.
- Working groups have addressed the goals of the 30 by 30 initiative, required visit materials, student learning
  experience during COVID-19 and virtual accreditation visits. Results will be presented at the February 2021 CEAB
  meeting.
- The working group charged with considering the terms of reference of the Policies & Procedures committee continues it work, with results expected later in 2021.
- The issue of international student exchanges was discussed with Regulators, but further progress with EDC remains outstanding.

# Comments:

Annual objectives were severely disrupted by COVID-19, and the CEAB successfully pivoted to address urgent challenges this year.

# **OP2** Regulator relationships

Accountability: CEO Weight: 3

# Intended outcomes:

- Sustain a high level of trust, engagement, and commitment between and among the Regulators.
- Facilitate the information exchange necessary to support a well-informed federation of Regulators that is able to act proactively in the best interests of engineering regulation in Canada.
- Support and facilitate the work of the CEO Group and the National Officials Groups in the regulation of the profession.
- Make available training materials and content on ethics and professionalism for Regulators' use in the development of their continuing professional development programs.

#### Probability of achieving the intended outcomes by December 2021

 Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

#### 2020 Objectives:

- Enable networking opportunities for the Regulator presidents within the context of regular Board meetings.
- Support an orientation program about Engineers Canada for the Regulator presidents, and other Engineers Canada and Regulator staff and volunteers.
- Support the CEO Group and their initiatives
  - o 4 meetings per year
- Support the national officials' groups and their initiatives
  - 2 National Admissions Officials Group (NAOG) face-to-face meetings; 1 National Discipline & Enforcement Officials Group (NDEOG) face-to-face meeting; 1 National Practice Officials group (NPOG) face-to-face meeting.
  - NAOG, NDEOG, NPOG: deliver current work plans, develop new work plans, participate in consultations.
  - o IT and Communications Officials: host teleconferences and share information as requested.

#### Achievement of the objectives:

- Presidents Group meetings were facilitated in conjunction with the February, May and October Board meetings.
- First-timer orientation sessions were provided for new presidents and CEOs, with sessions provided in-person in February and via online delivery in October.
- The CEO Group met virtually four times and held additional single-topic calls for as-needed information exchange throughout the year.
- The NAOG met twice virtually, with three additional calls during the year.
- The NPOG met once virtually, with three additional calls during the year.
- The NDEOG met once virtually, with two additional calls during the year.
- The National IT Officials group met in the spring to share information about supporting virtual AGMs and online voting.
- The new National Finance Officials Group met once in November to establish their purpose, chair and terms of reference.

#### Comments:

The COVID-19 pandemic brought new urgency to meetings of the officials' groups. Regulators reported high value from being able to collaborate with their peers and exchange information as the external situation changed rapidly.

# **OP3** Services and tools for regulation, practice, and mobility

Accountability: CEO and CEQB Weight: 3

# Intended outcomes:

- Enable the assessment of engineering qualifications:
  - Through the Qualifications Board, develop work products that enable the assessment of engineering qualifications (i.e., papers, model guides, and guidelines) and maintain examination syllabi, ensuring that both are timely and serve the needs of the Regulators and applicants for licensure.
  - o Provide research into emerging areas of practice in support of Regulators in their decision making.
- Foster excellence in engineering practice and regulation:
  - Through the Qualifications Board, develop work products that foster excellence in engineering practice and regulation (i.e. papers, model guides, and guidelines), ensuring that they are timely and serve the needs of the Regulators and of practicing engineers.
- Facilitate mobility of practitioners within Canada:
  - Maintain, within the constraints and preferences of the Regulators, a shared database of engineers in Canada for the purposes of processing inter-provincial/territorial applications.
  - Through the Qualifications Board, develop work products that facilitate mobility (i.e. papers, model guides, and guidelines), are timely, and serve the needs of the Regulators.

# Probability of achieving the intended outcomes by December 2021

- The outcome related to the national database of engineers is currently being achieved, and it is expected that it will be sustained up to and beyond December 2021.
- The outcomes related to the Qualifications Board's work products fostering excellence in engineering practice and regulation, national mobility, and the assessment of engineering qualifications are all currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.
- The outcome related to emerging areas of engineering practice is being addressed through the regulatory research portfolio.

# 2020 Objectives:

- CEQB: Maintain examination syllabi
  - New "Aeronautical engineering and aerospace engineering syllabus" (carried forward from 2019)
  - Review of the 2004 <u>Basic Studies Syllabus</u> (carried forward from 2019)
  - Review of the 2004 <u>Biomedical/Biochemical Engineering Syllabus</u> (carried forward from 2019)
  - o Review of the 2004 <u>Agricultural/biosystems/bioresource/food engineering syllabus</u>
  - o Review of the 2007 <u>Building Engineering Syllabus</u>
  - Review of the 2011 <u>Complementary Studies Syllabus</u>
- CEQB: Develop and maintain guidelines and papers
  - New "Public guideline for engineers on use of new technology and automation"
  - New "Public guideline for engineers and engineering firms on the topic of diversity and inclusion"
  - Review of the 2009 "Regulator Guideline for Assessment of Engineering Work Experience" (*carried forward from 2019*)
  - Review of the 2012 <u>Public Guideline on Risk Management</u> (carried forward from 2019)
  - Review of the 2012 Guideline for the Engineer-in-Training Program
  - o Review of the 2016 <u>Regulators Guideline on Returning to Active Practice</u>
  - o Review of the 2016 Engineers Canada Paper on Software Engineering
  - o Web content on entrepreneurship
  - Research on requirements for a potential document for Canadian engineers working internationally.
  - CEO: Maintain the National Membership Database for those Regulators who choose to update and/or access it.
  - Finalize planning and project charter with budget for refresh of the national membership database (NMDB).

# Achievement of the objectives:

<u>CEQB</u>

- Syllabi for basic studies, and biomedical/biochemical engineering were approved. The syllabus on building engineering syllabus was not updated due to a lack of currently accredited programs, and the agricultural and complementary studies syllabi are in progress.
- The guidelines on engineer-in-training program, risk management and the assessment of engineering work experience were completed.
- Work on the new guideline on diversity and inclusion, and the revised paper on software engineering are in progress.
- Work on the web content on entrepreneurship, research into requirements for a document on Canadian engineers
  working internationally, and a new guideline on the use of technology and automation were all discontinued due to
  competing priorities / workload and/or a lack of Regulator support.

CEO

• The planning and project charter for the new NMDB were completed, as was the bid evaluation stage. A preferred vendor has been selected and contract negotiations are underway.

# Comments:

The work of the Qualifications Board was disrupted this year by the COVID-19 pandemic, and by a lack of resources when the then-Manager accepted a new role at Engineers Canada. Now fully resourced, the QB is back on track and positioned for success in 2021.

# **OP4** National programs

Accountability: CEO Weight: 1 (lowest)

- Within the period of this plan, divest itself of programs which the Regulators consider are not within its mandate or which may be best served by other organizations. This includes the Public Infrastructure Engineering Vulnerability Committee (PIEVC) Protocol and Infrastructure Resilience Professional (IRP) training. In the future, it would be desirable if PIEVC and IRP were available to Canadian engineers but provided by more appropriate organizations.
- Affirm that Engineers Canada is not a designation body and stop offering IRP designations.
- Maintain sustainability in affinity products and services.

# Probability of achieving the intended outcomes by December 2021

• Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

# 2020 Objectives:

- Signed divestment agreement between Engineers Canada and successful proponent for Public Infrastructure Engineering Vulnerability Committee (PIEVC) program and protocol.
- Signed divestment agreement between Engineers Canada and successful proponent for Infrastructure Resilience Professional (IRP) program.
- Social media awareness campaign implemented for Secondary Professional Liability Insurance Program.
- Monitor impact on Home/Auto insurance program in Alberta.
- Semi-annual reporting with Canada Life, Manulife and TD Insurance. Results of reporting meetings shared.
- Pricing and enhancements review to Professional Retiree Health & Dental Insurance Plan.
- Experience review and pricing negotiations in collaboration with Aon (our independent consultants) for the National Employee Group Benefits Program.

# Achievement of the objectives:

- Signed divestment agreement completed on March 30 between Engineers Canada and successful proponent for Public Infrastructure Engineering Vulnerability Committee (PIEVC) program and protocol.
- Divestment agreement completed on July 7 between Engineers Canada and successful proponent for Infrastructure Resilience Professional (IRP) program.
- Social media awareness campaign using Twitter and Facebook was implemented in Q1 and Q3 for the Secondary Professional Liability Insurance Program (SPLIP), a successful campaign driving increased traffic to the Engineers Canada website with over 1,000 views on the SPLIP pages. The Q3 campaign saw visitors spend, on average, longer on the page than in the previous campaign.
- Impact on Home/Auto insurance program in Alberta monitored throughout 2020.
- Semi-annual reporting for 2020 with Canada Life, Manulife and TD Insurance was completed. Results of the Q2 reporting meetings were shared. Results of the Q4 reporting meetings will be shared in Q1 2021.
- A review of the Professional Retiree Health & Dental Insurance Plan was completed in collaboration with Engineers Canada's independent consultant, Aon. There is no change to pricing and the plan has moved to a retention accounting model effective September 1, 2020. This move provides Engineers Canada with greater input over the rate-setting process and provides a more stable rate for the insureds. To ensure continued value to the engineers, a future benefits provision account has been established.
- An experience review and pricing negotiations have been completed in collaboration with Aon, Engineers Canada's independent consultant, for the National Employee Group Benefits Program.

# Comments:
# **OP5** Advocating to the federal government

Accountability: CEO Weight: 1 (lowest)

# Intended outcomes:

- Advocate to the federal government to promote and advance the enactment of new demand-side legislation and prevent the erosion of existing federal legislation.
- Engage and educate parliamentarians, senior federal officials, and all relevant agencies within the federal government to gain their confidence and develop their awareness of:
  - The responsibility of engineers to safeguard the public.
  - $\circ$   $\;$  The benefits of engineering input into federal policy.
  - The positions and concerns of the engineering profession.
- Inform Regulators of Engineers Canada's federal government advocacy activities and progress through a newly developed reporting mechanism.

# Probability of achieving the intended outcomes by December 2021

• Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

# 2020 Objectives:

- Strengthen the current review process for potential legislation and effects on engineers and the engineering profession.
- Promote and advance the enactment of new demand-side legislation relating to engineering.
- Ensure to the best of our abilities, that there is no erosion of existing federal demand-side legislation.
- The federal government is aware of the responsibility of engineers to safeguard the public, the benefits of engineering input into federal policy, and the positions and concerns of the engineering profession through Engineers Canada's advocacy efforts.
- Regulators are aware of Engineers Canada's federal government advocacy activities and progress through an approved and newly developed reporting mechanism.
- Regulators to inform Engineers Canada of provincial issues requiring federal government attention.
- Hill Day 2020.

# Achievement of the objectives:

- Reviewed all existing demand-side federal legislation in terms of engineering responsibilities.
- Provided comments and recommendations to the House of Commons, Senate and the federal public service on topics relating to the impacts of the COVID-19 on women, wastewater systems effluent regulations, engineering positions within the public service, the 2021 federal budget, the draft National climate change science and knowledge plan, and on Canada's Building Code in the context of climate change.
- Updated National Position Statements (NPSs) on regulating the profession, federally regulated industries and demand-side legislation, infrastructure, infrastructure on Indigenous reserves and in remote Indigenous communities, climate change, diversity, equity, and inclusion, and national and international labour mobility.
- Published a new NPS on professional practice in cyber security and an issue statement on engineers' role in Canada's long-term economic recovery post-COVID-19.
- Met with Members of Parliament and senior federal officials to discuss issues of concern for the Regulators and for the engineering profession.
- Developed an advocacy report containing a summary of advocacy activities from June 2019 June 2020.
- While Hill Day 2020 was canceled in 2020, planning is underway for a Hill Day to be held virtually in 2021.

# **OP6** Researching, monitoring, and advising

Accountability: CEO Weight: 2

### Intended outcomes:

• Establish a lean and effective research-based monitoring and reporting capability that provides Regulators with foresight and early warning of potential changes and advances in the Canadian regulatory environment and the engineering profession. The information provided will help inform regulatory decision making.

#### Probability of achieving the intended outcomes by December 2021

• Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

#### 2020 Objectives:

- Submission and approval of the new sub-strategy
- Launch the first research strategy:
  - o Regulatory newsletter published in September 2020
  - o Research topics selected in consultation with Regulators
  - o Emerging discipline selected in consultation with Regulators

#### Achievement of the objectives:

- The new sub-strategy was approved at the May 2020 Board meeting.
- Research papers on entity regulation and non-practising status are currently underway. General direction documents will be completed in early 2021 and final papers will be completed by late 2021.
- A paper on the emerging field of autonomous systems is currently underway. The general direction will be completed in early 2021 and the final paper will be completed by late 2021.

# **OP7** International mobility

Accountability: CEO and CEAB Weight: 1 (lowest)

# Intended outcomes:

- Provide Regulators with a timely and accurate assessment of the risks and opportunities associated with mobility of work and practitioners internationally.
- Maintain international mobility agreements and mutual recognition agreements in accordance with Regulator needs.
- Provide timely and accurate information to Regulators on the impact of international trade agreements.
- Provide online information for internationally trained engineers that describes the process for becoming an engineer in Canada.
- Maintain current information on international institutions and degrees for use by the Regulators.

# Probability of achieving the intended outcomes by December 2021

- Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.
- At the February 2020 workshop on the international mobility sub-strategy, Regulators agreed that assessment of the risks and opportunities associated with the mobility of work and practitioners internationally was work that they would prefer to undertake individually and on a case-by-case basis, instead of requesting a national overview from Engineers Canada. This outcome was therefore removed from the sub-strategy.

#### 2020 Objectives:

- Submission and approval of the new sub-strategy.
- Initial implementation of the new sub-strategy.
- Maintain status in the Washington Accord, International Professional Engineers Agreement, and APEC Engineers Agreement, including maintaining the mobility register and attending the IEA meetings in June.
- Launch the IIDD improvement project, including vendor selection, initial development of the tool, and research on new information requested by the Regulators.

# Achievement of the objectives:

- The new sub-strategy was approved at the October 2020 Board meeting. A steering committee is currently being established to guide work with the International Engineering Alliance (IEA), which is a key part of the sub-strategy.
- At the June 2020 IEA meeting, Engineers Canada's review prompted questions about licensure assessment that are not competency-based. The issue is scheduled to be resolved at a special January 2021 meeting, with additional information from Engineers Canada, which will determine whether or not we maintain our status in the agreements.
- Our Washington Accord monitoring visit was postponed due to the COVID-19 pandemic, and will take place in 2021 instead.
- The IIDD improvement project launched and over 95% of the development work is completed. Work will be completed in January 2021 with the development of reports from the system, and a training program with documentation for Regulators and Engineers Canada staff.

# **OP8** Promotion and outreach

Accountability: CEO Weight: 2

#### Intended outcomes:

- Leverage existing opportunities to foster recognition of the value and contribution of the profession without embarking on cost-prohibitive endeavours.
- Leverage partnerships and joint ventures that can spark interest in the next generation of engineering professionals without developing or wholly sustaining such programs internally.

### Probability of achieving the intended outcomes by December 2021

• Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

#### 2020 Objectives:

- Submission and approval of the new OP8 sub-strategy.
- Lead and coordinate National Engineering Month, an annual joint campaign throughout the month of March that engages all the Regulators and fosters recognition of the value of the profession to society and sparks an interest in the next generation of engineering professionals.
- Ensure the efficient sharing of ideas, best practices and coordination between and among the Regulators in their outreach and engagement activities through the creation of a Strategic Engagement Working Group.
- Recognize and support the exemplary accomplishments of engineers by administering effective fellowship and scholarship programs.
- Conduct a review and submit recommendations to the Board on how best to align Engineers Canada's scholarships program with its strategic objectives.

#### Achievement of the objectives:

- The new OP8 sub-strategy was submitted and approved by the Board at the February 2020 Board meeting.
- National Engineering Month was held in March; some events were impacted due to COVID-19. The 2020 National Engineering Month (NEM) report was completed and implementation of the report's recommendations began in June 2020.
- In July 2020, as part of the implementation of the OP8 sub-strategy and OP8's mandate to leverage and facilitate joint ventures, and following consultation with Regulator staff on Engineers Canada's Outreach Engagement Strategy 2021, the NEM Advisory Committee was dissolved and replaced with two Strategic Engagement Working Groups: Online Campaign Working Group; and Digital Engagement Working Group.
- The exemplary accomplishments of engineers were recognized and supported by administering effective fellowship and scholarship programs.
- The review and recommendations of how best to align Engineers Canada's scholarships program with its strategic objectives were completed. The recommendations were approved by the Board at the October 2020 Board meeting.
- Due to the COVID-19 disruption, the 2020 Awards Gala was cancelled. In June, promotion of the 2020 Engineers <u>Canada Awards</u> recipients was launched. The campaign featured posts through Engineers Canada's social media channels as well as those of the awards recipients, social media advertising, advertising on CBC's digital platforms, as well as earned media outreach. The 2020 recipients will be honoured face-to-face at Engineers Canada's 2021 Awards Gala.

# **OP9 Diversity and inclusion**

Accountability: CEO Weight: 2

# Intended outcomes:

• Demonstrate progress towards diversity and inclusion targets through consistent effort and innovative, highlyleveraged programs that increase the number of women and Indigenous people entering, thriving, and remaining in the profession.

# Probability of achieving the intended outcomes by December 2021

• Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

# 2020 Objectives:

- An Indigenous engagement plan is created on building relationships with Indigenous organizations and engineers.
- Engineers Canada provides Indigenous training to staff and the Board.
- Regulators are made aware of the Canadian Region of the American Indian Science and Engineering Society (.caISES) and CIAC.
- Engineers Canada improves the reporting of Indigenous engineers and engineering students.
- Engineers Canada opens dialogue with Indigenous organizations.
- Engineers Canada investigates, with appropriate consultation, options for truth and reconciliation efforts to be incorporated into engineering undergraduate education in Canada.

# Achievement of the objectives:

- Big River Analytics hired to develop a research plan on the experience of Indigenous engineers. The research will be conducted in 2021 and will inform the Indigenous engagement plan.
- Engineers Canada provided Indigenous training to staff in July and August. Indigenous training for the Board, CEO Group, CEAB, CEQB, and the Presidents Group began in Q4 2020 and will be completed in Q1 2021.
- Engineers Canada participated in the annual .calSES national meeting, and facilitated a meeting of the Indigenous Student Services in Engineering working group (now called the Decolonizing and Indigenizing Engineering Education Network) held in conjunction with the national .calSES meeting. APEGA and APEGS also attended the .calSES meeting. Regulators were made aware of the work of .calSES and CIAC.
- Engineers Canada published a secondary data analysis, conducted by Big River Analytics, to report on the numbers of Indigenous engineers and engineering students.
- Engineers Canada is networking with other professional organizations (i.e. Canadian Society of Landscape Architects, Canadian Institute of Planners), to lay the groundwork for opening dialogue with national Indigenous organizations and collaborate on developing strategic partnerships.
- Engineers Canada is in contact with the Mi'kmaq Ulnooweg Development Group for the planning of .calSES 2021.
- Review of existing programs offered by institutions within the Decolonizing and Indigenizing Engineering Education Network indicates further research and knowledge gathering is needed to create options for truth and reconciliation efforts to be incorporated into engineering undergraduate education in Canada.

# **OP10** Protect official marks

Accountability: CEO Weight: 1 (lowest)

# Intended outcomes:

- Protect the official marks from unauthorized or misleading use.
- Ensure that federally-incorporated companies respect provincial and territorial engineering legislative requirements.

#### Probability of achieving the intended outcomes by December 2021

• Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

#### 2020 Objectives:

- Protect the official marks from unauthorized use, responding as necessary.
- Ensure Engineers Canada's portfolio of trademarks is current and appropriate, as determined from time to time and based on projects and programs.
- Manage and administer the established process for the federal incorporation of companies wishing to use the official marks in their corporate name.

# Achievement of the objectives:

- Reviewed and evaluated Engineers Canada's trademark enforcement strategy to ensure trademarks and official marks continue to be adequately used and protected.
- Provided an online presentation to the members of the National Discipline and Enforcement Officials group, providing background information / context around the trademark application process and the status and strategy surrounding Engineers Canada's oppositions proceedings.
- Managed oversight of 12 (open, ongoing) trademark opposition proceedings plus six (6) additional oppositions that have now concluded.
  - Four (4) of the "open" oppositions have been abandoned, but we must await the appeal deadline to pass before declaring these matters formally closed.
- Closed six (6) trademark opposition files (3 of which were abandoned, 3 settled).
- Issued notices for summary judgment in respect of twenty-four (24) marks identified for potential s. 45 proceedings. Twenty-one (21) of the proceedings resulted in the trademark being expunged from the register.
  - The owners may appeal the Registrar's decision and we await the appeal deadline to pass before declaring these matters formally closed.
- Issued 50 letters of consent to applicants in response to requests to incorporate federally using the official marks in their corporate name.

# **Board responsibilities**

# BR1 Hold itself, its Directors, and its Direct Reports accountable Annual Objectives:

The Human Resources Committee shall:

- Establish and use competency profiles for directors and all committee chairs, as well as for the Board as a whole.
- Manage the CEO and committee chairs through competency profiles and performance measurement against the achievement of the operational and strategic plans.
- Be responsible for performance management of the CEO

#### Intended outcomes:

- Codify a more structured means of measuring and understanding the progress-against-plan of the organization.
- Take action to address gaps, weaknesses, and failings in any part of the plan, as measured through national, transparent performance measures.
- This Board responsibility will be achieved when the Board is confident that it has an accurate and complete awareness of its own performance as well as that of its Directors and committee chairs. With this information, the Board will act to recognize success and offer appropriate guidance when needed to achieve objectives.

# Probability of achieving the intended outcomes by December 2021:

• All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

# **Objectives:**

Responsibilities from Board policy 6.12, *HR Committee Terms of Reference*, that support these outcomes include:

- Establish, administer and annually review competency profiles for the Board, individual Directors, and chairs.
- Develop and recommend annual objectives for the CEO to the Board.
- Conduct regular CEO assessments, and make recommendations to the Board regarding CEO compensation.
- Review results of the employee engagement survey.

# Achievement of the objectives:

In the period January 1, 2020 to December 31, 2020, the HR Committee:

- Obtained Board approval for the 2019 recommendations for CEO assessment, and 2020 objectives.
- Secured a consultant to begin work on the formal 360-degree evaluation of the CEO's performance and a comprehensive compensation review (following three years of service) and reviewed the suggested objectives for 2021. Resulting recommendations will be presented to the Board in February 2021.
- Continued work on annual reviews of committee chairs, Directors, and Board:
  - o Obtained Board approval for and launched the Chair assessment process;
  - Reviewed the Director peer- and self-assessment process for presentation to the Board in February 2021; and,
  - Reviewed and supported a recommendation from the Governance Committee to incorporate
  - the 2021 Board self-assessment into the organization-wide governance effectiveness survey (BR4).
- Additionally, the Board monitored performance against the strategic plan through interim reporting delivered quarterly, covering all four strategic priorities and the ten operational imperatives.

Strategic Outcomes:

# BR2 Sustain a process to engage with Regulators through regular communication that facilitates input, evaluation, and feedback

Annual Objectives:

Strategic Outcomes:

The President-Elect shall:

• Provide oversight and guidance to the Engineers Canada consultation process with Regulators and other key Stakeholders whose input is vital to the Board's work.

#### Intended outcomes:

- Regulators and all Key Stakeholders will appreciate and value the engagement process which shall be cost-effective and make efficient use of the time of all those asked to engage in Engineers Canada's Consultations.
- This Board responsibility will be fulfilled when the Regulators and other Key Stakeholders are satisfied that their views and requirements are understood and considered before action is taken.

# Probability of achieving the intended outcomes by December 2021:

• Outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

#### **Objectives:**

As per Board policy 7.11, *Consultation*, the President-Elect has an ongoing responsibility to oversee the development and approval of an annual Consultation Plan.

#### Achievement of the objectives:

• The 2021 Consultation Plan, including both Board (strategic) Consultations as well as all operational Consultations, was approved at the December 2020 meeting.

# BR3 Provide ongoing and appropriate strategic direction

#### The Board shall:

- Develop an annually updated, three-year Strategic Plan that considers emerging trends and challenges.
- Ensure that Annual Operating Plans and budgets are developed that specify the actions and resources necessary to achieve the Strategic Plan.
- Ensure the use of a continual improvement process to track, report, and when necessary, correct, performance against set objectives of:
  - o The Strategic Plan
  - The Annual Operating Plan

#### Intended outcomes:

- Codify a more structured means of providing strategic direction, including ongoing and clear communications to all stakeholders as to the progress-against-plan, as well as mitigation strategies put in place to counter any areas of gaps or weaknesses.
- This Board responsibility will be achieved when the Regulators agree and have confidence that the Board's Strategic Plan meet their needs, and that the Annual Operating Plan delivers on those needs.

#### Probability of achieving the intended outcomes by December 2021:

• Outcomes are currently being achieved, and it is expected that they will be sustained beyond December 2021.

#### **Objectives:**

The Board has ongoing responsibilities to:

- Approve the annual Budget and plan;
- Monitor strategic performance reporting quarterly; and
- Submit an annual strategic performance report to the Members.

In 2020, the Board had additional responsibilities to approve sub-strategies arising from the 2019-2021 Strategic Plan.

In 2019, the Board stood up a Strategic Plan Task Force to guide the development of the 2022-2024 Strategic Plan and they provided oversight to:

- Conduct a foresight exercise with the Board, Regulators and CEAB and CEQB representatives;
- Conduct a workshop with the Board to develop the draft Strategic Plan;
- Consult with Regulators, the CEAB, the CEQB and EDC on the draft Strategic Plan; and,
- Approve a final draft of the 2022-2024 Strategic Plan for presentation to the Board in February 2021.

# Achievement of the objectives:

- The following sub-strategies were approved, in support of the 2019-2021 Strategic plan:
  - Operational imperative 8: fostering recognition of the value of the profession to society and sparking interest in the next generation of engineering professionals, in February 2020;
  - Operational imperative 9: promoting diversity and inclusion in the profession that reflects Canadian society (indigenous access to engineering), in February 2020;
  - Operational imperative 6: actively monitoring, researching, and advising on changes and advances that impact the Canadian regulatory environment and the engineering profession, in May 2020; and,
  - Operational imperative 7: managing risks and opportunities associated with mobility of work and practitioners internationally, in October 2020.
- Quarterly performance reports were reviewed at the May, October, and December Board meetings.
- The 2021 Budget was approved in December 2020.
- The 2019 Annual Strategic Performance Report was provided to the Members in May 2020.
- The Strategic Plan Task Force oversaw all aspects of the development of the 2022-2024 Strategic Plan, as planned.



Strategic Outcomes:

# BR4: Ensure the development and periodic review of Board policies

Annual Objectives:

Strategic Outcomes:

The Governance Committee shall:

- Maintain effective governance principles and policies.
- Perform ongoing governance improvements.

# The Finance, Audit, and Risk Committee shall:

• Ensure external and direct inspection and monitoring of fiscal policy and responsibilities.

#### Intended outcomes:

This responsibility will be fulfilled when the Board and Members are satisfied that:

- All Board policies are current and relevant to established requirements.
- Board policies serve as the direction to all volunteers and staff on governance style.
- Action plans with clear objectives are established based on the recommendations of any task force established by the Board.
- Action plans to implement recommendations are integrated with the Board's plans.

# Probability of achieving the intended outcomes by December 2021

• All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

#### **Objectives:**

Responsibilities from Board policy 6.8, *Governance Committee Terms of Reference* to support these outcomes include:

- Review and maintain currency and relevance of Board policies and governance documents.
- Review and make recommendations on the currency and relevance of the By-laws.
- Make recommendations for Board education and training.
- Evaluate the effectiveness of Board governance and operations and develop action plans to address any required improvements.

# Achievement of the objectives:

In the period January 1, 2020 to December 31, 2020, the Governance Committee:

- With help from the Finance, Audit, and Risk Committee, reviewed and obtained approval to rescind one (1) Board policy, revise 37 existing policies, and adopt one (1) new policy.
- Reviewed and reported on the 2020 Board self-assessment results, identifying governance gaps and recommending areas for education and training (included in the budget for 2021).
- Brought forward a plan to reduce the size of the Board through attrition, which was defeated by a motion of the Board in May 2020.
- Obtained Board approval in respect of the approach and content for the governance effectiveness survey, at its December 2020 Board meeting.

# BR5 Ensure the CEO maintains and acts on a robust and effective risk management system which reflects the Board's risk tolerance level and directs Board-approved mitigation strategies

Annual Objectives:

Strategic Outcomes:

The Finance, Audit, and Risk Committee shall:

- Ensure the Board is wholly accountable for risk management and for directing the CEO through clear and timely mitigation strategies.
- Monitor the risk register and ensure the Board is aware and able to take timely action on all relevant risks.

# Intended outcomes:

• The Board and Regulators are fully aware of any relevant potential risks, have clearly established appropriate levels of risk tolerance, and are satisfied that any necessary risk mitigation strategies are defined and acted upon.

# Probability of achieving the intended outcomes by December 2021

• All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

# **Objectives:**

Responsibilities from Board policy 6.4, FAR Committee Terms of Reference, to support these outcomes include:

- Review the CEO's operational risk register and the Board's strategic risk register, and make recommendations with respect to the strategic risk register.
- Conduct a triannual review of the Board's strategic risk register and make recommendations of acceptable mitigation strategies, residual risk, and required actions.

# Achievement of the objectives:

In the period January 1, 2020 to December 31, 2020, the Finance, Audit, and Risk Committee:

- Reviewed the risk register quarterly, and provided updates at each Board meeting.
- Reviewed and approved the symptoms, response strategies, and monitoring methods and assigned responsible parties for all new strategic risks identified during the environmental scan and foresight workshop associated with the development of the 2022-2024 strategic plan.
- Initiated work to update and improve the risk management process

# BR6 Provide orientation of new Directors, and continuing development of Directors and others who work closely with the Board

Develop and deliver orientation materials and programs that facilitate the effectiveness of Directors. The Board's orientation program will take into account the challenges of onboarding individuals new to their function and provide opportunity for the ongoing development of those continuing in their term.

#### Intended outcomes:

- The quality of orientation provided to new Directors will improve over the course of this Strategic Plan period, especially once the roles of Directors, Members, and presidents are clarified as a part ongoing governance work in the fall and winter of 2018-19.
- This responsibility will be fulfilled when Directors express their satisfaction with the effectiveness of the Board orientation program.

# Probability of achieving the intended outcomes by December 2021:

• All outcomes are currently being achieved, and it is expected that they will be sustained up to and beyond December 2021.

# **Objectives:**

Responsibilities from Board policy 6.12, HR Committee Terms of Reference, to support these outcomes include:

- Nominate new Committee members and recommend chairs.
- Review policies for Engineers Canada's volunteers and staff.
- Provide oversight of the Director onboarding and development programs.
- Review succession planning for the CEO, the Board and its Committees.
- Confirm the succession plans for Direct Reports to the CEO.

# Achievement of the objectives:

During the period from January 1, 2020 to December 31, 2020 the HR Committee:

- Established the membership for all 2020-2021 committees with recommendations for chairs, and named Director appointees to the CEAB, the CEQB, and the 30 by 30 champions network.
- Reviewed and improved orientation sessions that were provided to incoming Directors in May and June.
- In respect of Director training:
  - Implemented 4 Seasons of Reconciliation Education to provide the Indigenous awareness online training summit from November 1, 2020 to January 31, 2021; and,
  - Planned for online Director training with the Canadian Nonprofit Academy's Board-on-Board course to support the needs identified in the 2020 Board self-assessment, to be implemented in January 2021.

Annual Objectives:

Strategic Outcomes:



# **BRIEFING NOTE:** For decision

2022-2024 Strategic Plan	4.2
Purpose:	To approve the 2022-2024 Strategic Plan
Link to the 2019-2021 Strategic Plan:	Board responsibility 3: Provide ongoing and appropriate strategic direction
Motion to consider:	THAT the Board recommend to the Members the 2022-2024 Strategic Plan, for approval at the 2021 Annual Meeting of Members, on recommendation of the Strategic Plan Task Force.
Vote required to pass:	Two-thirds majority
Transparency:	Open session
Prepared by:	Mélanie Ouellette, Manager, Strategic and Operational Planning
Presented by:	Jean Boudreau, Director from New Brunswick, Engineers Canada President, and Chair of the Strategic Plan Task Force

# **Problem/issue definition**

- As per Board policy 1.4, *Strategic Plan*, the Board is responsible for developing a Strategic Plan. The purpose of strategic planning is to document the Board's direction and the outcomes that it wants the organization to achieve.
- The process for the development of the 2022-2024 Strategic Plan started in summer 2019. A draft environmental scan was sent for consultation with Regulators, CEAB, CEQB, and EDC in September 2019.
- The environmental scan was approved by the Strategic Plan Task Force (SPTF) in December 2019 and a strengths, weaknesses, opportunities and threats (SWOT) and strategic risks analysis was approved by the Finance, Audit, and Risk Committee in December 2019. The final environmental scan and SWOT and strategic risks analysis was sent to Board, presidents, CEAB, CEQB, CEOs, and officials' groups in February 2020.
- A foresight workshop was held with Board Directors, presidents, CEOs, and representatives from CEAB and CEQB on February 25, 2020. The draft foresight report was then sent for feedback to Board Directors, presidents, and CEOs in April 2020. The final foresight report was included in the May 2020 Board meeting agenda book. In May 2020, a survey was sent to the Board, CEOs, and presidents and an environment scan was conducted to assess COVID-19's potential impact on Regulators, Engineers Canada, and the profession.
- The Board confirmed the vision and prioritized potential strategic priorities at the August 2020 strategic planning workshop. The vision and strategic priorities were thereafter presented at an information session with the Board, CEOs and presidents in October. Using the same content as was presented in the October 1, 2020 information session, Engineers Canada staff held the following consultation sessions on the draft 2022-2024 Strategic Plan:
  - o Canadian Engineering Accreditation Board (September 19)
  - o Canadian Engineering Qualifications Board (September 21)
  - o Atlantic Regulators (October 22)
  - o Western Regulators (October 22)
  - o Ontario (October 23)
  - Québec (November 9)
  - o Engineering Deans Canada (November 19)

- Attendees included presidents, CEOs, Engineers Canada Directors as well as Regulators and Engineers Canada staff. A full consultation report is available in Appendix 1. Received feedback can be summarized as follows:
  - Many participants expressed satisfaction with the content and the process used to develop the Strategic Plan.
  - Most of the comments were on operationalizing priorities. As a result, very few changes were made to the strategic priorities.
  - While ranking varied across jurisdictions, it was generally acknowledged that all priorities are important and complement each other.
  - The priority of "Fostering trust and pride" ranked first for Atlantic Regulators, while it was ranked much lower in other consultation sessions. Some Regulators (APEGA and OIQ) have already conducted marketing campaigns and concern was expressed over the long-term cost of this priority and the confusion it might create over who the Regulator is. It was suggested that, if Engineers Canada is going to adopt this priority, focus should be on increasing trust in self-regulation. Recently, APEGA indicated that they could not support this priority if it is was solely an Engineers Canada initiative. APEGA did indicate, however, that if the priority collaborates actively with Regulators, they might be able to participate.
  - One Regulator (Engineers and Geoscientists BC) proposed that a new strategic priority be added to address the issue of technologists. Given that it was suggested by only one Regulator and that no other Regulators have expressed support, this item was not added to the Strategic Plan on recommendation from the SPTF.

# **Proposed action/recommendation**

• That the Board approve the 2022-2024 draft Strategic Plan, by recommending it to the Members for their (final) approval at the meeting of Members in May 2021.

# **Other options considered**

• None.

# Risks

- Not approving this Strategic Plan could result:
  - in Engineers Canada lacking strategic direction to execute its work once the 2019-2021 Strategic Plan ends;
  - in Regulators' dissatisfaction, as they have invested time and resources to provide input in the development of the plan; and,
  - o in the Board not meeting its responsibilities under Board policy 1.4, *Strategic Plan*.

# **Benefits**

- Engineers Canada has clear direction from the Board on its work in 2022-2024.
- Regulators are aware of and support Engineers Canada's work in 2022-2024.
- The Board meets its responsibilities under Board policy 1.4, *Strategic Plan*.

# **Financial Implications**

- The estimated costs of all activities over three years is \$9.12M.
- As per Board policy 7.12 *Net Assets*, internally restricted reserve funds exist to ensure stability, mitigate financial risks and fund strategic priorities; these currently include a \$2M strategic priorities reserve.
- Additionally, it is projected that by the end of 2021, unrestricted reserves will increase to \$9.8M.
- Engineers Canada has sufficient reserves to fund the strategic priorities as proposed.

# Consultation

• A consultation report is available in Appendix 1.

# Next steps (if motion approved)

- If the Board passes the motion to recommend the draft 2022-2024 Strategic Plan to the Members, the plan will be circulated to the Members immediately following the February Board meeting.
- Members will be asked to share the draft Strategic Plan with their respective Councils so that the presidents may receive instructions and be prepared to cast a vote at the 2021 Annual Meeting of Members, when the Members will be asked to approve the final Strategic Plan.
- As per its terms of reference, the SPTF will be stood down after Members approve the Strategic Plan in May.

# **Appendices**

- Appendix 1: 2020 Consultation feedback on the draft content for the 2022-2024 Engineers Canada Strategic Plan
- Appendix 2: 2022-2024 draft Engineers Canada Strategic Plan



# 2020 Fall consultation feedback on the draft content for the Engineers Canada Strategic Plan 2022-2024

Questions concerning the content of this report should be directed to: Gerard McDonald, MBA, P.Eng., ICD.D Chief Executive Officer Engineers Canada gerard.mcdonald@engineerscanada.ca 613.232.2474 Ext. 212

300–55 Metcalfe Street, Ottawa, Ontario K1P 6L5 613.232.2474 | t-f: 877.408.9273 ♥@EngineersCanada engineerscanada.ca 55, rue Metcalfe, bureau 300, Ottawa (Ontario) K1P 6L5 613.232.2474 s. f. : 877.408.9273 ♥@EngineersCanada ingenieurscanada.ca

# Contents

About the 2020 fall consultation process
Consultation feedback
Canadian Engineering Accreditation Board4
Canadian Engineering Qualifications Board5
Atlantic regulators
Western regulators7
Professional Engineers Ontario9
Ordre des Ingénieurs du Québec11
Engineering Deans Canada12
Table of ranking results 14
Appendix A: Attendees list15
Canadian Engineering Accreditation Board consultation session
Canadian Engineering Qualifications Board consultation session
Atlantic regulators consultation session17
Western regulators consultation session18
Professional Engineers Ontario consultation session19
Ordre des Ingénieurs du Québec session20

# About the 2020 fall consultation process

Engineers Canada is developing its upcoming 2022-2024 strategic plan. The current 2019-2021 strategic plan was approved in May 2018. The process to develop this upcoming plan started in summer 2019. A draft environmental scan was sent for consultation with regulators, the Canadian Engineering Accreditation Board (CEAB), the Canadian Engineering Qualifications Board (CEQB), and Engineering Deans Canada (EDC) in September 2019. The environmental scan was approved by the Strategic Plan Task Force in December 2019 and the Strengths, weaknesses, opportunities, and threats (SWOT) and strategic risks analysis was approved by the Finance, Audit, and Risk (FAR) Committee in December 2019.

The final environmental scan, as well as the SWOT and strategic risk analysis were sent to the Board, presidents, CEAB, CEQB, CEOs, and officials' groups in February 2020. A foresight workshop was held with Board directors, presidents, CEOs, and representatives from CEAB and CEQB on February 25, 2020. A draft foresight report was sent for feedback to Board directors, presidents, and CEOs in April 2020 and the final foresight report was included in the May 2020 Board Meeting agenda book.

On August 13-14, 2020, the Engineers Canada Board held a hybrid (in-person and virtual) strategic planning workshop to confirm the organization's vision and generate a consensus on potential strategic priorities. Attendees included Board directors, representatives of the CEAB, CEQB and CEO Group, a member of the FAR committee, and Engineers Canada staff. Board directors approved a final vision and selected strategic priorities for consultation. The vision and strategic priorities were presented to the Presidents, CEOs, Board directors and CEAB and CEQB representatives at a virtual information session held on October 1<sup>st</sup>.

In the fall 2020, national consultations were held with the following groups:

- Canadian Engineering Accreditation Board
- Canadian Engineering Qualifications Board
- Atlantic Canada (which included Association of Professional Engineers and Geoscientists New Brunswick, Engineers Nova Scotia, Engineers PEI and Professional Engineers and Geoscientists Newfoundland & Labrador)
- Western Canada (which included Association of Professional Engineers and Geoscientists Alberta, Association of Professional Engineers and Geoscientists Saskatchewan, Engineers & Geoscientists British Columbia, Engineers Geoscientists Manitoba, Engineers Yukon and NAPEG)
- Professional Engineers Ontario
- Ordre des Ingénieurs du Québec
- Engineering Deans Canada

The purpose of this report is to summarize received feedback to inform the final 2022-2024 Strategic Plan. A full list of attendees is provided in Appendix A.

# **Consultation feedback**

The following section provides a summary of the feedback received during the consultation sessions. Please note that it does not represent the consensus of the group.

# **Canadian Engineering Accreditation Board**

This consultation session was held on September 19<sup>th</sup>, 2020. The following questions/comments were received from attendees:

# Accelerate 30 by 30

No comments were provided on this proposed priority.

# Foster trust and pride

Efforts should be put on promoting the profession, and effective marketing efforts are not necessarily expensive. Leveraging major events to showcase engineering is an inexpensive option. Consideration should be given to work in partnerships other than with regulators. The use of the word "pride" could be perceived as arrogance.

# Increase harmonization and consistency

Harmonization should not be retained as a strategic priority as it is not embedded within the vision.

# Adapt to emerging technologies

This strategic priority is too generic.

# Continue commitment to excellence

No comments were provided on this proposed priority.

# Strengthen the foundation of accreditation

The accreditation system can be improved but decisions must be based on evidence, not just in response to vocal stakeholders. There needs to be a process in place to receive input from a broad number of Higher Education Institutions (HEIs) and measure whether feedback represents the perspective of a majority or a few. Careful consideration must be given in the selection process for the accreditation expert. There is a need to communicate that the mandate is to seek to define whether the accreditation system does what it was intended to achieve.

CEAB and non-CEAB assessment streams are different and this discrepancy should be addressed. The standard for licensure might be different than the one for engineering education. Using competencies could provide linkages between the education requirement and the licensure process. It could also ensure that the definition applies to all engineering disciplines and can be achieved within a reasonable timeframe.

# Other/additional comments

This is an excellent strategic plan.

# **Canadian Engineering Qualifications Board**

This consultation session was held on September 21<sup>st</sup>, 2020. The following questions/comments were received from attendees:

# Accelerate 30 by 30

Engineers Canada must remain committed to increasing diversity, including women, racialized persons and indigenous peoples, including in the workplace and in accreditation.

# Foster trust and pride

Given that there is already an important level of pride in the engineering profession, this priority should be renamed "increasing public profile". The marketing campaign could alleviate the impact of the recent economic downturn and attract new licensees.

# Increase harmonization and consistency

Increasing harmonization is an important goal as major national initiatives require a lot of resources and sometimes are not implemented by regulators due to lack of internal support. Receiving this support prior to initiating the work would prevent this situation from happening again.

# Adapt to emerging technologies

No comments were provided on this proposed priority.

# Continue commitment to excellence

No comments were provided on this proposed priority.

# Strengthen the foundation of accreditation

The investigation should look into new education methods, including online learning and micro credentials. The 2016 Accreditation Forum sought to investigate how accreditation would be improved. It is not clear how this priority is different. Regulators trust that HEIs ensure that each graduate has met the minimum path. The introduction of graduate attributes has increased the workload of HEIs without reducing the risk nor providing a direct link to the requirement for licensure.

# Other/additional comments

CEQB could support all of these strategic priorities, and more specifically could provide expertise on linkages between CEAB and CEQB streams and assessing academic credentials in a heterogenous environment.

# **Atlantic regulators**

This consultation session was held on October 22<sup>nd</sup>, 2020. The following questions/comments were received from attendees:

Vision, mission, purposes and guiding principles

No comments were provided on this content.

# Strengthen the foundation of accreditation

Accreditation is a significant issue for most regulators as they rely on accreditation to assess Canadian graduates. This priority should first determine the fundamental academic requirement for licensure, then examine which tools should be used to achieve this goal. This investigation should look into the use of a national entry-to-practice exam and reconsider whether accreditation is needed or not to achieve the agreed upon academic requirement for licensure.

Given how long accreditation changes take to be implemented, abrupt modifications under tight timelines should be avoided. It is important to hire an unbiased expert. This study should also look at other tools than a national entry-to-practice exam.

# Accelerate 30 by 30

Concerns were expressed that this proposed priority might not enable the profession to reach 30 by 30. While it is important to support efforts to increase the proportion of women in the profession, the scope of this priority should be expanded to target other diversity groups such as racialized Canadians and Indigenous peoples so that the engineering profession is perceived as responsive to recent events.

# Foster trust and pride

This is a top priority for smaller regulators as they do not have the means to support a marketing campaign of this extent. It is critical that the public understands the impact of engineering on their welfare and that students understand what engineers do so that they choose the profession as a career path. It is especially valuable to target non-traditional areas. Consideration should be given to draw from other professions' marketing campaigns and develop metrics to measure success.

# Increase harmonization and consistency

This priority is very important, and we need a commitment from regulators to harmonize in both regulation and non-regulation areas. Some regulators' governance model leaves all operational decisions to the Chief Executive Office (CEO). The selection of the decision-making body should be left to the CEOs so that the process is adapted to jurisdiction-specific circumstances.

This priority should include a discussion on the relationship and role of Engineers Canada with regulators. Distinguishing between areas that require and do not require act changes might make this priority easier to achieve.

# Adapt to emerging technologies

This is an area of priority and is linked to the marketing campaign. It should focus on areas where regulation clearly provides value to the public. There should also be a component that targets individuals that did not graduate from CEAB-accredited programs.

# Continue commitment to excellence

This priority is under the purview of the CEO of Engineers Canada. As a result, it is not ranked high among other strategic priorities.

# Plenary discussion

Even if regulators might not agree on all of content pieces of this strategic plan, the process to develop it is good.

# Vote results

These are the results from the ranking exercise:

- 1. Foster trust and pride
- 2. Strengthen the foundation of accreditation
- 3. Accelerate 30 by 30
- 4. Support regulation of emerging areas
- 5. Increase harmonization and consistency
- 6. Continue commitment to excellence

# Western regulators

This consultation session was held on October 22<sup>nd</sup>, 2020. The following questions/comments were received from attendees:

# Vision, mission, purposes and guiding principles

For the vision, consideration should be given to adding "unified" or "united" in front of national collaboration". While the vision is clear, the mission is long and difficult to remember. In terms of Guiding Principles #4, it is not clear how Engineers Canada "enables" diversity, perhaps "encourages" is a more appropriate term.

# Strengthen the foundation of accreditation

The level of enquiry is appropriate, and this is a high priority. Accreditation issues have been known for years, and an incremental approach is not going to resolve them. Examining the foundation of accreditation is key, and the investigation should include a national entry-to-practice exam, a common tool used by other professions. Consideration should be given to allow HEIs to recognize student's education abroad as part of their minimum path.

The practice of engineering has drastically evolved since 1965. Not only do engineers now deal with artificial intelligence, they are also expected to possess soft skills such as the ability to work collaboratively in teams, consider a diversity of perspectives in designs, and conduct Indigenous consultations. Our education system must reflect these new requirements.

#### Accelerate 30 by 30

Supporting an increased percentage of women in the profession is an important goal, but this priority should be broadened to include other groups, especially Indigenous peoples. Engineers Canada should seek federal grants in support of 30 by 30 activities.

# Foster trust and pride

Some regulators have already conducted marketing campaigns as part of their centennial celebrations. Concerns were expressed on the long-term cost of this priority. A national campaign targeting the public might create confusion on who the regulator is. It is not clear how regulators without an advocacy mandate can participate in this marketing campaign. Perhaps if the scope included fostering trust in selfregulation their participation could be acceptable.

This priority is lower. If Engineers Canada is going to adopt this priority, focus should be on increasing trust in self-regulation. There is clearly an erosion in the trust in self-regulation. Strengthening regulatory processes can help resolve this situation as well as other priorities in the Strategic plan. It can also address the decreasing proportion of CEAB graduates that seek licensure and retain engineers in the profession.

Consideration should be given to dealing with technologists, given the possible national ramifications across the country. Perhaps focussing on the issue of technologists could be undertaken if the Foster trust and pride priority does not move forward.

# Increase harmonization and consistency

While everyone supports collaboration, harmonization has a negative connotation. In some provinces, governments are requiring them to harmonize their licensure requirements with other professional associations within their jurisdictions, sometimes without considering practices of other Canadian professions. This situation will likely challenge Engineers Canada's efforts to harmonize practices across regulators.

Continuing professional development, issuing certificate of authorization, authentication of engineering documents, outsourcing engineering work outside Canada, and supervision of engineering work are all areas where regulators could collaborate to harmonize. This list should be expanded to include matters that support national mobility.

# Adapt to emerging technologies

This is an area where Engineers Canada can help individual regulators by writing documents they can reuse and interpret according to their legislation.

# Continue commitment to excellence

Regulators benefit when Engineers Canada improves its service and products.

# Plenary discussion

Accreditation remains the most important priority.

# Vote results

These are the results from the ranking exercise:

- 1. Strengthen the foundation of accreditation
- 2. Increase harmonization and consistency
- 3. Support regulation of emerging areas
- 4. Accelerate 30 by 30
- 5. Foster trust and pride
- 6. Continue commitment to excellence

# **Professional Engineers Ontario**

This consultation session was held on October 23<sup>rd</sup>, 2020. The following questions/comments were received from attendees:

# Vision, mission, purposes and guiding principles

The vision is succinct and suggests that Engineers Canada exists to serve regulatory organizations, not individual license holders. A question remains on how regulators without an advocacy mandate can leverage this vision statement. The current situation in British Columbia could shed light on this matter.

In the mission statement, consideration should be given to replace the term "profession" in the first sentence to be replaced with "Canadian engineering" so that it is updated to reflect the new vision statement.

While purpose n.7 refers to international mobility, consideration could be given to include national mobility in the purposes as well. It was noted that national mobility is covered under purpose n.3. The new terminology associated with gender representation in the workplace is equity, and perhaps the purpose should be updated to include this term in purpose n.8.

# Strengthen the foundation of accreditation

This is the most important issue that Engineers Canada should tackle; if we do not address this issue soon, the system will implode. It is best to keep an open mind. We should also not continue to seek incremental changes as this approach has been damaging the system for years. A right touch approach should be sought.

A fundamental review is long overdue as the disconnect has been going on for years. The accreditation process is a means to an end, which is to meet the academic requirement for licensure. The fairness issue needs to be addressed. We need to involve graduates as they are interconnected with CEAB programs, engineering employers and regulators. Council is responsible for determining whether an applicant meets requirement for licensure, not Engineers Canada.

This investigation should also reach out to employers and students. The proposed timelines are too long, a solution is needed as soon as possible as HEIs are already preparing to launch non-accredited programs. Engineers Canada does not control schools, provincial governments do. The success of the accreditation system also lies with provincial governments' perception of the accreditation system and they should be engaged when reviewing the purpose of accreditation.

# Accelerate 30 by 30

Consideration should be given to what more can be done from an equity perspective. Systemic changes are required to reach this goal, and international applicants will need to be targeted to meet this goal. Other traditionally predominately male professions have successfully increased their female representation. Engineers Canada should look into what steps they took to achieve their goal and learn from their best practices. Looking at biases in regulatory processes and learning from regulators' best practices is a good path.

# Foster trust and pride

There is value in promoting licensure to the public. Social media tools should be used to appeal to a younger audience.

# Increase harmonization and consistency

This is an area where Engineers Canada can have an impact, if regulators agree to harmonize.

# Adapt to emerging areas

While this is ongoing operational work, it is important to send a message that this is important. The focus should be on engineering work, not on technology products.

# Continue commitment to excellence

No comments were provided on this proposed priority.

# Vote results

These are the results from the ranking exercise:

- 1. Strengthen the foundation of accreditation
- 2. Increase harmonization and consistency
- 3. Accelerate 30 by 30
- 4. Support regulation of emerging areas
- 5. Foster trust and pride
- 6. Continue commitment to excellence

# Ordre des Ingénieurs du Québec

This consultation session was held on November 9<sup>th</sup>, 2020. The following questions/comments were received from attendees:

# Vision, mission, purposes and guiding principles

No comments were provided on this content.

# Strengthen the foundation of accreditation

Since the beginning of the pandemic, students have not been taught in a classroom. Concerns have been expressed that regulators do not know the impact of this situation on their ability to practice. This process is ambitious and consulting stakeholders on many questions at the same time might generate efficiencies and ensure that it can be done within three years.

Participants will need to keep an open mind and consider all possibilities. A systemic view of the academic assessment process is needed. The process should also include regulator staff that work on practice and discipline matters to identify the knowledge required to practice safely and key areas of failure.

# Accelerate 30 by 30

The focus should remain on increasing the representation of women in engineering. The idea of an annual conference is a good but perhaps it could start in 2022 so that contribution to this priority start as soon as possible.

Increasing the representation of women in the engineering profession is still important but this issue is also part of a larger conversation on how the profession can be more inclusive of other groups. Consideration should be given to broaden this priority to include other groups that currently lack representation in the engineering profession. This priority should focus on ensuing that the profession attracts and retains the best candidates. There is also a need to ensure that foreign trained people get a license when competent to practice. While it might be outside their mandates, regulators could consider bridging foreign trained individuals with engineering employers to help smoothen their transition to the Canadian market.

# Foster trust and pride

Engineering is competing against other professions to recruit the best talents and HEIs could also help contribute to this priority. OIQ members supported another provincial campaign targeting the public this year. Before supporting this priority, the associated implementation plan would need to be reviewed.

# Increase harmonization and consistency

It is not clear what gap would be filled by further Pan-Canadian harmonization. If there is a gap, this is a role that can be played by Engineers Canada. There seems to an increased openness to collaboration and harmonization, which is encouraging. It should be sought where possible.

# Adapt to emerging areas

There is support for this priority as it could help regulators develop competency profiles in new areas.

# Continue commitment to excellence

If this Strategic plan becomes too ambitious for Engineers Canada to successfully deliver, this priority should be the one that is dropped.

# Vote results

These are the results from the ranking exercise:

- 1. Strengthen the foundation of accreditation
- 2. Increase harmonization and consistency
- 2. Support regulation of emerging areas
- 3. Accelerate 30 by 30
- 4. Foster trust and pride
- 5. Continue commitment to excellence

# **Engineering Deans Canada**

This consultation session was held on November 19<sup>th</sup>, 2020. The following questions/comments were received from attendees:

# Vision, mission, purposes and guiding principles

No comments were provided on this content.

# Strengthen the foundation of accreditation

HEIs are committed to increasing the percentage of women in the engineering profession. CEAB should not include 30 by 30 requirements in its accreditation criteria.

# Accelerate 30 by 30

A question was posed on what Engineers Canada is doing to address anti-black racism in society and whether the collected data includes other demographic information than gender. Engineers Canada should consider spearheading the launch of an annual list of top female engineers in the profession in Canada. A request was made that the diversity training modules be shared with HEIs and the Executive Committee of the Canadian Federation of Engineering Students. While the national conference might be a good idea, diversity and inclusion efforts must also be integrated in national decision-making processes and existing national groups' discussions.

# Foster trust and pride

Engineers Canada should focus on enhancing the public's trust in engineering regulation.

# Increase harmonization and consistency

It will be challenging for Engineers Canada to achieve harmonization across regulators.

# Adapt to emerging areas

No comments were provided on this proposed priority.

# Other/additional comments

This is an ambitious Strategic plan.

# Table of ranking results

During the regulator consultation sessions, attendees were asked to rank priorities. They were told by presenters their rankings would only be used to give Engineers Canada an indication of the pulse of the group given that meetings were virtual and not in-person. Given that CEOs were told they could invite as many attendees as they wished, some jurisdictions had more representatives in attendance than others and therefore results are not reflective of the weight of the regulators in Engineers Canada's governance structure. Finally, presenters were not facilitating consensus of groups on the different priorities so they should not be interpreted as reflecting the views of all attendees.

Priority	Atlantic regulators	Western regulators	PEO	οια
Strengthen the foundation of accreditation	2	1	1	1
Increase harmonization and consistency	5	2	2	2
Support regulation of emerging areas	4	3	4	2
Accelerate 30 by 30	3	4	3	3
Foster trust and pride	1	5	5	4
Continue commitment to excellence	6	6	6	5

# **Appendix A: Attendees list**

The following section presents attendees of each consultation session, by meeting:

# Canadian Engineering Accreditation Board consultation session

- Kalina Bacher-René, Directrice, Accès à la profession, Ordre des Ingénieurs du Québec
- Suzelle Barrington, Québec region representative, Canadian Engineering Accreditation Board
- Jean Boudreau, President and New Brunswick Director, Engineers Canada
- Luigi Benedicenti, Past Chair, Canadian Engineering Accreditation Board
- Pierre Bourque, Member-at-large, Canadian Engineering Accreditation Board
- Jeff Card, Senior Director Appointee to the Canadian Engineering Accreditation Board and Newfoundland and Labrador Director, Engineers Canada Board
- Danny Chui, President-Elect and Ontario Director, Engineers Canada
- Pemberton Cyrus, Atlantic region representative, Canadian Engineering Accreditation Board
- Kevin Deluzio, Professor and Dean, Faculty of Engineering and Applied Science, Queen's University
- Robert Dony, Chair, Canadian Engineering Accreditation Board
- **Rajkumar Durairaj**, Associate Professor in the Faculty of Engineering and Science (FES), Universiti Tunku Abdul Rahman (UTAR), Malaysia
- Nicole Dyck, Director, Programs & Planning at Faculty of Engineering, University of Alberta
- Waguih H. ElMaraghy, Ontario region representative, Canadian Engineering Accreditation Board
- Ray Gosine, Member-at-large, Canadian Engineering Accreditation Board
- Ryan Huckle, Program assistant, Conestoga College
- **Carol Jaeger**, Professor of teaching and Associate Dean, Undergraduate Engineering Programs, University of British Columbia
- Amor Jnifene, Professor and Associate Dean of Engineering, Royal Military College of Canada
- **Tim Joseph,** Director Appointee to the Canadian Engineering Accreditation Board and Alberta Director, Engineers Canada Board
- Paula Klink, Member-at-large, Canadian Engineering Accreditation Board
- Suzanne Kresta, Member-at-large, Canadian Engineering Accreditation Board
- Pierre Lafleur, Vice-Chair, Canadian Engineering Accreditation Board
- Anne-Marie Laroche, Member-at-large, Canadian Engineering Accreditation Board
- David Lynch, Past Chair and Alberta Director, Engineers Canada
- Mahmoud Mahmoud, Chair, Canadian Engineering Qualifications Board
- Mrinal Mandal, Alberta, Nunavut and Northwest Territories region representative, Canadian Engineering Accreditation Board
- Che Maznah Mat Isa, Senior Lecturer, Faculty of Engineering, Universiti Teknologi Mara
- James Olson, Professor and Dean of the Faculty of Applied Science, University of British Columbia

- Julius Pataky, British Columbia and Yukon region representative, Canadian Engineering Accreditation Board
- Gillian Pichler, Director, Registration, Engineers and Geoscientists British Columbia
- Jeff Pieper, Member-at-large, Canadian Engineering Accreditation Board
- Jessica Pizarro, General Manager, Acredita Cl
- Changiz Sadr, Ontario Director, Engineers Canada Board
- Kate Sisk, Director of Registration, Engineers Geoscientists New Brunswick
- Sierra Sparks, Engineering Student, Dalhousie University
- John Allen Stewart, Member-at-large, Canadian Engineering Accreditation Board
- Ramesh Subramanian, Ontario representative, Canadian Engineering Accreditation Board
- Alex Vega, Technical coordinator, Acredita CI
- Tara Zrymiak, Saskatchewan and Manitoba representative, Canadian Engineering Accreditation Board

- Aude Adnot-Serra, Coordinator, Accreditation Visits
- Elise Guest, Accreditation Program Advisor
- Johanne Lamarche, Accreditation Coordinator
- Gerard McDonald, Chief Executive Officer
- Alexander Olivas, Coordinator, Accreditation Visits
- Mélanie Ouellette, Manager, Strategic and operational planning
- Stephanie Price, Executive Vice President, Regulatory Affairs
- Adam Rodrigues, Coordinator, Accreditation Visits
- Mya Warken, Manager Accreditation and Secretary, Canadian Engineering Accreditation Board

# Canadian Engineering Qualifications Board consultation session

- Jean Boudreau, President and New Brunswick Director, Engineers Canada
- Danny Chui, President-Elect and Ontario Director, Engineers Canada
- Frank Collins, Atlantic region representative, Canadian Engineering Qualifications Board
- **Robert Dony**, Chair, Canadian Engineering Accreditation Board
- Frank George, Vice-Chair, Canadian Engineering Qualifications Board
- Michael Gregoire, Director of Professional Standards, Engineers Geoscientists Manitoba
- Anil Gupta, Alberta, Nunavut and Northwest Territories region representative, Canadian Engineering Qualifications Board
- Margaret Anne Hodges, Member-at-large, Canadian Engineering Qualifications Board
- Jeff Holm, Senior Director Appointee to the Canadian Engineering Qualifications Board and British Columbia Director, Engineers Canada Board
- Amy Hsiao, Atlantic region representative, Canadian Engineering Qualifications Board

- Samer Inchasi, Member-at-large, Canadian Engineering Qualifications Board
- **Tim Joseph,** Director Appointee to the Canadian Engineering Accreditation Board and Alberta Director, Engineers Canada Board
- Kimberly King, Executive Director/Director of Registration, Engineers Yukon
- Cliff Knox, Division Manager (Acting), Licensing & Registration, Professional Engineers Ontario
- Pierre Lafleur, Vice-Chair, Canadian Engineering Accreditation Board
- Ron LeBlanc, Past Chair, Canadian Engineering Qualifications Board
- Nadia Lehoux, Québec region representative, Canadian Engineering Qualifications Board
- David Lynch, Past Chair and Alberta Director, Engineers Canada
- Mahmoud Mahmoud, Chair, Canadian Engineering Qualifications Board
- Kate MacLachlan, Director of Academic Review, Association of Professional Engineers and Geoscientists of Saskatchewan
- Jason Ong, Manager, Examinations, Engineers and Geoscientists British Columbia
- Gillian Pichler, Director, Registration, Engineers and Geoscientists British Columbia
- Kelly Reid, Ontario Director, Engineers Canada Board
- Changiz Sadr, Director Appointee to the Canadian Engineering Qualifications Board and Ontario Director, Engineers Canada Board
- Karen Savage, British Columbia and Yukon region representative, Canadian Engineering Qualifications Board
- Kate Sisk, Director of Registration, Engineers Geoscientists New Brunswick
- Ian Sloman, Saskatchewan and Manitoba representative, Canadian Engineering Qualifications Board
- Qing Zhao, Member-at-large, Canadian Engineering Qualifications Board

- Megan Falle, Manager, Regulatory Liaison
- Isabelle Flamand, Coordinator, Qualifications
- **Ryan Melsom,** Manager, Qualifications and Secretary, Canadian Engineering Qualifications Board
- Gerard McDonald, Chief Executive Officer
- Mélanie Ouellette, Manager, Strategic and Operational Planning
- Stephanie Price, Executive Vice President, Regulatory Affairs
- Mya Warken, Manager Accreditation and Secretary, Canadian Engineering Accreditation Board

# Atlantic regulators consultation session

- Jean Boudreau, President and New Brunswick Director, Engineers Canada Engineers Canada
- Janet Bradshaw, CEO and Registrar, Professional Engineers and Geoscientists Newfoundland and Labrador
- Elliott Coles, Vice-President, Engineers PEI

- Geoffrey Connolly, Past President, Engineers PEI
- Crysta Cumming, President, Engineers Nova Scotia
- Lia Daborn, Chief Executive Officer, Engineers and Geoscientists New Brunswick
- Kris Dove, Chief Operating Officer & Treasurer, Engineers Nova Scotia
- Justin Dunn, PEI Director, Engineers Canada
- **Bill Hunt,** Professional Standards Director, Professional Engineers and Geoscientists Newfoundland and Labrador
- Jim Landrigan, Executive Director/Registrar, Engineers PEI
- Pal Mann, CEO and Registrar, Engineers Nova Scotia
- Carol MacQuarrie, Director of Professional Affairs & Registrar, Engineers and Geoscientists New Brunswick
- Bill O'Keefe, Chair Elect, Professional Engineers and Geoscientists Newfoundland and Labrador
- Marlo Rose, President, Engineers and Geoscientists New Brunswick
- Chris Zinck, Nova Scotia Director, Engineers Canada
- Wendy Week, President, Engineers PEI

- Gerard McDonald, Chief Executive Officer
- Mélanie Ouellette, Manager, Strategic and Operational Planning
- Stephanie Price, Executive Vice President, Regulatory Affairs
- Jeanette Southwood, Vice President, Corporate Affairs and Strategic Partnerships
- Heidi Theelen, Manager, Organizational Excellence

# Western regulators consultation session

- Victor Benz, Alberta Director, Engineers Canada
- Nancy Biamonte, Chief Professional Sustainability Officer, Association of Professional Engineers and Geoscientists of Alberta
- Jean Boudreau, President and New Brunswick Director, Engineers Canada
- Jennifer Cho, Chief Financial and Administration Office, Engineers and Geoscientists British Columbia
- **Tony Chong,** Chief Regulatory Officer and Deputy Registrar, Engineers and Geoscientists British Columbia
- John Corriveau, Director, Regulatory Affairs, Association of Professional Engineers and Geoscientists of Alberta
- Sloan D'Entremont, Senior Advisor & Director of Council Relations, Association of Professional Engineers and Geoscientists of Alberta
- Chris Dixon, President, Engineers Yukon
- Ann English, CEO and Registrar, Engineers and Geoscientists British Columbia
- Sharilee Fossum, Chief Financial and Corporate Officer, Association of Professional Engineers and Geoscientists of Alberta

- Dwayne Gelowitz, Saskatchewan Director, Engineers Canada
- Linda Golding, Chief Executive Officer & Registrar, NAPEG
- **Gisela Hippolt-Squair,** Director, Member Engagement, Association of Professional Engineers and Geoscientists of Alberta
- Kristen Hogan, Vice-President, Engineers Yukon
- Jeff Holm, British Columbia Director, Engineers Canada
- Sudhir Jha, Northwest Territories Director, Engineers Canada
- Tim Joseph, Alberta Director, Engineers Canada
- Kim King, Executive Director/Director of Registration, Engineers Yukon
- Grant Koropatnick, CEO and Registrar, Engineers Geoscientists Manitoba
- **Bob MacDonald,** Executive Director and Registrar, Association of Professional Engineers and Geoscientists of Saskatchewan
- Kate MacLachlan, Director of Academic Review, Association of Professional Engineers and Geoscientists of Saskatchewan
- Jay Nagendran, Registrar and CEO, Association of Professional Engineers and Geoscientists of Alberta
- Zac Parsons, Senior Advisor, Business Planning, Association of Professional Engineers and Geoscientists of Alberta
- Brian Pearse, President-Elect, Association of Professional Engineers and Geoscientists of Alberta
- Larry Spence, President, Engineers and Geoscientists British Columbia
- Jane Tink, Alberta Director, Engineers Canada
- John Van der Put, President, Association of Professional Engineers and Geoscientists of Alberta
- Michael Wrinch, British Columbia Director, Engineers Canada

- Gerard McDonald, Chief Executive Officer
- Mélanie Ouellette, Manager, Strategic and Operational Planning
- Stephanie Price, Executive Vice President, Regulatory Affairs
- Jeanette Southwood, Vice President, Corporate Affairs and Strategic Partnerships
- Heidi Theelen, Manager, Organizational Excellence

# Professional Engineers Ontario consultation session

- Daniel Abrahams, General Counsel, Professional Engineers Ontario
- Jean Boudreau, President and New Brunswick Director, Engineers Canada
- Christian Bellini, Ontario Director, Engineers Canada and President-elect, Professional Engineers Ontario
- Danny Chui, President-Elect and Ontario Director, Engineers Canada
- Nancy Hill, Ontario Director, Engineers Canada and Past President, Professional Engineers
   Ontario
- Kelly Reid, Ontario Director, Engineers Canada

- Changiz Sadr, Ontario Director, Engineers Canada
- Arthur Sinclair, Vice president (appointed), East Central Region Councillor, Professional Engineers Ontario
- Marisa Sterling, President, Professional Engineers Ontario
- Johnny Zuccon, CEO/Registrar, Professional Engineers Ontario

- Gerard McDonald, Chief Executive Officer
- Mélanie Ouellette, Manager, Strategic and Operational Planning
- Stephanie Price, Executive Vice President, Regulatory Affairs
- Jeanette Southwood, Vice President, Corporate Affairs and Strategic Partnerships

# Ordre des Ingénieurs du Québec session

- Harout Aramali, Directeur, Finances et de l'administration, Ordre des ingénieurs du Québec
- Kalina Bacher-René, Directrice à l'accès à la profession, Ordre des ingénieurs du Québec
- Louis Beauchemin, Directeur-général, Ordre des ingénieurs du Québec
- Zaki Ghavitian, Membre du Conseil d'administration, Ordre des ingénieurs du Québec
- Béatrice Laporte-Roy, Membre du Conseil d'administration, Ordre des ingénieurs du Québec
- Nathalie Martel, Membre du Conseil d'administration, Ordre des ingénieurs du Québec
- Luc Vagneux, Directeur, Développement de la profession, Ordre des ingénieurs du Québec
- Alice Vien-Bélanger, Directrice, Surveillance et de l'inspection professionnelle, Ordre des ingénieurs du Québec

The following Engineers Canada staff were also present:

- Gerard McDonald, Chief Executive Officer
- **Roseanne Gauthier,** Executive Assistant
- Mélanie Ouellette, Manager, Strategic and Operational Planning
- Stephanie Price, Executive Vice President, Regulatory Affairs
- Jeanette Southwood, Vice President, Corporate Affairs and Strategic Partnerships



# A vision for collaboration

Engineers Canada 2022-2024 strategic plan
# Contents

;
5
5
;
;
•
•
;
)
)
)

# Message on behalf of the Engineers Canada Board



We are proud to present to you Engineer's Canada's 2022-2024 strategic plan. To us, this is more than a document; it is a roadmap that points to areas where we will collaborate to strategically position our profession to adapt to a changing regulatory landscape, select and adopt best practices, and remain relevant across Canada.

The groundwork for this plan was laid through the commitment to transparency and collaboration that marked the development and execution of our 2019-2021 strategic plan. Engineers Canada is now bearing the fruit of this deep focus on renewal and it is why we are proud to formally introduce the vision for Engineers Canada:

### Advancing Canadian engineering through national collaboration

It is with this vision at the forefront of our minds that we present to you our six strategic priorities for the next three years.

In this time, we will take action to foster **collaboration** and **consistency** of requirements, practices, and processes across the engineering regulators, and to ensure that our profession remains **trusted** by the public and **attracts** future engineers. We will continue our work to increase the **equity, diversity**, **and inclusion** of our profession and support our target of achieving the goal that by 2030, 30 per cent of all newly licensed engineers are women. We will seek direction to implement a national academic requirement for licensure and investigate the impact on our **accreditation** system to ensure that it continues to meet the needs of regulators, students, and higher education institutions.

The strength of our outcomes can only be as strong as the foundation that we place under it. And that is why we recognize **organizational excellence** as a prime enabler of our success. Engineers Canada is on a journey to excellence, and our continued commitment supports the effective delivery of our products and services to regulators and stakeholders.

This strategic plan lays out our transformative work. While we pursue these goals with determination, we also remain focussed on sustaining our ongoing operational initiatives, laid out each year in our annual operating plan.

Canada's engineering profession is strong. Together, we're reinforcing this vision and embarking on a path that addresses some of the most important issues facing the profession. And we do this together, on behalf of 12 regulators, to strengthen a profession of over 300,000 members, and contribute to a better place to live for 38 million Canadians.

Sincerely,

Jun Doudreau

Jean Boudreau, FEC, P.Eng President

1 Ami

Danny Chui, FEC, P.Eng President-elect

David T. Lynch

David T. Lynch, FEC, P.Eng Past President

# **Our areas of focus**



This plan is built in response to some of the major trends and risks that have been identified throughout the strategic planning process. In particular:

- Our regulatory landscape is evolving rapidly. Governments are increasingly demanding that provincial and territorial engineering regulators demonstrate how the regulatory framework and associated processes are necessary to protect the public.
- Technological innovation drives the creation of new engineering disciplines and practices, increases the potential for overlap with other professions, and challenges regulators to provide support and enforcement in these areas.
- An increasing proportion of graduates from accredited programs do not seek licensure. Younger generations have different career paths, which might not necessarily be compatible with the traditional licensure path.
- COVID-19 has disproportionately affected the career paths of under-represented groups such as women, Indigenous and racialized persons, as well as younger segments of the population, requiring even greater sustained efforts to build a more equitable, inclusive and diverse profession.

It is with these factors in mind, and after extensive consultation with the Engineers Canada Board, provincial and territorial engineering regulators, Engineering Deans Canada, our staff, the Canadian Engineering Accreditation Board, and the Canadian Engineering Qualifications Board that we identified three areas of focus for the next three years:



1. Advance the engineering regulatory framework



2. Champion an equitable, diverse, inclusive, and trustworthy engineering profession



3. Uphold our commitment to excellence



# **1. Advance the engineering regulatory framework**



Our work supports engineering regulators in fulfilling their mandates of protecting the public. Key to our success is our ability to foster collaboration and support pan-Canadian implementation of consistent requirements and practices. We will investigate a national academic requirement for licensure, re-examine the purpose of accreditation, identify areas for national collaboration, and support adaptation to emerging areas of engineering practice. **Our priorities are to:** 

- 1.1 Validate the purpose and scope of accreditation
- **1.2 Strengthen collaboration and harmonization**
- 1.3 Support regulation of emerging areas

### 1.1 Validate the purpose and scope of accreditation

#### WHAT WE WILL DO

Major regulatory and educational changes have taken place since the creation of the Canadian engineering accreditation system in 1965. We will investigate the best practices in engineering education, benchmark our accreditation system, and collectively work with regulators and stakeholders to understand if there is a desire to adopt a new, national academic requirement for licensure as well as an updated purpose of accreditation. If there is, we will reconsider accreditation criteria and procedures.

#### HOW

- Benchmark the Canadian engineering accreditation system
- Investigate a minimum academic requirement for licensure
- Re-examine the purpose of accreditation in the context of the overall licensure system
- Hire external expertise and convene pan-Canadian, multi-stakeholder advisory groups to inform all recommendations

- All stakeholders understand the purpose of accreditation
- Regulators have an academic requirement for licensure, applicable to all
- Engineers Canada, including the CEAB and CEQB, have direction to implement systems aligned with the purpose and the academic requirement for licensure

### 1.2 Strengthen collaboration and harmonization

#### WHAT WE WILL DO

Fostering collaboration and consistency of requirements, practices, and processes across jurisdictions is at the heart of our mandate. We will work with regulators to understand barriers and success factors leading to harmonization and facilitate the adoption of a national agreement that will establish the principles and areas where pan-Canadian harmonization will be sought.

#### HOW

- Collaborate with regulator staff to identify barriers and opportunities
- Develop a national statement of collaboration with all jurisdictions
- Identify specific areas of harmonization for collaboration

#### WHAT DOES SUCCESS LOOK LIKE?

- Engineers Canada has a clear mandate and key focus areas for harmonization
- Regulators benefit from collaboration and resource sharing, supporting improved practice

### 1.3 Support regulation of emerging areas

#### WHAT WE WILL DO

Technological advances move much faster than legislative change and engineers who work in emerging areas of practice may not fully understand or consider the long-term professional and ethical impacts and obligations. We will provide information to regulators on the long-term impacts of engineering practice in emerging areas and a framework for the evaluation of professional and ethical obligations. This will enable regulators to educate license holders in these emerging areas of practice and regulate more effectively.

#### HOW

- Identify and investigate new and overlapping areas of engineering practice that will have a long-term impact on the public
- Continue to work with the federal government to promote the role of engineers in emerging areas

- Regulators receive information that helps them adapt their admission, enforcement, and practicerelated processes and uphold the framework for ethical practice
- The federal government is made aware of the importance of the work of engineers in emerging areas





2. Champion an equitable, diverse, inclusive, and trustworthy engineering profession



We are the national voice of the profession and we are committed to a more equitable, diverse and inclusive profession of women, Indigenous, racialized and LGBTQ2+ persons. Our success is tied to our ability to foster public trust and demonstrate the relevance of our profession with younger generations and employers. We will amplify our 30 by 30 initiative in order to increase the percentage of newly licensed engineers who are women, reinforce trust in the profession among Canadians, and demonstrate the value of licensure among engineering graduates. **Our priorities are to:** 

### 2.1 Accelerate 30 by 30

2.2 Reinforce trust and the value of licensure

### 2.1 Accelerate 30 by 30

#### WHAT WE WILL DO

As the engineering profession is at risk of not meeting its national goal of having 30 per cent of newly licensed engineers being women by 2030, there is a need to sustain momentum, augment our efforts, and strengthen our support of regulators while not duplicating efforts. We will continue accelerating 30 by 30 through collecting and sharing information on best practices, supporting regulators in their work, and organizing a national 30 by 30 conference.

#### HOW

- Hire external expertise to conduct research on the perceptions of women who graduate from engineering programs and/or are eligible for licensure and the barriers that they encounter, including in the workplace
- Share the results of research with regulators and employers
- Provide a 30 by 30 report card and needs assessment to interested regulators and continue to convene groups to facilitate sharing of best practices
- Organize an annual national 30 by 30 conference that focuses on sharing innovative ideas and practices

- Regulators have information and support that enables them to increase inclusion and the number of engineering graduates who proceed through the licensure processes
- Representation of women is increasing within every step of the pipeline: students at higher education institutions (HEIs), graduates, engineers-in-training (EITs), newly licensed engineers, and engineers
- Employers have information that enables them to make their workplaces more equitable, diverse and inclusive
- Lessons learned from the 30 by 30 work inform initiatives in support of increasing representation of under-represented groups including but not restricted to Indigenous, racialized and LGBTQ2+ persons

### 2.2 Reinforce trust and the value of licensure

#### WHAT WE WILL DO

There is a lack of information on the profile and licensure motivators of engineers, engineering students, engineering graduates, and EITs. More research is needed to understand the perceptions of engineering employers on the requirement and value of licensure. Relative to other professions, the public has only moderate familiarity and trust with engineers. We will bridge this gap by creating and promoting a consistent, national message that will showcase the diversity of the profession, the breadth of engineering in both traditional and new disciplines, and the value of engineering licensure to the public, engineering graduates, EITs, and employers.

#### HOW

- Conduct market research to identify and understand appropriate target audience
- Develop national value-of-licensure messaging in collaboration with regulators
- Launch a multi-year, multi-million-dollar, national marketing campaign, co-branded and delivered in partnership with regulators

- Targeted public audiences perceive engineers as trustworthy and recognize engineering as a licensed profession
- Engineering graduates and EITs recognize value in licensure
- Regulators have a valuable national framework and marketing support tools









We are committed to continually measure ourselves against best practices and hold ourselves accountable to enhance our products and service delivery for the benefit of regulators, staff, and stakeholders. **Our priority is to:** 

### 3.1 Uphold our commitment to excellence

### 3.1 Uphold our commitment to excellence

#### WHAT WE WILL DO

The demand for change continues and we are facing pressure to deliver on the diverse and changing needs of engineering regulators, higher education institutions, and the engineering community. To continually adapt, we need an effective and sustainable approach that ensures that we are a high performing organization. By 2024, we will achieve Platinum level certification from Excellence Canada by demonstrating measurable, sustained, and improving performance over at least a three-year period as measured against the Excellence, Innovation and Wellness Standard.

#### HOW

Achieve Platinum level certification from Excellence Canada

- Regulators, HEIs, and the engineering community benefit from effective delivery of products and services
- Staff benefit from increased engagement and retention, working in motivated teams, and improved health
- Engineers Canada benefits from sustainment of a high level of performance



# About us



Engineers Canada serves the regulators, upholds the honour, integrity, and interests of Canadian engineering by supporting consistent high standards in regulation, encouraging the growth of the profession in Canada, and inspiring public confidence. Our work is focussed on ten core purposes, as established by Engineers Canada's members, the engineering regulators:

- 1. Accrediting undergraduate engineering programs.
- 2. 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.
- 4. Offering national programs.
- 5. Advocating to the federal government.
- 6. Actively monitoring, researching, and advising on changes and advances that impact the Canadian regulatory environment and the engineering profession.

- 7. 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.
- 9. Promoting equity, diversity, and inclusion in the profession that reflects Canadian society.
- 10. 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.

We are successful when we convene, facilitate, and support our partners to come together and make evidence-based decisions for the benefit of the public. We recognize that our profession is facing challenges and are confident that we can confront them together. The sum of our efforts will be stronger than all of our individual parts. Our vision is:

### Advancing Canadian engineering through national collaboration

Our work is guided by our staff values and Board guiding principles:

#### Our staff:

- Take pride in creating a culture of teamwork and wellness
- Earn credibility through high-quality work
- Foster new ideas and embrace creative approaches
- Are transparent and accountable
- Create and sustain trusting relationships
- Rely on diverse people and perspectives to enrich our work

#### Our Board commits to:

- Serve the needs of the regulators
- Ensure transparency and accountability in the decision-making process
- Encourage commitment and engagement of regulators
- Promote equity, diversity and inclusion in the Canadian engineering profession



### **BRIEFING NOTE:** For decision

2021 CEO objectives	4.3
Purpose:	To confirm the 2021 CEO objectives
Link to the Strategic Plan:	Board Responsibility #1: Hold itself, its Directors, and its Direct Reports accountable
Motion(s) to consider:	THAT the Board approve the 2021 CEO objectives, on recommendation of the HR Committee.
Vote required to pass:	Simple majority
Transparency:	Open session
Prepared by:	Christina Mash, Governance Administrator
Presented by:	David Lynch, Director from Alberta and Chair of the HR Committee

### **Problem/issue definition**

- Board policy 4.7, Monitoring of CEO establishes the procedure for evaluating the CEO's performance and for providing feedback and guidance to the CEO.
- The CEO is required to have annual objectives on which performance can be measured. Appendix 1 includes a description of the objectives that are proposed for 2021.

### Proposed action/recommendation

• That the Board approves the proposed 2021 CEO objectives.

### Other options considered:

None

#### Risks

• The objectives set the expectations of CEO performance from the Board. Lack of objectives leads to ambiguity and uncertainty of direction and focus. This absence of clarity causes confusion and frustration amongst staff and for Regulators. Establishing transparent objectives will mitigate this risk.

### **Financial implications**

• None

#### **Benefits**

- An engaged CEO, who both understands what is required to be successful and is able to motivate and guide staff to drive performance and results.
- Clarity for Directors, Regulators, and staff on the expectations for the CEO.

#### Consultation

These objectives were developed with reference to the Strategic Plan, Annual Operating Plan, and Budget, with consultation and input from the CEO, senior staff leadership, and members of the HR Committee.

#### Next steps (if motion approved)

At year's end, measure the results of the 2021 objectives and conduct the CEO's performance evaluation.

### **Appendices**

• Appendix 1: 2021 CEO objectives



#### **Objectives for the Chief Executive Officer – 2021**

The following series of considerations may be used by the Human Resources Committee to provide the basis for the evaluation of the performance of Engineers Canada's Chief Executive Officer. It covers the period January 1, 2021 until December 31, 2021.

It is proposed the evaluation utilize a numerical assessment system as follows:

- 1. Unacceptable: Performance is below accepted levels
- 2. Needs Improvement: Fails to meet one or a few expectations
- 3. Satisfactory: Performance is adequate in carrying out the duties of the position
- 4. **Excellent:** Performance is exceptional it exceeds standards or expectations

#### Achievement of strategic objectives

- Strategic priority 1: Accreditation Improvement Program
  - Implement accreditation management system (Tandem) considering the needs of higher education institutions (HEI) and Engineers Canada.
  - Plan the transition of and initiate adoption of the accreditation management system by HEIs, CEAB, and Engineers Canada.
  - Design, build, and plan implementation of improvements to Engineers Canada's accreditation volunteer management process, ensuring alignment to the Engineers Canada's Volunteer Management Program.
- Strategic priority 3: Recruitment, retention, and the professional development of women in the engineering profession
  - Complete review and refinement of actions in action plans for recruitment, retention and professional development.
  - Complete roll-out of equity, diversity, and inclusion training for Board, CEOs, CEAB and CEQB.
  - Make equity, diversity and inclusion training module available to Regulators.
  - Work with Engineering Deans Canada (EDC) to expand the 30 by 30 network to include all HEIs.
- Strategic priority 4: Competency-Based Assessment Project
  - Complete the project, fully bilingual, with the Canadian environment competencies included.
- Operational imperative 3: Services and tools for the engineering Regulators
  - Make the new national membership database (NMDB) tool available to Regulators.
- Operational imperative 5: Advocating to the federal government
  - Provide Regulators with information about federal government proposals, actions, and policies that impact the profession.

- Develop evidence-based National Position Statements that provide views on matters of public policy that affect the engineering profession.
- Submit pre-budget submission to the federal government as part of the federal budget process.
- Arrange virtual Hill Day with parliamentarians and public servants to promote the use of engineering expertise and the value of the engineering profession.
- > Develop and submit annual advocacy report to the Board.
- Operational imperative 7: Managing risks and opportunities associated with mobility of work and practitioners internationally
  - Obtain approval of the signatories for our continued participation in the APEC and International Professional Engineers agreements.
- Operational imperative 8: Fostering recognition of the value and contribution of the profession to society and sparking interest in the next generation of engineering professionals
  - Through our new Digital Engagement and Online Campaign Working Groups, increase collaboration amongst Regulator outreach and engagement staff through collaboration on Digital Scavenger Hunt (K to grade 6), Design Challenges (grades 6 to 8), online game (grades 9 to 12), lifelong learning (post-secondary EITs), and National Engineering Month.
  - Create and distribute a benchmark report to provide greater confidence in the impact and value of our outreach efforts and better understanding of our collective efforts and influence within the school system.
  - Expand our relationship with Girl Guides Canada and Scouts Canada and create a pilot project that connects Regulator volunteers and activities with local units.
  - Complete the first cycle of the Engineers Canada-CFES mentorship program.
  - Complete implementation of approved recommendations from awards and scholarship programs reviews.
- Operational imperative 9: Promote diversity and inclusion in the profession that reflects Canadian society
  - Complete roll-out of 4 Seasons for Reconciliation training sessions for Board, CEOs, CEAB and CEQB.
  - > Make Indigenous awareness training module available to Regulators.
  - Complete research and analysis of the experiences of Indigenous engineers and recommend options for truth and reconciliation efforts to be incorporated into engineering undergraduate education in Canada, with appropriate consultation.
  - Complete Indigenous engagement plan on building relationships with Indigenous organizations and engineers.
- 2022-2024 Strategic Plan
  - > Obtain approval, with the assistance of the Board, of the 2022-2024 Strategic Plan.

- > Develop each of the strategic priority work plans.
- Engineering Deans Canada (EDC)
  - > Liaise with senior leadership of EDC to foster transparent and respectful relations.

#### **Organizational stability**

- Maintain and improve commitment to Excellence, Innovation and Wellness standard. Achievement of gold level certification.
- Conclude implementation of the action plans to address results of employee engagement survey in the areas of:
  - Performance management rollout a new performance management system for the 2022 performance cycle.
  - Client focus/Innovation Identification of clients and their respective needs; integration of innovation in performance management and planning processes.
  - Organizational vision Ensure that employees know and comprehend the vision and how it applies to their work.

#### Financial and operational management

- Meet 2021 Budget and provide appropriate reporting on operational plan.
- Develop and obtain Board approval of 2022 Budget and operational plan (including proposed 2024 Per Capita Assessment fee and multi-year forecast).
- Implement Human Resources Information System (HRIS) modules as follows:
  - Recruitment module software to facilitate recruitment and retention
    - Creating electronic job requisitions and posting them to internal and external websites and managing applications through the ADP recruitment process. Creating a career center for Engineers Canada.
  - Onboarding module software to facilitate onboarding of new employees
    - Manage onboarding through ADP linked to new hire process.
- Develop succession plan for CEO direct reports and staff.
- Develop Volunteer Management Program.
- Assess and implement post-pandemic workplace adjustments.



#### **BRIEFING NOTE:** For decision

Board policy updates		4.4
Purpose:	To approve updates to existing and new Board policies	
Link to the Strategic Plan:	Board Responsibility 4: Ensure the development and periodic review of Board policies.	
Motion(s) to consider:	<ul> <li>THAT the Board, on recommendation of the Governance Committee:</li> <li>a) approve the following revised Board policies: <ol> <li>4.12, Board Self-Assessment</li> <li>4.2, Directors' Responsibilities</li> <li>4.3, Code of Conduct</li> <li>6.1, Board Committees and Task Forces</li> <li>6.13, President-Elect Nomination and Election Process</li> <li>6.8, Governance Committee Terms of Reference</li> <li>7.1, Board, Committee and Other Volunteer Expenses</li> <li>7.9, Process for In-camera Meetings</li> <li>x. 9.2, Qualifications Board Guidelines</li> <li>x. 9.3, National Position Statements</li> </ol> </li> <li>b) approve the new Board policy 7.7, Investments</li> <li>c) rescind Board policy 8.1, Emerging Disciplines</li> </ul>	
Vote required to pass:	Two-thirds majority	
Transparency:	Open session	
Prepared by:	Evelyn Spence, Corporate Secretary	
Presented by:	Nancy Hill, Chair of the Governance Committee	

### **Problem/issue definition**

- Ten (10) revised policies are presented today for approval. In addition, one (1) new policy is presented for approval and one (1) policy is recommended to be rescinded.
- An additional two (2) policies received minor (editorial) updates and have been updated secretarially. No Board approval is required for these minor updates as per the Governance Committee's terms of reference, which grant the authority to "make editorial changes to Board policies such as the correction of typographical and grammatical errors, to ensure consistent use of terminology and plain language and to update references."
  - Policies that received minor updates include:
    - Policy 5.4, *Communication and Support to the Board*
    - Policy 6.12, Human Resources Committee Terms of Reference
- Policies that were not substantively changed during this review cycle were moved to a two-year (biennial) review cycle.

### **Proposed action/recommendation**

- That the Board review and approve the proposed revisions to the existing policies, accept and approve the new policy 7.7, *Investments*, and approve rescinding policy 8.1, *Emerging Disciplines*.
  - In recommending that policy 8.1 be rescinded, the Governance Committee took into consideration the 2019-2020 Governance Committee's recommendations and also the Board's May 2020 discussion, when it noted that: "although [the section 8 policies] provide

support for the strategic plan, they may no longer be helpful. It was noted that they are meant to articulate the Board's position to staff and assist in narrowing the scope for operational implementation."

 Additionally, the committee felt that the policy was aspirational and contained principles or statements that were mostly out of Engineers Canada's control. The committee further noted that this policy has not worked in the past.

#### **Other options considered**

• None.

#### **Risks**

• Operating without clear and complete policies puts Directors and the organization at risk in terms of compliance and the transfer of corporate knowledge.

#### **Financial Implications**

None.

#### **Benefits**

• The Board and its Key Stakeholders have access to clear policies about the requirements and procedures for operations and governance at Engineers Canada.

#### Consultation

- The policies being put forward for this review cycle have first been reviewed by staff to confirm consistency in formatting (as determined following the Governance Committee's September 22 meeting), terminology, definitions, review periods and for more substantive edits based upon staff's knowledge of best practices and policies/procedures across the organization. In addition, staff supporting the CEQB were consulted and advised on policy 9.2, *Qualifications Board Guidelines*, and the Manager of Public Affairs provided input into policy 9.3, *National Position Statements*.
- Policy 7.7, *Investments* was developed using the old (2005) policy and bringing it up to date with the new directive provided by RBC in 2020. The new Board policy was reviewed by Engineers Canada's Director, Finance and the FAR Committee at its October 21, 2020 and December 1, 2020 meetings.

#### Next steps (if motion approved)

• Upon Board approval, the policy manual will be updated to include the revised and new policies, as well as to remove policy 8.1.

#### **Appendices**

- Policies marked up versions and clean copies
- For information policies policies with editorial revisions only (Board approval not required):
  - o Policy 5.4, Communication and Support to the Board
  - Policy 6.12, Human Resources Committee Terms of Reference



# 4 Role of the Board

The role of the Board is to provide strategic direction and ensure appropriate financial and risk management for the organization. The Board shall provide this leadership with due consideration of long-term impacts, and a clear distinction between the roles and responsibility of the Board and staff. Board directors are expected to be knowledgeable and prepared to cast a vote.

### 4.12 Board self-assessment

Date of adoption: March 1, 2019 (Motion 5736)	Review period: Annual
Date of latest amendment: (Motion)	Date last reviewed:

Assessing Board effectiveness is an important governance responsibility. The purpose of Board selfassessment is to give all Board members an opportunity to evaluate and discuss the Board's performance with candor and from multiple perspectives. The ultimate objectives are greater efficiency in the use of the Board's time and increased effectiveness of the Board as a governing body.

### 4.12.1 Self-assessment process

- (1) Three assessment processes are to be used by the Board:
  - a) a short meeting assessment, conducted at the end of each meeting;
  - b) an electronic survey, after each meeting; and,
  - c) a more detailed annual survey of Board performance.

#### A. Meeting assessment

- (1) At the end of each Board meeting, the chair will ask that the meeting move in-camera. The attendees will include the Directors, the Direct Reports (CEO, Corporate Secretary and the chairs of the CEAB and CEQB), and the CEO Group Advisor to the Board. The objective is to engage participants in a healthy discussion about the quality of the meeting and the decisions taken.
- (2) In addition, an electronic meeting satisfaction survey will be sent to all participants following each Board meeting.

#### B. Annual survey of the Board

(1) The annual survey of the Board provides the opportunity to look internally at the Board itself, reflect on Board members' individual and shared responsibilities, identify different perceptions and opinions among Board members, and determine areas of responsibility that need attention. Board self-assessment should not be judgmental or focus only on weaknesses and negative aspects. Instead, it should help the Board with succession planning and governance improvements.



- (2) Except when the Governance Committee conducts the governance effectiveness survey (described below), the annual survey and reporting of the Board's effectiveness shall be the responsibility of the Human Resources (HR) Committee. The survey will be conducted through an anonymous questionnaire.
- (3) The following process will be used:
  - a) The HR Committee shall agree upon the structure and content of the questionnaire.
  - b) The proposed questionnaire will be presented to the Board at the Winter (February) Board meeting for review and approval.
  - c) The questionnaire will be distributed after the Winter meeting and Board members will complete the questionnaire within two weeks of receipt.
  - d) Results will be tabulated and analyzed and a Board assessment report will be prepared.
  - e) The report will be presented to the Board at its Spring (May) meeting.
  - f) The Board will discuss the report and decide if changes to policies, procedures, or practices are required.
  - g) The incoming Past President will oversee the implementation of any agreed-upon improvements.
- (4) Opinions and comments expressed during the assessment process will not be attributed to individual Board members but should be shared in the aggregate report.
- C. Periodic governance effectiveness survey
- (1) In accordance with Board Policy 6.8, *Governance Committee Terms of Reference*, the Governance Committee is responsible to conduct a periodic survey of Regulators and Directors to evaluate the effectiveness of Board governance and operations, and develop action plans to address any required improvements.
- (2) In years where the Board conducts the broader governance effectiveness survey, the annual survey and reporting of the Board's effectiveness shall be the responsibility of the Governance Committee. The Board assessment will form one part of the questionnaire, and will include questions for Directors that are designed specifically to evaluate Board performance.
- (3) The specific results of the Board self-assessment, including any recommendations for improvements, will be presented to the Board at its spring (May) meeting.
- (4) The Board will discuss the report and decide if changes to policies, procedures or practices are required.



### 4 Role of the Board

The role of the Board is to provide strategic direction and ensure appropriate financial and risk management for the organization. The Board shall provide this leadership with due consideration of long-term impacts, and a clear distinction between the roles and responsibility of the Board and staff. Board directors are expected to be knowledgeable and prepared to cast a vote.

#### 4.12 Board self-assessment

Date of adoption: March 1, 2019 (Motion 5736)	Review period: Annual
Date of latest amendment: <del>May 22, 2020</del> (Motion <del>5851</del> )	Date last reviewed: <del>May 22, 2020</del>

Assessing Board effectiveness is an important governance responsibility. The purpose of Board selfassessment is to give all Board members an opportunity to evaluate and discuss the Board's performance with candor and from multiple perspectives. The ultimate objectives are greater efficiency in the use of the Board's time and increased effectiveness of the Board as a governing body.

#### 4.12.1 Self-assessment process

- (1) Three assessment processes are to be used by the Board:
  - a) a short meeting assessment, conducted at the end of each meeting,
  - b) an electronic survey, after each\_meeting,-:\_and,\_
  - c) a more detailed annual survey of Board performance.
- A. Meeting assessment
- (1) At the end of each <u>Board</u> meeting, the chair will ask that the meeting move in-camera. The attendees will include the <u>dD</u>irectors, the <u>dD</u>irect <u>R</u><u>r</u>eports (CEO, <u>sCorporate S</u>ecretary and the chairs of the CEAB and CEQB), and the CEO Group <u>advisor Advisor</u> to the Board. The objective is to engage participants in a healthy discussion about the quality of the meeting and the decisions taken.
- (2) In addition, an electronic meeting satisfaction survey will be sent to all participants following each Board meeting.
- B. Annual survey of the Board
- (1) The annual survey of the Board provides the opportunity to look internally at the Board itself, reflect on Board members' individual and shared responsibilities, identify different perceptions and opinions among Board members, and determine areas of responsibility that need attention. Board self-assessment should not be judgmental or focus only on weaknesses and negative aspects. Instead, it should help the Board with succession planning and governance improvements.

**Engineers Canada Board Policy Manual** Section 4: Role of the Board **Commented [ES1]:** Clarify this is for Board meetings, since they are not used for Committee meetings



(2) The Except when the Governance Committee conducts the governance effectiveness survey (described below), the annual survey and reporting of the Board's effectiveness shall be the responsibility of the Human Resources (HR) Committee. The survey will be conducted through an anonymous questionnaire.

(2)(3) The following process will be used:

- a) In November, tThe HR Committee shall agree upon the structure and content of the questionnaire.
- b) The proposed questionnaire will be presented to the Board at the Winter (February) Board meeting for review and approval.
- c) The questionnaire will be distributed after the Winter meeting and Board members shall-will complete the questionnaire within two weeks of receipt.
- d) Results will be tabulated and analyzed and a Board assessment report will be prepared.
- e) The report will be presented to the Board at its Spring (May) meeting.
- f) The Board will discuss the report and decide if changes to policies, procedures, or practices are required.
- g) The incoming <u>pastPast-\_pP</u>resident will oversee the implementation of any agreed-upon improvements.
- (3)(4) Opinions and comments expressed during the <u>assessment</u> process will not be attributed to individual Board members but should be shared in the aggregate report.
- C. Periodic governance effectiveness survey
- (1) In accordance with Board Policy 6.8, Governance Committee Terms of Reference, the Governance Committee is responsible to conduct a periodic survey of Regulators and Directors to evaluate the effectiveness of Board governance and operations, and develop action plans to address any required improvements.
- (2) In years where the Board conducts the broader governance effectiveness survey, the annual survey and reporting of the Board's effectiveness shall be the responsibility of the Governance Committee. The Board assessment will form one part of the questionnaire, and will include questions for Directors that are designed specifically to evaluate Board performance.
- (3) The specific results of the Board self-assessment, including any recommendations for improvements, will be presented to the Board at its spring (May) meeting.
- (1)(4) The Board will discuss the report and decide if changes to policies, procedures or practices are required.

**Commented [ES2]:** Added this is to try to get around the situation we find ourselves in at present, where we are asking the Board to deviate from policy in order to incorporate the Board assessment into the general governance effectiveness survey. I think we should anticipate that this might be a practice we continue, so that when we engage in future governance effectiveness surveys, we don't need to do all the workarounds

**Commented [ES3]:** "the survey AND REPORTING" Right now, based on a request from last year's HR Committee, the HR Committee drafts the survey and then has Governance Committee report on the findings. Given that the HRC is responsible for conducting the survey and also for oversight of the director onboarding and development (education) program, it makes sense that they would keep the reporting responsibility (except where GC conducts the survey, with the governance effectiveness survey.

**Commented [ES4R3]:** Note - this will require an update to policy 6.8, Governance Cttee TOR, to remove reference to GC making "recommendations for content and review results of the annual Board assessment survey." This is inaccurate.

**Commented [ES5]:** Removing the date for this is in line with soon-to-be approved revisions to policy 4.13.

**Commented [ES6]:** Added to memorialize the process we are using this year, to streamline the work.

Engineers Canada Board Policy Manual Section 4: Role of the Board



# 4 Role of the Board

The role of the Board is to provide strategic direction and ensure appropriate financial and risk management for the organization. The Board shall provide this leadership with due consideration of long-term impacts, and a clear distinction between the roles and responsibility of the Board and staff. Board Directors are expected to be knowledgeable and prepared to cast a vote.

## 4.2 Directors' responsibilities

Date of adoption: April 9, 2018 (Motion 5693) Date of latest amendment: (Motion) Review period: Biennial Date last reviewed:

- (1) In order to fulfill their purpose as a Board, individual Directors shall:
  - a) Know the business of Engineers Canada.
  - b) Ensure sufficient time to fulfill their Director's duties and responsibilities.
  - c) Be informed of issues affecting, or likely to affect, Engineers Canada and the Regulators.
  - d) Contribute to the Board's decision-making process by:
    - i. Attending meetings on a regular and punctual basis and being properly prepared to participate;
    - ii. Discussing all matters freely and openly at Board meetings;
    - iii. Working towards achieving a consensus that respects divergent points of view;
    - iv. Supporting the legitimacy and authority of Board decisions, regardless of their personal position on the issue, and not discussing the varying opinions of individuals members;
    - v. Respecting the rights, responsibilities, and decisions of the Regulators; and,
    - vi. Participating actively in the work of the Board including by serving on Committees or Task Forces.
  - e) Bring the views, concerns, and decisions of the Board to their Regulator.
  - f) Seek their Regulator's input on issues to be discussed by the Board so as to be able to communicate the Regulator's position to the Board.
  - g) Advise their Regulator of issues to be presented for decision by the Members.
  - h) Be knowledgeable of the rules, regulations, policies, and procedures governing the Regulator that nominated/elected them.
  - i) Be familiar with the incorporating documents, By-law, policies, and legislation governing Engineers Canada as well as the rules of procedure and proper conduct of meetings.
  - j) Participate in Board educational activities that will assist them in carrying out their responsibilities.



- (2) Each individual Director shall act in accordance with the Canada *Not-for-Profit Corporations Act* (the "Act") and their common law fiduciary duties, including but not limited to:
  - a) Acting honestly, in good faith and at all times, in the best interests of the corporation;
  - b) Being independent and impartial;
  - c) Exercising, in the performance of their duties, the degree of care, diligence and skill required of a Director;
  - d) Preserving the confidentiality of information obtained while acting as a Director by avoiding any advertent or inadvertent disclosure of such information;
  - e) Exercising vigilance for and declaring any apparent or real personal conflict of interest in accordance with Policy 4.3, *Code of Conduct*; and
  - f) Voicing, clearly and explicitly at the time a decision is being taken, any opposition to a decision being considered by the Board.



#### 4 Role of the Board

The role of the Board is to provide strategic direction and ensure appropriate financial and risk management for the organization. The Board shall provide this leadership with due consideration of long-term impacts, and a clear distinction between the roles and responsibility of the Board and staff. Board Directors are expected to be knowledgeable and prepared to cast a vote.

### 4.2 Directors' responsibilities

 Date of adoption: April 9, 2018 (Motion 5693)
 Review period: AnnualBiennial

 Date of latest amendment: May 22, 2020 (Motion 5851)
 Date last reviewed: May 22, 2020

(1) In order to fulfill their purpose as a Board, individual Directors shall:

- a) Know the business of Engineers Canada.
- b) Ensure sufficient time to fulfill his/hertheir Director's duties and responsibilities.
- c) Be informed of issues affecting, or likely to affect, Engineers Canada and the Regulators.
- d) Contribute to the Board's decision-making process by:
  - i. Attending meetings on a regular and punctual basis and being properly prepared to participate;
- i-ii. Discussing all matters freely and openly at Board meetings;
- iii. Working towards achieving a consensus which that respects divergent points of view;
- ii.iv. Supporting the legitimacy and authority of Board decisions, regardless of their personal position on the issue, and not discussing the varying opinions of individuals members;
- iii.v. Respecting the rights, responsibilities, and decisions of the Regulators; and,
- iv-<u>vi.</u> Participating actively in the work of the Board including by serving on Committees or Task Forces.
- e) Bring the views, concerns, and decisions of the Board to their Regulator.
- f) Seek their Regulator's input on issues to be discussed by the Board so as to be able to communicate the Regulator's position to the Board.
- g) Advise their Regulator of issues to be presented for decision by the Members.
- h) Be knowledgeable of the rules, regulations, policies, and procedures governing the Regulator that nominated/elected them.
- i) Be familiar with the incorporating documents, By-law, policies, and legislation governing Engineers Canada as well as the rules of procedure and proper conduct of meetings.
- Participate in Board educational activities that will assist them in carrying out their responsibilities.

Engineers Canada Board Policy Manual Section 4: Role of the Board



<u>(2) Eac</u>	h individual Director shall act in accordance with the Canada Not-for-Profit Corporations Act (the	
"Ac	t") and their common law fiduciary duties, including but not limited to:	Commented [ES1]: Added, to more fully capture Directors'
<u>a)</u>	Acting honestly, in good faith and at all times, in the best interests of the corporation;	individual fiduciary duties
<u>b)</u>	Being independent and impartial;	<b>Commented [ES2]:</b> This has been moved here, from the previous version of the Code of conduct.
<u>c)</u>	Exercising, in the performance of their duties, the degree of care, diligence and skill required of	
	<u>a Director;</u>	
<u>d)</u>	Preserving the confidentiality of information obtained while acting as a Director by avoiding any advertent or inadvertent disclosure of such information;	

- e) Exercising vigilance for and declaring any apparent or real personal conflict of interest in accordance with Policy 4.3, *Code of Conduct*; and
- <del>)</del>f) Voicing, clearly and explicitly at the time a decision is being taken, any opposition to a decision being considered by the Board.

Engineers Canada Board Policy Manual Section 4: Role of the Board



# 4 Role of the Board

The role of the Board is to provide strategic direction and ensure appropriate financial and risk management for the organization. The Board shall provide this leadership with due consideration of long-term impacts, and a clear distinction between the roles and responsibility of the Board and staff. Board Directors are expected to be knowledgeable and prepared to cast a vote.

### 4.3 Code of conduct

Date of adoption: April 9, 2018 (Motion 5693)	Review period: Annual
Date of latest amendment: (Motion)	Date last reviewed:

This policy is intended to provide guidance to members of the Board and Board committees in managing the affairs of Engineers Canada. It does so by setting out the principles, standards and guidelines of ethical conduct, thereby ensuring confidence, transparency and trust in the integrity, professionalism and impartiality of the decisions made by the Board and Board committees.

### 4.3.1 Board and Committee member Conduct

- (1) Engineers Canada is committed to ensuring an inclusive and supportive environment. Board members and members of Committees shall, at all times, conduct themselves in an ethical, professional, and lawful manner. This includes proper use of authority and appropriate decorum.
- (2) Expected behavior for Board members and members of Board committees at in-person and/or virtual events, activities and meetings include that:
  - a) They shall refrain from violent behavior, harassment, intimidation, retaliation or any form of discrimination and shall treat one another and staff members with respect, co-operation, and a willingness to deal openly on all matters, valuing a diversity of views and opinion;
  - b) They should be considerate, respectful, and collaborative with others;
  - c) They should communicate openly with respect for others, critiquing ideas rather than individuals;
  - d) They should avoid personal attacks directed toward others;
  - e) They should be mindful of their surroundings and their fellow participants; and,
  - f) They should respect the rules and policies of the meeting venue, hotels, Engineers Canada contracted facility, or any other venue.
- (3) Unacceptable behavior by Board or Board committee members includes, but is not limited to:
  - a) Verbal or written comments that are not welcome and/or are personally offensive that relate to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin, or age;



- b) Violations of federal or provincial laws that could result in fines or civil damages payable by Engineers Canada or that could otherwise significantly harm Engineers Canada's reputation or public image;
- c) Unethical conduct and/or conduct that contravenes any Engineers Canada policies or its Code of Conduct; and
- d) Danger to the health, safety or well-being of staff, other Board or Board committee members and/or the general public.
- (4) Board members and members of Board committees shall ensure that unethical, unprofessional or illegal activities not covered or specifically prohibited by the foregoing or any other legislation are neither encouraged nor condoned and are reported as per section 4.3.3, *Compliance with Board policies*.
- (5) A Board member or a member of a Board committee who is no longer holding good standing status with their provincial Regulator shall be suspended from participation in Board and Board committee activities until they return to good standing status.
- (6) A Board member or a member of a Board committee who is alleged to have violated this Code of Conduct shall be so informed. As per section 4.3.3, *Compliance with Board policies*, such breaches shall be investigated.
- (7) Upon appointment, Directors shall sign the oath of office or other suitable undertaking.
- (8) Upon appointment and every year thereafter, Board members and members of Board committees shall sign an acknowledgment of Policy 4.4, *Confidentiality*.

### **4.3.2** Conflict of interest guidelines

- (1) Board members and members of Board committees shall act at all times in the best interests of Engineers Canada. This means putting the interests of Engineers Canada ahead of any personal interest or the interest of any other person or entity. It also means performing their duties and transacting the affairs of the corporation in such a manner that promotes public confidence and trust in the integrity, objectivity and impartiality of the Board or Committee.
- (2) Board members and members of Board committees shall not use their Board or Committee position to obtain employment at Engineers Canada for themselves, family members, or close associates. Board and Committee members must resign from the Board or Board committee before applying for employment with Engineers Canada.
- (3) Board members and members of Board committees shall not directly or indirectly offer or accept cash payments, gifts, gratuities, privileges or other personal rewards, which are intended to influence the activities or affairs of Engineers Canada. Board members and members of Board committees may, however, give or receive modest gifts or hospitality as a matter of general and



accepted business practice, provided the foregoing does not include cash or other negotiable instruments and provided all gifts or hospitality have been disclosed and properly accounted for.

- (4) Both prior to serving on the Board and during their term of office, Directors must openly disclose a potential, real or perceived conflict of interest as soon as the issue arises and before the Board or its committees deal with the matter at issue.
- (5) If a Director is not certain whether they are in a conflict of interest, the matter may be brought forward to the President or the Board for advice and guidance.
- (6) If there is any question or doubt about the existence of a real or perceived conflict of interest, the Board will determine by majority vote if a conflict of interest exists. The Director potentially involved in the conflict of interest shall be absent from the discussion and shall not vote on the question.
- (7) It is the responsibility of other Directors who are aware of a real, potential or perceived conflict of interest on the part of a fellow Director to raise the issue for clarification, first with the Director in question and, if still unresolved, with the President of the Board or the full Board.
- (8) The Director must declare the conflict in advance and, if decided by the Board, shall:
  - a) abstain from participation in any discussion on the matter;
  - b) not attempt to personally influence the outcome;
  - c) refrain from voting on the matter; and,
  - d) leave the meeting room for the duration of any discussion or vote.
- (9) The disclosure of a conflict of interest and decision as to whether a conflict exists shall be recorded in the minutes of the meeting.
- (10) Directors have an ongoing obligation to disclose conflicts of interest in accordance with s. 141 of the Canada *Not-for-profit Corporations Act*.

### **4.3.3** Compliance with Board policies

- (1) Board members and members of Board committees are expected to comply with all Board policies. A Board member or member of a Board committee who is unsure about the interpretation of any policy should consult with the president of the Board or the CEO. Anyone unable to carry out the material responsibilities of his/her position or to conduct him/herself in a manner consistent with Board policy, should consider voluntarily resigning their position.
- (2) Anyone who wishes to file a complaint against a Board member or member of a Board committee for a violation of this policy, the confidentiality policy or the oath of office (both contained within Policy 4.4, *Confidentiality*) must do so in writing and address it to the President. If the matter involves the President, the complaint shall instead be addressed to the remaining Board officers.



The complaint must identify the complainant, the respondent (i.e. the subject of the complaint) and the grounds for the complaint.

- (3) The respondent shall be informed in writing of the complaint and entitled to present his or her views of the complaint within 30 days of receiving notice of the complaint.
- (4) The President or, if the matter involves the President, the remaining Board officers, shall establish a panel to consider the merits of the complaint within 30 business days of receiving a response from the respondent. The panel shall consist of the President, the Past President, and the President-Elect. Where the complaint involves any of the preceding, an alternate director shall be appointed. The selection of an alternate director shall be at the discretion of the remaining panel members.
- (5) The panel shall consider the complaint and may involve outside consultants (such as an ethicist or a lawyer) to investigate its merits. The panel shall report its findings, in writing, to both the complainant and the subject of the complaint within 90 days of receipt of the complaint.
- (6) The panel's report will include a course of action for disposing of the complaint. The panel may:
  - a) Determine that the complaint does not warrant further action. If the complainant is not satisfied with that decision, they may submit the written complaint to the full Board for further consideration;
  - b) Mediate between the complainant and the respondent, until the complaint has been resolved; or
  - c) Refer the complaint to the Board.
- (7) If the matter is referred to the Board, it shall be heard at the next Board meeting, in an in-camera session. The Board shall be presented with the complaint, the response, and the report. The complainant and the respondent shall be invited to attend to respond to questions from the Board.
- (8) If the complainant or the respondent is a Board member, then they shall recuse themselves from the deliberations and any vote upon a motion regarding the complaint.
- (9) Board members or members of Board committees who have been found in violation of this policy or policy 4.4, *Confidentiality* may be subject to the following sanctions:
  - a) A requirement to modify or discontinue the conduct giving rise to the complaint;
  - b) A requirement to undergo training or other remedial action;
  - c) Admonishment or reprimand;
  - d) Removal from Board- or committee-related assignments and/or loss of duties or privileges;
  - e) Submit to resigning their position as a member of a Board committee;
  - f) A report to the individual's home Regulator, submitted to the Council via its president or secretary;
  - g) Any other reasonable or prudent sanction as appropriate under the circumstance;



- h) Termination of their position on a Board committee (for members of Board committees only); or
- i) A recommendation to the Members to remove the Director from the Board (for Board members only).
- (10) If the respondent does not cooperate with the decision of the Board, the Board may take such further action as it deems appropriate up to and including termination from a Board committee, or a recommendation to the Members to remove the Director, as appropriate.



### 4 Role of the Board

The role of the Board is to provide strategic direction and ensure appropriate financial and risk management for the organization. The Board shall provide this leadership with due consideration of long-term impacts, and a clear distinction between the roles and responsibility of the Board and staff. Board directors <u>Directors</u> are expected to be knowledgeable and prepared to cast a vote.

#### 4.3 Code of conduct

Date of adoption: April 9, 2018 (Motion 5693)	Review period: Annual
Date of latest amendment: <del>May 22, 2020 (</del> Motion <del>5851</del> )	Date last reviewed: <del>May 22, 2020</del>

This policy is intended to provide guidance to members of the Board and Board committees in managing the affairs of Engineers Canada. It does so by setting out the principles, standards and guidelines of ethical conduct, thereby ensuring confidence, transparency and trust in the integrity, professionalism and impartiality of the decisions made by the Board and Board committees.

#### 4.3.1 Board and Committee member Conduct

- (1) Engineers Canada is committed to ensuring an inclusive and supportive environment. The Board members and members of Committees shall, at all times, conduct itself-themselves in an ethical, professional, and lawful manner. This includes proper use of authority and appropriate decorum.
- (2) Expected behavior for Board members and members of Board committees at in-person and/or virtual events, activities and meetings include that:
  - a) They shall refrain from violent behavior, harassment, intimidation, retaliation or any form of discrimination and shall treat one another and staff members with respect, co-operation, and a willingness to deal openly on all matters, valuing a diversity of views and opinion;
  - b) They should be considerate, respectful, and collaborative with others;
  - c) They should communicate openly with respect for others, critiquing ideas rather than individuals;
  - d) They should avoid personal attacks directed toward others;
  - e) They should be mindful of their surroundings and their fellow participants; and,
  - f)
     They should respect the rules and policies of the meeting venue, hotels, Engineers Canada

     contracted facility, or any other venue.

(3) Unacceptable behavior by Board or Board committee members includes, but is not limited to:

Engineers Canada Board Policy Manual Section 4: Role of the Board **Commented [ES1]:** From policy 8.2, Diversity and Inclusion

**Commented [ES2]:** Incorporates part of Diversity and Inclusion policy



- a) Verbal or written comments that are not welcome and/or are personally offensive that relate to gender, sexual orientation, disability, physical appearance, body size, race, religion, national origin, or age;
- b) Violations of federal or provincial laws that could result in fines or civil damages payable by Engineers Canada or that could otherwise significantly harm Engineers Canada's reputation or public image;
- c) Unethical conduct and/or conduct that contravenes any Engineers Canada policies or its Code of Conduct; and\_
- <u>d)</u> Danger to the health, safety or well-being of staff, other Board or Board committee members and/or the general public.
- (4) Board members and members of Board committees shall ensure that unethical, unprofessional or illegal activities not covered or specifically prohibited by the foregoing or any other legislation are neither encouraged nor condoned and are reported as per section 4.3.3, *Compliance with Board policies.*
- (5) A Board member or a member of a Board committee who is no longer holding good standing status with their provincial Regulator shall be suspended from participation in Board and Board committee activities until they return to good standing status.
- (1) Board members and members of Board committees shall refrain from violent behaviour, harassment, or any form of discrimination and shall treat one another and staff members with respect, co operation, and a willingness to deal openly on all matters.
- (2) Board members and members of Board committees must act honestly and in good faith in the best interests of the corporation in accordance with s. 148 of the Canada Not for profit Corporations Act.
- (3) Board members and members of Board committees have an ongoing obligation to disclose conflicts of interest in accordance with s. 141 of the Canada Not for profit Corporations Act. Directors that cannot act in the best interests of Engineers Canada or are conflicted should recuse themselves from the salient part of the Board meeting, and they shall not vote on the decision at hand.
- (4) Board members and members of Board committees shall not use their Board position to obtain employment at Engineers Canada for themselves, family members, or close associates. Board members must resign from the Board before applying for employment with Engineers Canada.
- (5) Board members and members of Board committees will support the legitimacy and authority of Board decisions, regardless of their personal position on the issue, and shall not discuss the varying opinions of individual members in accordance with s. 147 of the Canada Not for profit Corporations Act.
- (6) Board members and members of Board committees shall attend meetings on a regular and punctual basis and be properly prepared to participate.

Engineers Canada Board Policy Manual Section 4: Role of the Board **Commented [ES3]:** Incorporates part of the Diversity and Inclusion policy



- (7) Board members and members of Board committees shall ensure that unethical activities not covered or specifically prohibited by the foregoing or any other legislation are neither encouraged nor condoned and are reported as per policy 4.3.1, *Compliance with Board policies*.
- (8) A Board member or a member of a Board committee who is no longer holding good standing status with their provincial regulator shall be suspended from participation in Board and Committee activities until they return to good standing status.
- (9)(6) A Board member or a member of a Board committee who is alleged to have violated this Code of <u>Ceonduct shall be so informed. As per policy section</u> 4.3.<u>13</u>, Compliance with Board policies, such breaches shall be investigated.
- (7) Upon appointment, Directors shall sign the oath of office or other suitable undertaking.
- (10)(8) Upon appointment and every year thereafter, Board members and members of Board committees shall sign an acknowledgment of the Policy 4.4, Confidentiality-policy.

#### 4.3.2 Conflict of interest guidelines

- (1) Board members and members of Board committees shall act at all times in the best interests of Engineers Canada. This means putting the interests of Engineers Canada ahead of any personal interest or the interest of any other person or entity. It also means performing their duties and transacting the affairs of the corporation in such a manner that promotes public confidence and trust in the integrity, objectivity and impartiality of the Board or Committee.
- (2) Board members and members of Board committees shall not use their Board or Committee position to obtain employment at Engineers Canada for themselves, family members, or close associates. Board and Committee members must resign from the Board or Board committee before applying for employment with Engineers Canada.
- (3) Board members and members of Board committees shall not directly or indirectly offer or accept cash payments, gifts, gratuities, privileges or other personal rewards, which are intended to influence the activities or affairs of Engineers Canada. Board members and members of Board committees may, however, give or receive modest gifts or hospitality as a matter of general and accepted business practice, provided the foregoing does not include cash or other negotiable instruments and provided all gifts or hospitality have been disclosed and properly accounted for.
- (4) Both prior to serving on the Board and during their term of office, Directors must openly disclose a potential, real or perceived conflict of interest as soon as the issue arises and before the Board or its committees deal with the matter at issue.
- (5) If a Director is not certain whether they are in a conflict of interest, the matter may be brought forward to the President or the Board for advice and guidance.

**Commented [ES4]:** This allows a Director to bring the issue to the Board in cases where it is the President with the conflict.

Engineers Canada Board Policy Manual Section 4: Role of the Board



- (6) If there is any question or doubt about the existence of a real or perceived conflict of interest, the Board will determine by majority vote if a conflict of interest exists. The Director potentially involved in the conflict of interest shall be absent from the discussion and shall not vote on the guestion.
- (7) It is the responsibility of other Directors who are aware of a real, potential or perceived conflict of interest on the part of a fellow Director to raise the issue for clarification, first with the Director in guestion and, if still unresolved, with the President of the Board or the full Board.
- (8) The Director must declare the conflict in advance and, if decided by the Board, shall:
  - a) abstain from participation in any discussion on the matter;
  - b) not attempt to personally influence the outcome;
  - c) refrain from voting on the matter; and,
  - d) leave the meeting room for the duration of any discussion or vote.
- (9) The disclosure of a conflict of interest and decision as to whether a conflict exists shall be recorded in the minutes of the meeting.
- (10) Directors have an ongoing obligation to disclose conflicts of interest in accordance with s. 141 of the Canada Not-for-profit Corporations Act.

(11)(1) Upon appointment, Directors shall sign the oath of office or other suitable undertaking.

#### 4.3.14.3.3 Compliance with Board policies

- (1) Board members and members of Board committees are expected to comply with all Board policies. A Board member or member of a <u>board\_Board\_committee</u> who is unsure about the interpretation of any policy should consult with the president of the Board or the CEO. Anyone unable to carry out the material responsibilities of his/her position or to conduct him/herself in a manner consistent with Board policy, should consider voluntarily resigning <u>his/hertheir</u> position.
- (2) Anyone who wishes to file a complaint against a Board member or member of a Board committee for a violation of the code of conduct this policy, the confidentiality policy or the oath of office (both contained within Policy 4.4, Confidentiality) must do so in writing and address it to the president President of the Board. If the matter involves the President, the complaint shall instead be addressed to the remaining Board officers. The complaint must identify the complainant, the respondent (i.e. the subject of the complaint) and the grounds for the complaint.
- (3) The respondent shall be informed in writing of the complaint and entitled to present his or her views of the complaint within 30 days of receiving notice of the complaint.
- (4) The president President or, if the matter involves the President, the remaining Board officers, shall establish a panel to consider the merits of the complaint within 30 business days of receiving a response from the respondent. The panel shall consist of the pPresident, the pPresident, and

**Engineers Canada Board Policy Manual** Section 4: Role of the Board **Commented [ES5]:** Again, this allows the Director to bring the matter either to the President or the Board. So, if it's the President who is conflicted, they would go to the full Board for clarification.



the <u>Pp</u>resident-<u>eE</u>lect. Where the complaint involves any of the preceding, an alternate director shall be appointed. The selection of an alternate director shall be at the discretion of the remaining panel members.

- (5) The panel shall consider the complaint and may involve outside consultants (such as an ethicist or a lawyer-with expertise in ethics) to investigate its merits. The panel shall report its findings, in writing, to both the complainant and the subject of the complaint within 90 days of receipt of the complaint.
- (6) The panel's report will include a course of action for disposing of the complaint. The panel may:
  - a) Determine that the complaint does not warrant further action. If the complainant is not satisfied with that decision, <u>he/shethey</u> may submit the written complaint to the full Board for further consideration-;
  - b) Mediate between the complainant and the respondent, until the complaint has been resolved-<u>;</u> or
  - c) Refer the complaint to the Board.
- (7) If the matter is referred to the Board, it shall be heard at the next Board meeting, in an in-camera session. The Board shall be presented with the complaint, the response, and the report. The complainant and the respondent shall be invited to attend to respond to questions from the Board.
- (8) If the complainant or the respondent is a Board member, then they shall recuse themselves from the deliberations and any vote upon a motion regarding the complaint.
- (9) Board members or members of Board committees who have been found in violation of the Code of conduct<u>this policy</u>, the or policy 4.4, <u>C</u>eonfidentiality policy, or the oath of office (as applicable) may be subject to the following sanctions:
  - a) A requirement to modify or discontinue the conduct giving rise to the complaint;
  - b) A requirement to undergo training or other remedial action;
  - c) Admonishment or reprimand;
  - d) Removal from Board- or committee-related assignments and/or loss of duties or privileges;
  - e) Submit to resigning his or hertheir position as a member of a Board committee;
  - f) A report to the individual's home <u>regulatorRegulator</u>, submitted to the Council via its president or secretary, where the Board member is an engineer;
  - g) Any other reasonable or prudent sanction as appropriate under the circumstance;
  - h) Termination of their position on a Board committee (for <u>Board</u>members of <u>Board</u> committees only); or
  - A recommendation to the Members to remove the <u>director\_Director</u> from the Board (for Board members only).

(10)

Engineers Canada Board Policy Manual Section 4: Role of the Board



(11) If the violation involves a breach of a Member's code of ethics, a complaint or allegation shall be submitted to their governing body / professional association.

(12)(10) If the respondent does not cooperate with the decision of the Board, the Board may take such further action as it deems appropriate up to and including termination from a Board committee, or a recommendation to the Members to remove the <u>directorDirector</u>, as appropriate.

Engineers Canada Board Policy Manual Section 4: Role of the Board



# 6 Engineers Canada Board committees and Task Forces

### 6.1 Board Committees and Task Forces

Date of adoption: April 9, 2018 (Motion 5693)	Review period: Annual
Date of latest amendment: (Motion)	Date last reviewed:

- (1) Board Committees are defined as groups set up under the authority of the Board to perform ongoing tasks as specified in their terms of reference. A Task Force is formed for specific tasks and is typically dissolved once the task has been completed. The Board can delegate responsibility but is always accountable for decisions.
- (2) The standing Board Committees are as follows:
  - a) Canadian Engineering Accreditation Board (CEAB);
  - b) Canadian Engineering Qualifications Board (CEQB);
  - c) Finance, Audit, and Risk Committee;
  - d) Governance Committee; and,
  - e) Human Resources Committee
- (3) The Board shall appoint Committees and Task Forces as it considers necessary to serve the interests of Engineers Canada and the Regulators. It may delegate any authority it deems necessary for a Committee or Task Force to perform its function. The Board shall determine the terms of reference for all Committees and Task Forces they have appointed.
- (4) The terms of reference for every Committee shall define the Committee's responsibilities, tasks, authority, and composition.
- (5) The terms of reference for every Task Force shall define the mandate, timeline, and membership of the Task Force.
- (6) The CEO monitors the performance of Board Committees and Task Forces for compliance with their delegated authority where staff has a role with the activities.
- (7) All Committee and Task Force members shall abide by the same Code of Conduct as governs the Board.
- (8) All Committees and Task Forces will:
  - a) Develop and maintain an annual work plan with specific deliverables and deadlines;
  - b) Make minutes of their meetings and proceedings available to all Board Directors; and,
  - c) Report annually to the Board and the Members on the achievement of their assigned Board responsibilities and any outcomes or actions assigned to it under the Strategic Plan.



### 6.1.1 Composition

- (1) Board Committees and Task Forces may be populated by Board members, other volunteers, or any combination thereof. Staff shall provide support to Board Committees and Task Forces, but they are not members and shall have no vote.
- (2) The Human Resources Committee, in consultation with each outgoing Committee chair, shall annually nominate new Committee members considering:
  - a) Committee work plan;
  - b) Directors' interests;
  - c) Directors' skills and competencies; and,
  - d) Board succession planning.
- (3) With the exception of the CEAB and CEQB, the HR Committee shall recommend a chair to each Committee and Task Force. The Committee or Task Force shall make the final determination of who will serve as chair.
- (4) The Board appoints the members of all Committees, normally for a one-year term.
- (5) Members may be re-appointed to Committees. Reappointment of the members and staggered terms of office are desirable elements to support continuity.
- (6) In the selection of Committee and Task Force members, every reasonable effort shall be made to achieve a diverse membership, reflective of the Canadian population.
- (7) In the event of a vacancy on a Committee or Task Force prior to the conclusion of the term, the Board may fill the vacancy by appointment for the duration of the term.
- (8) In the event that a member of a Committee or Task Force is temporarily unable to serve, an alternate may be appointed by the Board to act in the member's absence.

#### 6.1.2 Authority

- (1) Through the Committee chair, all Committees and Task Forces may:
  - a) Request information from Engineers Canada staff as required for the efficient conduct of their business;
  - b) Use staff resources as required for administrative support of the Committee or Task Force; and,
  - c) Call on advisors for subject matter expertise.
- (2) Board Committees and Task Forces shall not speak or act for the Board except when formally given such authority for specific and/or time-limited purposes.
- (3) Except as defined in written terms of reference, no Committee or Task Force has authority to commit the funds or resources of Engineers Canada.


## 6.1.3 Role of Committee chairs

- (1) Chairs work closely with Engineers Canada staff and provide leadership to their Committees. They are responsible for:
  - a) Chairing meetings and setting their agenda;
  - b) Reviewing Committee minutes and briefing notes;
  - c) Developing, monitoring, and delivering on the work plan, with support from staff;
  - d) Providing updates on the Committee's activities to the Board;
  - e) Facilitating Committee deliberations that are timely, fair, orderly, thorough, and efficient; and,
  - f) Addressing issues arising with and between Committee members.
- (2) Any of the above responsibilities may be delegated by the Committee chair to other Committee members, as and when necessary.

## 6.1.4 Committee chair competencies

- (1) To deliver on the above responsibilities, in addition to the competencies established in Policy 4.8, *Board Competency Profile*, a chair should demonstrate the following skills, knowledge, and abilities:
  - a) Ability to build consensus;
  - b) Understanding and working within the Engineers Canada governance model;
  - c) Understanding broader strategic context;
  - d) Communications skills and relationship management with Key Stakeholders including the CEAB, the CEQB, the Regulators, the CEO Group, the officials' groups, and Engineers Canada staff; and,
  - e) Work ethic, commitment, and ability to meet deadlines.



## 6 Engineers Canada Board committees and task Task Forces

## 6.1 Board committees Committees and tTask fForces

Date of adoption: April 9, 2018 (Motion 5693)	Review period: Annual
Date of latest amendment: <del>May 22, 2020</del> (Motion <del>5851</del> )	Date last reviewed: <del>May 22, 2020</del>

- (1) Board <u>committees\_Committees</u> are defined as groups set up under the authority of the Board to perform ongoing tasks as specified in their terms of reference. A <u>T</u>task <u>E</u>force is formed for specific tasks and is typically dissolved once the task has been completed. The Board can delegate responsibility but is always accountable for decisions.
- (2) The standing Board Ceommittees are as follows:
  - a) Canadian Engineering Accreditation Board (CEAB);
  - b) Canadian Engineering Qualifications Board (CEQB);
  - c) Finance, Audit, and Risk Committee;
  - d) Governance Committee; and,
  - e) Human Resources Committee
  - <del>f)</del>e)
- (3) The Board shall appoint <u>Ceommittees and tTask Fforces as it considers necessary to serve the interests of Engineers Canada and the Rregulators. It may delegate any authority it deems necessary for a <u>Ceommittee or tTask fForce to perform its function</u>. The Board shall determine the terms of reference for all <u>eCommittees and tTask fforces they have appointed</u>.</u>
- (4) The terms of reference for every <u>Ceommittee</u> shall define the <u>Ceommittee</u>'s responsibilities, tasks, authority, and composition.
- (5) The terms of reference for every <u>Ttask F</u>orce shall define the mandate, timeline, and membership of the <u>Ttask F</u>orce.
- (6) The CEO monitors the performance of Board <u>C</u>eommittees and <u>T</u>task <u>F</u>forces for compliance with their delegated authority where staff has a role with the activities.
- (7) All <u>C</u>eommittee and <u>T</u>task <u>F</u>force members shall abide by the same Code of Conduct as governs the Board.
- (8) All <u>Ceommittees and t</u>ask <u>Forces will</u>:
  - a) Develop and maintain an annual work plan with specific deliverables and deadlines;
     b) Submit writteMaken minutes of their meetings and proceedings available to all Board dDirectors; and,

**Engineers Canada Board Policy Manual** 

Section 6: Engineers Canada Board committees and task forces

**Commented [ES1]:** Update to: "Make written minutes of their meetings and proceedings available to all Board Directors."

Current practice is to put minutes up on EC website, but this makes it sound like minutes are sent to directors



c) Report annually to the Board and the <u>members-Members</u> on the achievement of their assigned Board <u>responsibility responsibilities</u> and any outcomes or actions assigned to it under the <u>Setrategic <del>p</del>P</u>lan.

6.1.1 Composition

- (1) Board <u>C</u>eommittees and <u>T</u>ask <u>F</u>orces may be populated by <u>board Board members</u>, other volunteers, or any combination thereof. Staff shall provide support to <u>board Board eC</u>ommittees and <u>T</u>task <u>F</u>orces, but they are not members and shall have no vote.
- (2) The Human Resources Committee, in consultation with each outgoing <u>C</u>eommittee chair, shall annually nominate new <u>C</u>eommittee members considering:
  - a) Committee work plan;
  - b) Directors' interests;
  - c) Directors' skills and competencies; and,
  - d) Board succession planning.
- (3) With the exception of the CEAB and CEQB, the HR Committee shall recommend a chair to each <u>Ceommittee and tTask Fforce</u>. The <u>eCommittee or Ttask Fforce</u> shall make the final determination of who will serve as chair.
- (4) The Board appoints the members of all ecommittees, normally for a one-year term.
- (5) Members may be re-appointed to <u>C</u>eommittees. Reappointment of the members and staggered terms of office are desirable elements to support continuity.
- (6) In the selection of <u>C</u>eommittee and <u>T</u>task <u>E</u>force members, every reasonable effort shall be made to achieve a <u>diverse</u> membership, <u>reflective of the Canadian population</u>. <u>that reflects the diversity</u> <u>objectives established in Policy 8.2 of the Board</u>.
- (7) In the event of a vacancy on a e<u>C</u>ommittee or <u>T</u>task <u>F</u>force prior to the conclusion of the term, the Board may fill the vacancy by appointment for the duration of the term.
- (8) In the event that a member of a e<u>C</u>ommittee or <u>T</u>task <u>fF</u>orce is temporarily unable to serve, an alternate may be appointed by the Board to act in the member's absence.

#### 6.1.2 Authority

- (1) Through the <u>Committee</u> chair, all <u>Committees</u> and <u>T</u>task <u>F</u>forces may:
  - a) Request information from Engineers Canada staff as required for the efficient conduct of their business;
  - b) Use staff resources as required for administrative support of the eCommittee or Task Force; and,
  - c) Call on advisors for subject matter expertise.
- (2) Board <u>C</u>eommittees and <u>T</u>ask <u>F</u>forces shall not speak or act for the Board except when formally given such authority for specific and/or time-limited purposes.
- (3) Except as defined in written terms of reference, no <u>Ceommittee or <u>T</u>task <u>F</u>force has authority to commit the funds or resources of Engineers Canada.</u>

#### **Engineers Canada Board Policy Manual**

Section 6: Engineers Canada Board committees and task forces



#### 6.1.3 Role of <u>eC</u>ommittee chairs

- Chairs work closely with Engineers Canada staff and provide leadership to their <u>Ceommittees</u>. They are responsible for:
  - a) Chairing meetings and setting their agenda;
  - b) Reviewing <u>eC</u>ommittee minutes and briefing notes:
  - c) Developing, monitoring, and delivering on the work plan, with support from staff:
  - d) Providing updates on the <u>Ceommittee's activities to the Board</u>;
  - <del>d)</del>—
  - e) Facilitating <u>eC</u>ommittee deliberations that are timely, fair, orderly, thorough, and efficient; and,
  - <u>f)</u> Addressing issues arising with and between <u>Ceommittee members</u>.
- (2) Any of the above responsibilities may be delegated by the Committee chair to other Committee members, as and when necessary.

#### 6.1.4 Committee chair competencies

- To deliver on these-the above responsibilities, in addition to the competencies established in Policy
   4.8, Board <u>C</u>eompetency <u>PP</u>rofile, a chair should demonstrate the following skills, knowledge, and abilities:
  - a) Ability to build consensus;
  - b) Understanding and working within the Engineers Canada governance model;
  - c) Understanding broader strategic context;
  - d) Communications skills and relationship management with <u>K</u>key <u>external S</u>stakeholders including the CEAB, the CEQB, the <u>R</u>regulators, the CEO Group, the officials' groups, and Engineers Canada staff; and,
  - e) Work ethic, commitment, and ability to meet deadlines.



# 6 Engineers Canada Board committees and Task Forces

## 6.13 President-elect nomination and election process

Date of adoption: May 24, 2019 (Motion 5756)	Review period: Annual
Date of latest amendment: (Motion)	Date last reviewed:

This policy outlines a fair and transparent process to nominate and elect the President-Elect. It applies whether voting takes place using in-person or electronic ballots.

## 6.13.1 Introduction

- (1) The President-Elect is elected by the Engineers Canada Board of Directors annually, at the spring (May) Board meeting.
- (2) The President-Elect holds office for the period from the close of the spring Board meeting to the next spring Board meeting.

## 6.13.2 Eligibility

- (1) To serve as the President-Elect, a Director shall:
  - a) have been nominated to serve as a Director by their Regulator for the ensuing three years; or,
  - b) subject to being elected or acclaimed, as the case may be, to the office of President-Elect, obtain a written commitment from their Regulator to nominate them for election as a Director for an additional period to enable them to serve as President-Elect, followed by terms as President and then Past President; and,
  - c) for Directors in their second term, have a minimum of one (1) year remaining in their term of office (*effective 2022*).
- (2) All candidates for election shall provide, as part of their nomination:
  - a) A declaration of interest form (Appendix A); and,
  - b) A curriculum vitae that will be provided to the Board.
- (3) All documents must be submitted within the time period set by the Past President, which shall be a minimum of four weeks in advance of the spring Board meeting.

## 6.13.3 Nomination procedures

- (1) The Past-President shall act as the Nominating Committee and shall:
  - a) Maintain an impartial position;
  - b) Attempt to ensure that sufficient nominations are received;
  - c) Prior to the spring Board meeting, at least:
    - i. Three months in advance: issue a call for nominations to all Directors, referencing this policy;



- ii. Four weeks in advance: receive nominations and confirm eligibility; and
- iii. **Two weeks in advance**: provide the Board with the slate of candidates and their curricula vitae.
- d) Where no nominations are received, the Board shall determine how the position will be filled.

## 6.13.4 Voting

- A. Scrutineers
- (1) The Board will appoint two persons to act as scrutineers, typically the Engineers Canada CEO and the president of the Regulator where the meeting is held.
- B. Conduct of elections
- (1) The Past President shall conduct the elections. If the Past President is unavailable or unwilling to conduct the elections, the Board shall appoint another Board member to act as chair and conduct the elections.
- (2) If only one candidate is nominated for President-Elect, the position shall be filled by acclamation.
- (3) If more than one candidate is nominated for President-Elect, election for the position shall be by secret ballot.
- (4) Each candidate may address the Board, in alphabetical order by last name, for a maximum of five minutes.
- (5) Each Director present at the meeting may cast one vote. Proxy votes are not permitted.
- (6) Any spoiled ballots will be discarded, and any ballots cast after the election has closed will not be counted.
- (7) In the event of two candidates for President-Elect, the President will cast a second vote for one candidate and place the vote in a sealed envelope.
  - a) If one candidate receives a majority of the votes, that candidate shall be declared elected.
  - b) In the event of a tie in the number of votes received, the scrutineers shall open the sealed envelope and use the vote therein.
- (8) In the event of three or more candidates for President-Elect, the President and Past President shall each cast a second vote for all but one of the candidates and place the votes in sealed envelopes.
  - a) If one candidate receives a majority of the votes, that candidate shall be declared elected.
  - b) In the event no candidate is elected on the first ballot, the candidate receiving the lowest number of votes shall be removed from the slate and new ballots will be successively presented until one candidate receives a majority of the votes.
  - c) In the event of a tie in the number of votes received by two or more candidates, as determined by the scrutineers, such that one candidate cannot be dropped from the slate for the next round



of balloting, the scrutineers shall first open the President's sealed envelope and use the votes therein. If one candidate can still not be removed from the next round, the scrutineers shall open the Past President's sealed envelope and use the votes therein. If it is still not possible to remove one candidate, the result will be declared deadlocked and one or more further rounds of voting with all remaining candidates on the ballot will take place until the deadlock is broken.

- (9) The scrutineers will report the name of the candidate who received the majority of the votes to the Past President. The scrutineers will not report the vote totals or whether the sealed envelopes were used.
- (10) The Past President will thereafter announce the successful candidate.
- (11)When the election is complete, the Past President will request a motion to destroy any in-person ballots. This may not be necessary where electronic ballots are used.



### Appendix A: Declaration of interest form

Date: \_\_\_\_\_

To: Chair, Nominating Committee

I,\_\_\_\_\_, am pleased to confirm that I am placing my name into nomination for election as President-Elect of the Engineers Canada Board of Directors.

I have attached my curriculum vitae, for distribution to the Board.

### Term of office

\_\_\_\_ I have been nominated by my Regulator to serve as a Director for the required term, or

\_\_\_\_\_ I have received written confirmation that, in the event I am elected or acclaimed, as the case may be, in the office of President-Elect, my Regulator will nominate me to stand for election for an additional period to enable me to serve the term of office.

If elected, I would be pleased and honoured to serve the Board.

(Candidate signature)

(Date)

Encl: Regulator letter of support Director curriculum vitae



## 6 Engineers Canada Board committees and Task Forces

### 6.13 President-elect nomination and election process

Date of adoption: May 24, 2019 (Motion 5756)	Review period: Annual
Date of latest amendment: <del>May 22, 2020</del> (Motion <del>-5851</del> )	Date last reviewed: May 22, 2020

This policy outlines a fair and transparent process to nominate and elect the President-Elect. <u>It applies</u> whether voting takes place using in-person or electronic ballots.

#### 6.13.1 Introduction

- The President-Elect is elected by the Engineers Canada Board of Directors annually, at the spring (May) Board meeting.
- (2) The President-Elect holds office for the period from the close of the spring Board meeting to the next spring Board meeting.

#### 6.13.2 Eligibility

- (1) To serve as the President-Elect, a Director shall:
  - a) -have either three years remaining in his/her term of office or have been nominated to serve as a Director by their <u>R</u>regulator for the ensuing three years; or,
  - b) subject to being elected or acclaimed, as the case may be, to the office of President-Elect, obtain a written commitment from their Regulator to nominate them for election as a Director for an additional period to enable them to serve as President-Elect, followed by terms as President and then Past President-; and,
  - a)c) for Directors in their second term, have a minimum of one (1) year remaining in their term of office (effective 2022).
- (1)(2) All candidates for election shall provide, as part of their nomination:
  - a) A declaration of interest form (Appendix A); and,
  - b) A curriculum vitae that will be provided to the Board.
- (2)(3) All documents must be submitted within the time period set by the Past President, which shall be a minimum of four weeks in advance of the spring Board meeting.

#### 6.13.3 Nomination procedures

- (1) The Past-President shall act as the Nominating Committee and shall:
  - a) Maintain an impartial position;
  - b) Attempt to ensure that sufficient nominations are received;

#### Engineers Canada Board Policy Manual Section 6: Engineers Canada Board committees and task forces

Commented [ES1]: This wording comes from D. Lynch.

To summarize:

a) Covers the situation of a Director in year 3 of their first term, where their regulator has agreed to nominate them for another full term.

b) Covers the situation of a Director in year 2 or 3 of their first term, or for a Director in year 1 or 2 of their second term. This makes it clear that (depending on the wishes of the Regulator) their nomination may be conditional upon success in the election. If a Director in year 3 of term 1 is unsuccessful, and the Regulator wishes to place an alternate instead, the Regulator would be able to put forth that alternate (although, b/c of the timing, there would be a vacancy in the position for a period of time).

c) Precludes the Director in year 3 of term 2 from running for President-elect.



- c) Prior to the <u>Spring spring</u> Board meeting, at least:
  - i. Three months in advance: issue a call for nominations to <u>each-all</u> Directors, referencing this policy;
  - ii. Four weeks in advance: receive nominations and confirm receipt of the documents required aboveeligibility; and
- iii. Confirm that the director has been elected or is nominated to serve the required term
- iv.<u>iii. Two weeks in advance</u>: provide the Board with the slate of candidates and their curricula vitae.
- d) Where no nominations are received, the Board shall determine how the position will be filled.

#### 6.13.4 Voting

#### Proxy votes are not permitted.

- A. Scrutineers
- The Board will appoint two persons to act as scrutineers, typically the Engineers Canada CEO and the president of the Regulator where the meeting is held.

(2) The scrutineers shall distribute, collect, and count the ballots for each election.

- B. Conduct of elections
- (1) The Past President shall conduct the elections. If the Past President is unavailable or unwilling to conduct the elections, the Board shall appoint another Board member to act as chair and conduct the elections.
- (2) If only one candidate is nominated for President-Elect, the position shall be filled by acclamation.
- (3) If more than one candidate is nominated for President-Elect, election for the position shall be by secret ballot.
- (4) Each candidate may address the Board, in alphabetical order by last name, for a maximum of five minutes.

\_\_\_\_\_Each Director present at the meeting may cast one vote. Proxy votes are not permitted.

(5)

- (6) Any spoiled ballots will be discarded, and any ballots cast after the election has closed will not be counted.
- (6)(7) In the event of two candidates for President-Elect, the President will cast a second vote for one candidate and place the vote in a sealed envelope.
  - a) If one candidate receives a majority of the votes, that candidate shall be declared elected.

Engineers Canada Board Policy Manual Section 6: Engineers Canada Board committees and task forces



- b) In the event, only following discard of abstentions or spoiled ballots, of a tie in the number of votes received, as determined by the scrutineers during counting, the scrutineers shall open the sealed envelope and use the vote therein.
- (7)(8) In the event of three or more candidates for President-Elect, the President and Past President shall each cast a second vote for all but one of the candidates and place the votes in sealed envelopes.
  - a) If one candidate receives a majority of the votes, that candidate shall be declared presidentelected. -elect.
  - a)b)In the event If no candidate is elected on the first ballot, the candidate receiving the lowest number of votes is shall be removed from the slate and new ballots are will be successively presented until a one candidate receives a majority of the votes.
  - b)c) In the event, only following discard of abstentions or spoiled ballots, of a tie in the number of votes received by two or more candidates, as determined by the scrutineers during counting, such that one candidate cannot be dropped from the slate for the next round of balloting, the scrutineers shall firstly open the President's sealed envelope and use the votes therein. If one candidate can still not be removed from the next round, the scrutineers shall open the Past President's sealed envelope and use the votes therein. If it is still not possible to remove one candidate, the result will be declared deadlocked and one or more further rounds of voting with all remaining candidates on the ballot will take place until the deadlock is broken.
- (8)(9) The scrutineers will report the name of the successful candidatecandidate who received the majority of the votes -to the P-past P-president.-\_The scrutineers will not report the vote totals or whether the sealed envelopes were used.
- (9)(10) The Past President will <u>thereafter</u> announce the successful candidate, <u>being the candidate that</u> received a majority of votes cast.
- (10)(11) When the election is complete, the Past President will request a motion to destroy theany in-person ballots. This may not be necessary where electronic ballots are used.

Engineers Canada Board Policy Manual Section 6: Engineers Canada Board committees and task forces



#### Appendix A: Declaration of interest form

Date: \_\_\_\_\_

To: Chair, Nominating Committee

I,\_\_\_\_\_, am pleased to confirm that I am placing my name into nomination for election as President-Elect of the Engineers Canada Board of directorsDirectors.

I have attached my curriculum vitae, for distribution to the Board.

#### Term of office

\_\_\_\_ I have been <u>elected-nominated by my Regulator to serve</u> as a <u>director-Director to serve for</u> the required term, or

\_\_\_\_\_ I have received written confirmationbeen nominated by my regulator\_that, in the event I am elected or acclaimed, as the case may be,- in the office of President-Elect, my Regulator will nominate me to stand for election for an additional period to enable me to serve the term of office -I am seeking.

If elected, I would be pleased and honoured to serve the Board.

(Candidate signature)

(Date)

Encl: Regulator letter of support Director curriculum vitae

Engineers Canada Board Policy Manual Section 6: Engineers Canada Board committees and task forces



# 6 Engineers Canada Board committees and Task Forces

## 6.8 Governance Committee terms of reference

Date of adoption: April 9, 2018 (Motion 5693)	Review period: Biennial
Date of latest amendment: (Motion)	Date last reviewed:

The Governance Committee enhances the Board's effectiveness and efficiency on matters relating to Board governance principles and policies.

## 6.8.1 Responsibilities

- (1) The Governance Committee is tasked to fulfill Board responsibility #4: *Ensure the development and periodic review of Board policies.* The Governance Committee shall:
  - a) Review and maintain the currency and relevance of Board policies and governance documents.
  - b) Review and make recommendations on the currency and relevance of the Bylaws and Articles of Continuance.
  - c) Make recommendations for Board education related to governance and Board effectiveness.
  - d) Conduct a periodic survey of Regulators and Directors to evaluate the effectiveness of Board governance and operations, and develop action plans to address any required improvements.

## 6.8.2 Authority

The Governance Committee has the authority to make editorial changes to Board policies such as the correction of typographical and grammatical errors, to ensure the consistent use of terminology and plain language, and to update references.

## 6.8.3 Composition

- (1) The Committee is comprised of a minimum of three Directors, including the Past President.
- (2) Quorum for any Governance Committee meeting is 50 per cent of the Committee members plus one.
- (3) The Engineers Canada Corporate Secretary shall provide support to the Governance Committee.



## 6 Engineers Canada Board committees and <u>T</u>task <u>F</u>forces

## 6.8 Governance Committee terms of reference

Date of adoption: April 9, 2018 (Motion 5693)	Review period: Biennial
Date of latest amendment: May 22, 2020 (Motion 5851)	Date last reviewed: <del>May 22, 2020</del>

The Governance Committee enhances the Board's effectiveness and efficiency on matters relating to Board governance principles and policies.

#### 6.8.1 Responsibilities

- (1) The Governance Committee is tasked to fulfill Board responsibility #4: *Ensure the development and periodic review of Board policies*. The Governance Committee shall:
  - a) Review and maintain the currency and relevance of Board policies and governance documents.
  - b) Review and make recommendations on the currency and relevance of the Bylaws and Articles of Continuance.
  - Make recommendations for content and review results of the annual Board assessment survey.

H)c)Make recommendations for Board education related to governance and Board effectiveness.

e) Conduct a periodic survey of regulators Regulators and Defirectors to evaluate the effectiveness of Board governance and operations, and develop action plans to address any required improvements.

<del>f)</del>d)

#### 6.8.2 Authority

The Governance Committee has the following authority:

**<u>+</u>**<u>to</u> make editorial changes to Board policies such as the correction of typographical and grammatical errors, to ensure the consistent use of terminology and plain language, and to update references.

#### 6.8.3 Composition

- The Committee is comprised of a minimum of three <u>directorsDirectors</u>, including the <u>pastPast P-</u> president.
- (2) Quorum for any Governance Committee meeting is 50 per cent of the <u>C</u>eommittee members plus one.
- (3) The Engineers Canada Georporate Secretary shall provide support to the Governance Committee.

Engineers Canada Board Policy Manual

Section 6: Engineers Canada Board committees and task forces

**Commented [CM1]:** In accordance with changes to 4.12 -Board self-assessment



# **7** Board policies

## 7.1 Board, committee, and other volunteer expenses

Date of adoption: April 9, 2018 (Motion 5693)	Review period: Biennial
Date of latest amendment: (Motion)	Date last reviewed:

- (1) This policy applies to Engineers Canada Board members, Board Committee members, and other volunteers (collectively, "volunteers") who travel and/or incur travel-related expenses, including to attend or participate in meetings, events, and conferences ("events") in the course of carrying out Engineers Canada business.
- (2) The purpose of this policy is to ensure volunteers have a clear understanding of the guidelines, policy, and procedures around travel and the incursion of travel-related expenses, including the kind and method of business travel that is considered appropriate, in what circumstances pre-approval is required, and how travel-related expenses should be claimed.

## 7.1.1 Board and Committee members expenses

- (1) Volunteers shall be reimbursed for reasonable costs associated with travel for Engineers Canada business. Volunteers are accountable to determine the most practical methods of travel.
- (2) Expenses incurred for volunteers' attendance at meetings called by their Regulator, for which the Board Director is the appointed Director, shall not be reimbursed.
- (3) Expenses for the President's guest (or for the guest of the President's designate when the President is unable to attend) will be reimbursed when the President or designate attends a Regulator annual meeting, annual general meeting, or Geoscientists Canada annual meeting where guests are invited.
- (4) Travel expenses for the one guest of Board members may be reimbursed for attendance at only the annual meeting of members and the Board retreat.
- (5) Transportation costs will be reimbursed as appropriate for the situation.

## 7.1.2 Regulator presidents' expenses

Upon request, Engineers Canada shall reimburse (in accordance with this policy) travel-related expenses in excess of \$1,500 for presidents of Regulators with less than 2,500 registrants to attend Board meetings to which presidents are invited to attend.

## 7.1.3 Exceptional travel

(1) For international travel and travel within Canada, pre-approval by the President or their delegate is required before exceptional travel not included in Engineers Canada's approved Budget.



(2) Volunteers shall follow the standards set out in section 7.1.4, and are individually responsible for complying with this policy and are expected to exercise good business judgment when determining travel plans.

## 7.1.4 Acceptable travel-related expenses

- A. Airfare
- (1) Tickets should be purchased as early as possible to take advantage of the lowest fares, following the call of the event.
- (2) Lowest economy class airfare that allows for one piece of checked luggage should be used where available and practical. Engineers Canada's Corporate Rewards program should be used where practical.
- (3) When flying time is six (6) hours or more for any single leg of the trip, purchasing lowest-cost business class fare is permitted.
- (4) Checked and carry-on baggage fees and trip-cancellation insurance are eligible for reimbursement.

B. Rail

- (1) Tickets should be purchased as early as possible to take advantage of the lowest fares.
- (2) The standard for rail travel is business class.
- C. Buses, taxis, and ride-share
- (1) Reasonable bus, taxi, or ride-share fares shall be reimbursed.
- (2) Limousine service is discouraged unless it is more economical than taxi fare.
- D. Rental vehicles
- (1) Volunteers may travel by rental vehicle when it is more cost-effective or efficient than air, train, taxis, or personal vehicles (e.g. short trips, or where sharing makes renting a vehicle more attractive), including where:
  - a) Taxi/limousine service is not available or cost effective;
  - b) Location of the event is not easily accessible from a major airport; and,
  - c) Large quantities or materials are being delivered to an event location by the volunteer.
- (2) Volunteers who travel by rental vehicle shall be reimbursed for collision insurance and gasoline. The approved car rental category is mid-size, although free upgrades are permitted. When necessary, larger vehicles or vehicles with special requirements may be rented to transport excess baggage OR large items such as displays, or to accommodate medical reasons.
- (3) If, due to personal preference, a traveller opts to rent a vehicle instead of using other means of transport, the maximum amount payable will be the equivalent of taxi fare to and from the airport to location of the event.
- E. Personal vehicles
- (1) Personal vehicles may be used when overall economy is ensured.



- (2) Volunteers who travel by personal vehicle may claim the Canadian Revenue Agency (CRA) <u>automobile allowance rates</u> in effect at the time of travel, or the equivalent of the total travel costs of economy airfare, whichever is less.
- (3) Engineers Canada is not responsible or liable for any costs or damages incurred above and beyond the rate per kilometer reimbursement. It is the responsibility of the individual volunteer to ensure adequate insurance coverage for business use of personal vehicles.
- F. Parking, tolls, and tickets
- (1) Reasonable parking and toll expenses will be reimbursed.
- (2) Traffic and parking violations incurred while travelling on Engineers Canada business are not eligible for reimbursement.
- G. Accommodations
- (1) Engineers Canada will pay for accommodations directly or reimburse accommodation for costs reasonable for the situation.
- (2) Where events are arranged by Engineers Canada, group rates shall be secured and travellers advised accordingly. Original hotel invoices should be submitted with expense claims.
- (3) If the traveller makes arrangements to reside in accommodation other than in a hotel, reasonable expenses will be reimbursed provided the overall expenses do not exceed the cost of hotel accommodation as secured through Engineers Canada group rates, if applicable.
- (4) When private accommodation is provided to a volunteer without charge, a gift of appreciation other than cash to the host may be provided. The maximum value of such gift is \$50.
- H. Meals
- (1) Volunteers may, during business travel, incur the costs of meals. Meal costs will be reimbursed on receipts. The current <u>Canadian Government guidelines</u> on expenses provide a reference point for reasonable expenses.
- (2) Additional costs may be reimbursed on reasonable circumstances.
- (3) If a meal is included in the cost of an event, transportation or accommodation or is already being provided by Engineers Canada (e.g. if breakfast is provided as part of a conference), the volunteer will not be reimbursed for additional expenses.
- (4) Receipts for all meals must be attached to the expense claim form.
- *I.* Spousal or partner travel

Expenses for partners or guests of volunteers will not normally be reimbursed, unless as stipulated in 7.1.1(4), above.

#### J. Childcare expenses

Reasonable additional expenses for childcare services are reimbursed when such services are specifically required by persons travelling on Engineers Canada business. The maximum amount payable to any traveller in a calendar year shall be limited to \$1,500.



### K. Medical insurance

Engineers Canada will reimburse travellers who are travelling internationally for any additional medical coverage purchased to ensure medical protection while on Engineers Canada business. Costs for medical services required for international travel will also be reimbursed.

### L. Traveller accident insurance

Any claim made by or on behalf of a traveller under Engineers Canada's traveller accident insurance policy for accidental injury or death must be presented to the insurer by Engineers Canada within 30 days of the accident. A claim must have medical evidence from a licensed physician selected by Engineers Canada and be in agreement with a licensed physician as selected by the insurer. Claimants must communicate and comply in a timely manner to enable Engineers Canada time to present the claim to the insurer.

### *M.* Combining personal with business travel

Personal travel may be combined with Engineers Canada business travel provided there is no additional cost to Engineers Canada.

## 7.1.5 Expense reimbursement

- (1) Expenses shall be reimbursed within 30 days of receipt of the approved expense claim when proper documentation including required original receipts has been provided.
- (2) Claims should be made within 14 days of travel. Engineers Canada is not required to reimburse for claims received more than three months from the date of travel.

## 7.1.6 Approval of expense claims

- (1) All expense claims are initially examined by the financial staff at Engineers Canada for completeness and adherence to policy. Those submitting expense claims may be asked to complete, correct and/or clarify expense claim details. If expense claim items remain unresolved, these items will be brought to the attention of the individual authorized to provide final approval of the expense claim.
- (2) The final authority for the approval of expense claims submitted by the following is:
  - a) CEO: Approval by the President
  - b) President: Approval by the President-Elect
  - c) Directors, including the Past President: Approval by the CEO
  - d) Members of the CEAB and CEQB: Approval by the CEO
  - e) Other volunteers: Approval by the CEO
  - f) Engineers Canada Staff: Approval by the CEO
- (3) The President will have final approval in the event that any issues arise within this approval process for volunteers.



## 7 Board policies

## 7.1 Board, committee, and other volunteer expenses

Date of adoption: April 9, 2018 (Motion 5693)	Review period: <del>Annual<u>Biennial</u></del>
Date of latest amendment: <del>May 24, 2019</del> (Motion <del>5757</del> )	Date last reviewed: <del>May 24, 2019</del>

- (1) This policy applies to Engineers Canada Board members, Board <u>C</u>∈ommittee members, and other volunteers (collectively, "volunteers") who travel and/or incur travel-related expenses, including to attend or participate in meetings, events, and conferences ("events") in the course of carrying out Engineers Canada business.
- (2) The purpose of this policy is to ensure volunteers have a clear understanding of the guidelines, policy, and procedures around travel and the incursion of travel-related expenses, including the kind and method of business travel that is considered appropriate, in what circumstances pre-approval is required, and how travel-related expenses should be claimed.

#### 7.1.1 Applicable situations for Board and Ceommittee members expenses

- Volunteers shall be reimbursed for reasonable costs associated with travel for Engineers Canada business. Volunteers are accountable to determine the most practical methods of travel.
- (2) Expenses incurred for volunteers' attendance at meetings called by their <u>R</u>regulator, for which the Board <u>D</u>elirector is the appointed <u>D</u>elirector, shall not be reimbursed.
- (3) Expenses for the <u>pP</u>resident's guest (or for the guest of the <u>pP</u>resident's designate when the <u>pP</u>resident is unable to attend) will be reimbursed when the <u>pP</u>resident or designate attends a <u>R</u>regulator annual meeting, annual general meeting, or Geoscientists Canada annual meeting where guests are invited.
- (4) Travel expenses for the <u>one</u> guest of Board members may be reimbursed for attendance at only the annual meeting of members and the Board retreat.
- (5) Transportation costs will be reimbursed as appropriate for the situation.

#### 7.1.2 Applicable situations for regulator Regulator presidents' expenses

Upon request, Engineers Canada shall reimburse (in accordance with this policy) travel-related expenses in excess of \$1,500 for presidents of  $\underline{R}$  egulators with less than 2,500 registrants to attend Board meetings to which presidents are invited to attend.

#### 7.1.3 Exceptional travel

 For international travel and travel w<sup>W</sup> ithin Canada, pre-approval by the pPresident or their delegate is required before exceptional travel not included in Engineers Canada's approved <u>budgetBudget</u>.

Engineers Canada Board Policy Manual Section 7: Board <u>p</u>Policies **Commented [ES1]:** "Applicable situations" didn't fit as the heading



- (2) For international travel, pre-approval by the president or their delegate is required before exceptional travel not included in Engineers Canada's approved budget.
- (3)(2) Volunteers shall follow the standards set out in the <u>a</u>Acceptable <u>t</u>Travel <u>r</u>Related <u>e</u>Expenses <u>sectionsection 7.1.4</u>, and are individually responsible for complying with this policy and are expected to exercise good business judgment when determining travel plans.

#### 7.1.4 Acceptable travel-related expenses

- A. Airfare
- Tickets should be purchased as early as possible to take advantage of the lowest fares, following the call of the <u>meetingevent</u>.
- (2) Lowest economy class airfare that allows for one piece of checked luggage should be used where available and practical. <u>EC-Engineers Canada's</u> Corporate Rewards program should be used where practical.
- (3) When flying time is six (6) hours or more for any single leg of the trip, purchasing lowest-cost business class fare is permitted.
- (4) Checked and carry-on baggage fees and trip-cancellation insurance are eligible for reimbursement.
- B. Rail
- (1) Tickets should be purchased as early as possible to take advantage of the lowest fares.
- (2) The standard for rail travel is business class.
- C. Buses, taxis, and ride-share
- (1) Reasonable bus, taxi, or ride-share fares shall be reimbursed.
- (2) Limousine service is discouraged unless it is more economical than taxi fare.
- D. Rental vehicles
- (1) Volunteers may travel by rental vehicle when it is more cost-effective or efficient than air, train, taxis, or personal vehicles (e.g. short trips, or where sharing makes renting a vehicle more attractive), including <u>where</u>:
  - a) Where tTaxi/limousine service is not available or cost effective; or.;
  - b) Location of the event is not easily accessible from a major airport; or -; and,
  - c) Large quantities or materials are being delivered to an event location by the volunteer.
- (2) Volunteers who travel by rental vehicle shall be reimbursed for collision insurance and gasoline. The approved car rental category is mid-size, although free upgrades are permitted. When necessary, larger vehicles or vehicles with special requirements may be rented to transport excess baggage OR large items such as displays, or to accommodate medical reasons.
- (3) If, due to personal preference, a traveller opts to rent a vehicle instead of using other means of transport, the maximum amount payable will be the equivalent of taxi fare to and from the airport to the meeting ocation of the event.

Commented [ES2]: event

- E. Personal vehicles
- (1) Personal vehicles may be used when overall economy is ensured.

**Engineers Canada Board Policy Manual** 

Section 7: Board <u>p</u>Policies



- (2) Volunteers who travel by personal vehicle may claim the Canadian Revenue Agency (CRA) <u>automobile allowance rates</u> in effect at the time of travel, or the equivalent of the total travel costs of economy airfare, whichever is less.
- (3) Engineers Canada is not responsible or liable for any costs or damages incurred above and beyond the rate per kilometer reimbursement. It is the responsibility of the individual volunteer to ensure adequate insurance coverage for business use of personal vehicles.
- F. Parking, tolls, and tickets
- (1) Reasonable parking and toll expenses will be reimbursed.
- (2) Traffic and parking violations incurred while travelling on Engineers Canada business are not eligible for reimbursement.
- G. Accommodations
- (1) Engineers Canada will pay for accommodations directly or reimburse accommodation for costs reasonable for the situation.
- (2) Where meetings events are arranged by Engineers Canada, group rates shall be secured and travellers advised accordingly. Original hotel invoices should be submitted with expense claims.
- (3) If the traveller makes arrangements to reside in accommodation other than in a hotel, reasonable expenses will be reimbursed provided the overall expenses do not exceed the cost of hotel accommodation as secured through Engineers Canada group rates, if applicable.
- (4) When private accommodation is provided to a volunteer without charge, a gift of appreciation other than cash to the host may be provided. The maximum value of such gift is \$50.
- H. Meals
- Volunteers may, during business travel, incur the costs of meals. Meal costs will be reimbursed on receipts. The current <u>Canadian Government guidelines</u> on expenses provide a reference point for reasonable expenses.
- (2) Additional costs may be reimbursed on reasonable circumstances.
- (3) If a meal is included in the cost of an event, transportation or accommodation or is already being provided by Engineers Canada (e.g. if breakfast is provided as part of a conference), the volunteer will not be reimbursed for additional expenses.
- (4) Receipts for all meals must be attached to the expense claim form.
- I. Spousal or partner travel

Expenses for partners or guests of volunteers will not normally be reimbursed, unless as stipulated in 7.1.1<del>, part 4 above(4), above</del>.

J. Childcare expenses

Reasonable additional expenses for childcare services are reimbursed when such services are specifically required by persons travelling on Engineers Canada business. The maximum amount payable to any traveller in a calendar year shall be limited to \$1,500.

Engineers Canada Board Policy Manual Section 7: Board <u>p</u>Policies



#### K. Medical insurance

Engineers Canada will reimburse travellers who are travelling internationally for any additional medical coverage purchased to ensure medical protection while on Engineers Canada business. Costs for medical services required for international travel will also be reimbursed.

#### L. Traveller accident insurance

Any claim made by or on behalf of a traveller under Engineers Canada's traveller accident insurance policy for accidental injury or death must be presented to the insurer by Engineers Canada within 30 days of the accident. A claim must have medical evidence from a licensed physician selected by Engineers Canada and be in agreement with a licensed physician as selected by the insurer. Claimants must communicate and comply in a timely manner to enable Engineers Canada time to present the claim to the insurer.

#### M. Combining personal with business travel

Personal travel may be combined with Engineers Canada business travel provided there is no additional cost to Engineers Canada.

#### 7.1.5 Expense reimbursement

- (1) Expenses shall be reimbursed within 30 days of receipt of the approved expense claim when proper documentation including required original receipts has been provided.
- (2) Claims should be made within 14 days of travel. Engineers Canada is not required to reimburse for claims received more than three months from the date of travel.

#### 7.1.6 Approval of Eexpense claims :

- (1) All expense claims are initially examined by the financial staff at Engineers Canada for completeness and adherence to policy. Those submitting expense claims may be asked to complete, correct and/or clarify expense claim details. If expense claim items remain unresolved, these items arewill be brought to the attention of the individual authorized to provide final approval of the expense claim.
- (2) The final authority for the approval of expense claims submitted by the following is:
  - a) CEO: Approval by the President
  - b) President: Approval by the President-Elect
  - c) Directors, including the Past-President: Approval by the CEO
  - d) Members of the CEAB and CEQB: Approval by the CEO
  - e) Other volunteers: Approval by the CEO
  - f) Engineers Canada Staff: Approval by the CEO
- (3) The pPresident will have final approval in the event that any issues arise within this approval process for volunteers.



# **7** Board policies

# **7.9 Process for in-camera meetings**

Date of adoption: September 26, 2018 (Motion 5716) Date of latest amendment: (Motion) Review period: Biennial Date last reviewed:

- (1) All meetings shall be open. For reasons such as the ones listed below, the meeting or part of a meeting may be closed to the public if the subject matter being considered concerns one of the following:
  - a) The security of the property of the organization;
  - b) Personal matters about an identifiable individual;
  - c) The proposed or pending acquisition of assets by the organization;
  - d) Labour relations or employee negotiations;
  - e) Litigation or potential litigation, including matters before administrative tribunals affecting the organization or a Member;
  - f) The receiving of advice that is subject to solicitor client privilege, including communications necessary for that purpose;
  - g) The meeting assessment referred to in policy 4.12, Board Self-assessment; and,
  - h) Any other matter which the Board determines.
- (2) Before holding a meeting or part of a meeting that is to be closed to the public, the Board must pass a motion to move in camera before discussion on any item on the in- camera agenda may begin. The motion to go in-camera will be placed before the Board and the associated briefing note, if there is one, will identify which of the eight (8) reasons the meeting or a part of the meeting must be held in camera.
- (3) The motion to go in camera for any of reasons a) to g) will require a simple majority to be carried. The motion to go in camera for reason h) will need a 2/3 majority to be carried.
- (4) At the beginning of every in-camera session, the Board must establish:
  - a) who is allowed to participate in the in-camera session (the "attendees");
  - b) whether or not decisions shall be recorded and minutes taken; and,
  - c) whether or not the decision will be reported back in the open part of the meeting.
- (5) Attendees must have a direct interest in the item to be discussed. Once attendees are determined, the chair will direct non-invitees to leave the meeting.
- (6) The chair will remind attendees that discussions and documentation to be considered in the incamera session are to remain confidential unless the Board directs otherwise.



- (7) If any attendee is participating in the in-camera session remotely, they shall take all necessary steps to ensure that non-attendees cannot overhear the discussions or otherwise observe the closed session.
- (8) If it has been deemed by the Board that decisions should be recorded and reported back at the open part of the meeting, the Secretary will record the decision in the regular/public minutes.
- (9) If it has been determined that minutes are required, they will be recorded in a separate document from the regular meeting minutes. Such minutes will be clearly identified as confidential and will be distributed by the Secretary and subject to approval at the next meeting. Once approved, the incamera minutes and any accompanying materials (the "in-camera records") will be securely stored.
- (10) If attendees receive hard copies of any in-camera materials, the Secretary will ensure that such documents are collected at the end of the meeting and destroyed.
- (11) It is the responsibility of attendees to ensure that any personal notes they make that are related to the topic(s) discussed at the in-camera meeting or part of the meeting are destroyed at the end of the meeting.
- (12) All in-camera records, and any matters discussed during an in-camera meeting or part of a meeting, are protected by the confidentiality obligations imposed on Board and Board Committee members via their oath of office.
- (13) A meeting or session in-camera is no different than a regular meeting or part of a meeting of the Board. Thus, decisions can be made providing that material for such decisions has been submitted two (2) weeks prior to a duly called meeting and according to policy 7.8, *Rules of Order*.



## 7 Board policies

## 7.9 Process for in-camera meetings

 Date of adoption: September 26, 2018 (Motion 5716)
 Review period: AnnuelBiennial

 Date of latest amendment: May 22, 2020 (Motion-5851)
 Date last reviewed: May 22, 2020

- All meetings shall be open. For reasons such as the ones listed below, the meeting or part of a meeting may be closed to the public if the subject matter being considered concerns one of the following:
  - a) The security of the property of the organization;
  - b) Personal matters about an identifiable individual;
  - c) The proposed or pending acquisition of assets by the organization;
  - d) Labour relations or employee negotiations;
  - Litigation or potential litigation, including matters before administrative tribunals affecting the organization or a Member;
  - f) The receiving of advice that is subject to solicitor client privilege, including communications necessary for that purpose;

f)g) The meeting assessment referred to in policy 4.12, Board Self-assessment; and,

g)h)Any other matter which the Board determines.

- (2) As much as possible, in-camera sessions should be held during in-person meetings only.
- (3)(2)Before holding a meeting or part of a meeting that is to be closed to the public, the Board must pass a motion to move in camera before discussion on any item on the in- camera agenda may begin. The motion to go in-camera will be placed before the Board and the <u>associated</u> briefing note, if there is one, will identify which of the <u>seven eight (78)</u> reasons the meeting or a part of the meeting must be held in camera.
- (4)(3)The motion to go in camera for any of reasons  $\underline{a1}$ ) to  $\underline{6g}$  will require a simple majority to be carried. The motion to go in camera for reason  $\underline{7h}$ ) will need a 2/3 majority to be carried.
- (5)(4) At the beginning of every in-camera session, the Board must establish:
  - a) who is allowed to participate in the in-camera session (the "attendees")
  - b) whether or not decisions shall be recorded and minutes taken; and
  - c) whether or not the decision will be reported back in the open part of the meeting.
- (6) Attendees must have a direct interest in the item to be discussed. Once attendees are determined, the chair will direct non-invitees to leave the meeting.

<del>(7)<u>(5)</u></del>

Engineers Canada Board Policy Manual Section 7: Board policies



- (6) The chair will remind <del>all</del>attendees that <del>all items<u>d</u>iscussions and documentation</del> to be considered in the in-camera session are to remain confidential unless the Board directs otherwise.
- (8)(7) If any attendee is participating in the in-camera session remotely, they shall take all necessary steps to ensure that non-attendees cannot overhear the discussions or otherwise observe the closed session.
- (9)(8) If it has been deemed by the Board that decisions should be recorded and reported back at the open part of the meeting, the Secretary will record the decision in the regular/public minutes.
- (10)(9) If it has been determined that minutes are required, they will be recorded in a separate document from the regular meeting minutes. Such minutes will be clearly identified as confidential and will be distributed by the Secretary and subject to approval at the next meeting. Once approved, the incamera minutes and any accompanying materials (the "in-camera records") will be securely stored in the CEO's office.
- (11)(10) If attendees receive hard copies of any in-camera materials, the Secretary will ensure that such documents are collected at the end of the meeting and destroyed.
- (12)(11) It is the responsibility of attendees to ensure that any personal notes they make that are related to the topic(s) discussed at the in-camera meeting or part of the meeting are destroyed at the end of the meeting.
- (13)(12) All in-camera records, and any matters discussed during an in-camera meeting or part of a meeting, are protected by the confidentiality obligations imposed on Board and Board Committee members via their oath of office.
- (13)(13) A meeting or session in-camera is no different than a regular meeting or part of a meeting of the Board. Thus, decisions can be made providing that material for such decisions has been submitted two (2) weeks prior to a duly called meeting and according to policy 7.8, *Rules of Order*.

**Commented [ES1]:** Added following November 17 meeting to address principle from previous s (2) that "incamera sessions should be held during in-person meetings only", which was stated as a guideline in order to preserve confidentiality of discussions

Engineers Canada Board Policy Manual Section 7: Board policies



# **9** Board-approved documents and products

Date of adoption: September 26, 2018 (Motion 5716) Date of latest amendment: (Motion ) Review period: Biennial Date last reviewed:

The Board is responsible for the approval of some Engineers Canada products that are made available to the public and governments. These products reflect the positions and policies of the engineering profession to those groups.

# 9.2 Qualifications Board products

- (1) The Qualifications Board produces and maintains guidelines, and Engineers Canada papers, which are approved by the Board.
- (2) Guidelines are recommendations for the Regulators and the public on:
  - a) professional requirements;
  - b) programs for members of the Regulators; and,
  - c) assessment tools for international graduates.
- (3) Guidelines outline general guiding principles which have a broad basis of consensus among Regulators. They provide guidance to the Regulators and also to individual engineers on various subjects and are intended to be detailed descriptions of best practices. A guideline may include both current practices and also agreed goals which are not yet achieved by some or all of the Regulators.
- (4) Engineers Canada papers are produced for Regulators with the intent to inform them concisely about a complex issue and present a stance on the matter. They are intended for distribution to the Regulators and can be publicly available or posted on the members-only section of the Engineers Canada website.



All Qualifications Board documents are developed by the Qualifications Board, with support from Engineers Canada staff. The Regulators are consulted extensively during guideline development in accordance with the Qualification Board's consultation process as follows:





## **Qualifications Board consultation process: Step descriptions**

Step	Description
1. Environmental scan	CEQB sub-committee conducts an environmental scan. For new documents, the sub-committee organizes a national workshop in Ottawa with Regulator staff, CEQB committee members, and experts to define the target audience, objectives, and general content. If it is for the review of an existing document, then the process jumps to review and subsequent CEQB consultation approval in step 6.
2. Develop general direction	CEQB writes guiding principles, which are presented in the general direction document.
3. CEQB consultation approval for general direction	CEQB approves the general direction for consultation.
4. General direction consultations	<ul> <li>CEQB sends a request for feedback to the:</li> <li>CEO Group (all documents)</li> <li>National Admission, Practice, and Discipline &amp; Enforcement Officials Groups (documents pertaining to their specific mandates)</li> <li>Canadian Engineering Accreditation Board (documents pertaining to its mandate)</li> <li>CEQB presents to these groups when relevant. It informs the Engineers Canada Board by email.</li> </ul>
5. Responses and draft document	CEQB sub-committee reviews all the feedback, prepares the committee's response to each comment, and develops a draft document. CEQB posts the table on the consultation webpage and shares it with the officials' groups and individuals that submitted feedback before CEQB approves the draft document for consultation.
6. CEQB consultation approval for draft document	CEQB approves the draft document for consultation.
7. Draft document consultations	<ul> <li>CEQB sends a request for feedback to the:</li> <li>CEO Group (all documents)</li> <li>National Admission, Practice and Discipline &amp; Enforcement Officials Groups (documents pertaining to their specific mandates)</li> <li>Canadian Engineering Accreditation Board (documents pertaining to its mandate)</li> <li>CEQB presents to these groups when relevant. It informs the Engineers Canada Board by email.</li> </ul>
8. Responses and final document	CEQB sub-committee reviews all the feedback, prepares the committee's response to each comment, and develops a final document. CEQB posts the table on the consultation webpage and shares it with the officials' groups and individuals that submitted feedback before CEQB approves the draft document for consultation.



Step	Description
9. CEQB final document approval	CEQB reviews the final version of the draft document and approves it for Engineers Canada Board approval and subsequent dissemination. If it is an examinations syllabus, Engineers Canada staff upload it to the Engineers Canada website.
10. EC Board final document approval	Engineers Canada Board reviews the draft document and approves it for public or members-only distribution. Engineers Canada staff upload the document to the Engineers Canada website.
11. Dissemination	Engineers Canada staff disseminate the approved document through diverse communication tactics such as emails, newsletter articles, Twitter, Facebook, and LinkedIn posts.
12. Review and evaluation	CEQB monitors reaction to the document and its implementation. After five years, CEQB reviews the document, in priority order, as identified by Regulators through the work plan consultation process.

All guidelines and Engineers Canada papers produced by the Qualifications Board must receive Board approval. Therefore, these guidelines are a Board-approved product for which the Board is responsible.

All Qualifications Board documents can be found on Engineers Canada's website at: <u>https://engineerscanada.ca/regulatory-excellence/national-engineering-guidelines</u>



## 9 Board-approved documents and products

Date of adoption: September 26, 2018 (Motion 5716)Review period: AnnualBiennialDate of latest amendment: May 22, 2020 (Motion 5851)Date last reviewed: May 22, 2020

The Board is responsible for the approval of some Engineers Canada products that are made available to the public and governments. These products reflect the positions and policies of the engineering profession to those groups.

## 9.2 Qualifications Board products

- (1) The Qualifications Board produces and maintains guidelines, and Engineers Canada papers, which are approved by the Board.
- (2) Guidelines are recommendations for the provincial and territorial engineering regulatory bodies<u>Regulators</u> and the public on:
  - a) professional requirements;
  - b) programs for members of the provincial and territorial engineering regulatory bodies<u>Regulators</u>; and,
  - c) assessment tools for international graduates.
- (3) Guidelines outline general guiding principles which have a broad basis of consensus among regulators<u>Regulators</u>. They provide guidance to the <u>engineering rR</u>egulators and also to individual engineers on various subjects and are intended to be detailed descriptions of best practices. A guideline may include both current practices and also agreed goals which are not yet achieved by some or all of the <u>regulatorsRegulators</u>.
- (4) Engineers Canada papers are produced for <u>Rregulators</u> with the intent to inform them concisely about a complex issue and present a stance on the matter. They are intended for distribution to the <u>regulatory bodies</u>, <u>Regulators</u> and can be publicly available or posted on the members-only section of the Engineers Canada website.



All Qualifications Board documents are developed by the Qualifications Board, with support from Engineers Canada staff. The <u>engineering rR</u>egulators are consulted extensively during guideline development in accordance with the Qualification Board's consultation process as follows:



**Commented [CM1]:** New arrow and center text box as per email from QB staff support: "I was looking into Board Policy 9 and noticed that part of the diagram in the consultation wheel is missing. There should be a "short cut" in the middle, whereas we skip step 2-5 when we review guideline"

I

1



#### **Qualifications Board consultation process: Step descriptions**

Step	Description
1. Environmental scan	CEQB <u>sub-</u> committee conducts an environmental scan. For new documents, the <u>sub-</u> committee organizes a national workshop in Ottawa with #Regulator staff, CEQB committee members, and experts to define the target audience, objectives, and general content. If it is for the review of an existing document, then the process jumps to review and subsequent CEQB consultation approval in step 6.
2. Develop general direction	CEQB writes guiding principles, which are presented in the general direction document.
3. CEQB consultation approval for general direction	CEQB approves the general direction for consultation.
4. General direction consultations	<ul> <li>CEQB sends a request for feedback to the:</li> <li>CEO Group (all documents)</li> <li>National Admission, Practice, and Discipline &amp; Enforcement Officials Groups (documents pertaining to their specific mandates)</li> <li>Canadian Engineering Accreditation Board (documents pertaining to its mandate)</li> <li>CEQB presents to these groups when relevant. It informs the Engineers Canada Board by email.</li> </ul>
5. Responses and draft document	CEQB <u>sub-</u> committee reviews all the feedback, prepares the committee's response to each comment, and develops a draft document. CEQB posts the table on the consultation webpage and shares it with the officials' groups and individuals that submitted feedback before CEQB approves the draft document for consultation.
6. CEQB consultation approval for draft document	CEQB approves the draft document for consultation.
7. Draft document consultations	<ul> <li>CEQB sends a request for feedback to the:</li> <li>CEO Group (all documents)</li> <li>National Admission, Practice and Discipline &amp; Enforcement Officials Groups (documents pertaining to their specific mandates)</li> <li>Canadian Engineering Accreditation Board (documents pertaining to its mandate)</li> <li>CEQB presents to these groups when relevant. It informs the Engineers Canada Board by email.</li> </ul>
8. Responses and final document	CEQB <u>sub-</u> committee reviews all the feedback, prepares the committee's response to each comment, and develops a final document. CEQB posts the table on the consultation webpage and shares it with the officials' groups and individuals that submitted feedback before CEQB approves the draft document for consultation.

**Commented [ES2]:** Consider referring to it as a subcommittee throughout, as this is referring to a committee of the CEQB.



Step	Description
9. CEQB final document approval	CEQB reviews the final version of the draft document and approves it for Engineers Canada Board approval and subsequent dissemination. If it is an examinations syllabus, Engineers Canada staff upload it to the Engineers Canada website.
10. EC Board final document approval	Engineers Canada Board reviews the draft document and approves it for public or members-only distribution. Engineers Canada staff upload the document to the Engineers Canada website.
11. Dissemination	Engineers Canada staff disseminate the approved document through diverse communication tactics such as emails, newsletter articles, Twitter, Facebook, and LinkedIn posts.
12. Review and evaluation	CEQB monitors reaction to the document and its implementation. After five years, CEQB reviews the document, in priority order, as identified by #Regulators through the work plan consultation process.

All guidelines and Engineers Canada papers produced by the Qualifications Board must receive Board approval. Therefore, these guidelines are a Board-approved product for which the Board is responsible.

All Qualifications Board documents can be found on Engineers Canada's website at: <u>https://engineerscanada.ca/regulatory-excellence/national-engineering-guidelines</u>



# **9** Board-approved documents and products

Date of adoption: March 1, 2019 (Motion #5736)Review period: AnnualDate of latest amendment: (Motion)Date last reviewed:

The Board is responsible for the approval of some Engineers Canada products which are made available to the public and governments. These products reflect the positions and policies of the engineering profession to those groups.

## 9.3 National Position Statements

- (1) National Position Statements (NPSs) reflect the engineering profession's consensus position on key issues relating to the public interest in the practice of professional engineering. Each year, new NPSs are developed, and existing ones are reviewed to ensure that they remain current and relevant. These NPSs:
  - a) represent the collective position of the engineering profession;
  - b) are used by Engineers Canada staff in discussion with government; and,
  - c) influence public policy.

## 9.3.1 Development of National Position Statements

- (1) Responsibility for the development of NPSs rests with the CEO. Consideration should be given to new and existing issues facing the engineering profession. In addition, existing NPSs should be reviewed and updated on a regular basis.
- (2) The CEO should develop an annual workplan for the development of new NPSs and the updating of existing ones. The CEO must ensure that the Regulators are consulted on the proposed workplan prior to it being submitted to the Board for approval (usually at the Board's spring (May) meeting).
- (3) Likewise, the Regulators must be consulted upon on all new and updated NPSs before they are submitted to the Board for approval.
- (4) NPSs are a Board-approved product for which the Board is responsible.
- (5) NPSs can be found on Engineers Canada's website at: <u>https://engineerscanada.ca/public-policy/national-position-statements.</u>

## 9.3.2 Archiving of National Position Statements

- (1) Engineers Canada's NPSs that are no longer actively used will be removed from Engineers Canada's public website and stored internally at Engineers Canada. The CEO will ensure all NPSs are reviewed on an annual basis and any recommendations for archiving will be sent to the Board, for information.
- (2) NPSs that have been archived should be retained within Engineers Canada's document management system and not on the public facing website. These NPSs should be searchable by staff so that files can be easily located, updated, and returned to the public website on an "as-needed" basis, pending Board approval.



## 9 Board-approved documents and products

Date of adoption: March 1, 2019 (Motion #5736) Date of latest amendment: <del>March 1, 2019 (</del>Motion <del>#5736</del>) Review period: Annual Date last reviewed: <del>March 1, 2019</del>

The Board is responsible for the approval of some Engineers Canada products which are made available to the public and governments. These products reflect the positions and policies of the engineering profession to those groups.

## 9.3 National position Position statements Statements

- (1) National <u>position\_Position\_s</u>tatements (<u>NPSss</u>) reflect the engineering profession's consensus position on key issues relating to the public interest in the practice of profession<u>al</u> engineering. Each year, new <u>NPSstatement</u>s are developed, and existing ones are reviewed to ensure that they remain current and relevant. These <u>NPSstatement</u>s:
  - a) represent the collective position of the engineering profession;
  - b) are used by Engineers Canada staff in discussion with government; and,
  - -influence public policy.
  - c)

#### 9.3.1 Development of National pPosition sStatements

- (1) Responsibility for the development of NPSs rests with the CEO. Consideration should be given to new and existing issues facing the engineering profession. In addition, existing NPSs should be reviewed and updated on a regular basis.
- (2) The CEO should develop an annual workplan for the development of new NPSs and the updating of existing ones.- The CEO must ensure that the regulators are consulted on the proposed workplan prior to it being submitted to the Board for approval (usually at the Board's Spring (May) meeting).
- (3) Likewise, the rRegulators must be consulted upon on all new and updated NPSs before they are submitted to the Board for approval.
- (1) NPSational position statements are developed by <u>the CEO with support from the Manager, Public Affairs, the Public Affairs Advisory Committee (PAAC), and in consultation with the Board, and the engineering regulators according to the following process:</u>
- Annually, the <u>Public Affairs Advisory Committee (PAAC)</u>, supported by the Manager, Public Affairs, discusses new and existing issues facing the engineering profession and develops potential topics for new national position statements<u>NPSs. This includes the update of existing NPSs to be reviewed and</u> <u>updated. These topics are translated into a formal workplan reviewed by the Vice President</u>, <u>Corporate Affairs and Strategic Partnerships, and approved by the CEO</u>.
- (2) After CEO approval, tThe proposed workplan is communicated via e-mail to the Board and CEO Group for consideration and the final workplan is approved by the engineering regulators during the CEO Group meeting and by the
  - sent to the Board and CEO Group Board forduring the Spring meetings.

#### Engineers Canada Board Policy Manual

Section 9: Board-approved documents and products

**Commented [JT1]:** Update to the Board policy was based on the previously unclear process surrounding the national position statements, namely on the creation and approval of the workplan and updates to the documents. This process is also in-line with the policy relating to the work of the Qualifications Board.

**Commented [ES2R1]:** Other updates: capitalization to ensure consistency with Policy 2, Definitions and agreedupon style/formatting


#### (3) <u>PAAC</u>

- (4) <u>NPS</u>Documents are <u>drafted</u>, updated and finalized by the <u>Manager</u>, <u>Public Affairs</u>, and <u>PAAC based</u> on the <u>comments</u> received <u>by the Board and the CEO Group</u>. The updated documents are reviewed by the Vice President, Corporate Affairs and Strategic Partnerships, and approved by the CEO.
- (5) <u>After CEO approval, f</u>Final versions of the N<u>PS</u>ational position statements are presented to the Board for approval.
- (6) The Board may also direct the CEO to modify <u>NPS</u>national position statements at any time.
- (7) All NPS ational position statements must receive Board approval. Therefore, these statements-<u>NPSs</u> are a Board-approved product for which the Board is responsible.
- (4)

NPSational position statements can be found on Engineers Canada's website at: https://engineerscanada.ca/public-policy/national-position-statements.

<del>(8)</del>(5)

#### 9.3.2 Archiving of National pPosition sStatements

- (1) Engineers Canada's National position state<u>NPSs ments</u> that are no longer actively used for advocacy purposes will be removed from Engineers Canada's public website and stored internally at Engineers Canada. <u>The CEO will ensure all NPSs are reviewed on an annual basis</u>, in consultation the Public Affairs Advisory Committee (PAAC) and the Board according to the following process:
- (2) and Annually in May, a full review of all active and archived NPSsational position statements will be undertaken by Engineers Canada's Manager, Public Affairs, in consultation with the PAAC. <u>Recommendations to archive existing NPSnational position statements will be presented to the Vice</u> <u>President, Corporate Affairs and Strategic Partnerships, for review and to the CEO for approval.</u>

(3)(1) Aany recommendations for archiving are will be sent to the Board, for information.

(4) NPSational position statements that have been archived will-should be retained within Engineers Canada's document management system and not on the public facing website. These statements NPSs will-should be searchable by staff so that files can be easily located, updated, and returned to the public website on an "as-needed" basis, pending Board approval.

<del>(5)</del>(2)



# 7 Board policies

# 7.7 Investment policy

Date of adoption: MMMM DD, YYYY (Motion XXXX)Review period: AnnualDate of latest amendment: MMMM DD, YYYY (Motion XXXX)Date last reviewed: MMMM DD, YYYY

## 7.7.1 Investment objectives

- (1) Engineers Canada has a goal of establishing a well-diversified investment portfolio, which will be managed to ensure preservation of capital while seeking moderate growth. Any funds which are not required to carry out the short-term operations of Engineers Canada, for the purposes outlined in its Bylaws, articles, mission statement and Strategic Plan, shall be invested in accordance with this policy. Funds required for short-term operations will be held separately in highly liquid investments.
- (2) Further, without limiting the scope of the above statement, the following considerations shall be taken into account:
  - a) The time horizon this portfolio will remain invested is long, at least ten (10) years;
  - b) The investment portfolio will provide medium-term capital preservation to meet cash flow requirements over the next 3 years. Engineers Canada will provide the investment advisor a report with medium-term cashflow requirements at a minimum, on a quarterly basis;
  - c) Most investments in this portfolio will remain liquid and quickly convertible to cash. However, a small portion of the portfolio will be invested in illiquid investments;
  - d) While Engineers Canada is concerned with preserving the value of the portfolio, it is understood that some short-term volatility could be encountered in order to achieve long-term performance objectives. As a result, a decrease in portfolio value of fifteen percent (15%) to twenty percent (20%) can be tolerated provided that these decreases are reflective of general market conditions;
  - e) Engineers Canada is tax-exempt as defined under the Income Tax Act; and,
  - f) There are no legal constraints or preferences unique to Engineers Canada that will impact the investment management of this portfolio.



## 7.7.2 Asset mix guidelines

The following asset mix guidelines shall be followed in order to achieve moderate, consistent returns. Should market conditions and/or cash withdrawals cause the portfolio to be outside the following ranges, the investment manager will undertake steps to realign the portfolio within a reasonable period of time.

Asset Class	Minimum Allocation (%)	Neutral Allocation (%)	Maximum Allocation (%)		
Cash	10	20	25		
Fixed Income	25	35	45		
Equity	30	40	60		
Canadian Equity	5	10	15		
U.S. Equity	5	10	15		
International Equity	5	10	15		
Global Equity	5	10	15		
Alternative	0	5	10		

## 7.7.3 Monitoring performance and reporting

The following Benchmarks shall be used in assessing the overall performance of the portfolio:

Asset Class	Asset Weight (%)	Benchmark
Cash	20	FTSE Canada 30 Day T-Bill
Canadian Fixed Income	35	FTSE Canada Universe Bond Index
Canadian Equity	10	S&P/TSX Capped Composite TR
U.S. Equity	10	S&P 500 Index TR
International Equity	10	MSCI EAFE
Global Equity	10	MSCI World (Net)
Alternative	5	Alternative Equity

## 7.7.4 Servicing and reporting

The investment manager will meet with the CEO, the Director, Finance, and the chair of the FAR Committee at least annually (or more frequently, if requested) to discuss the portfolio returns and to reconfirm investment objectives. The investment manager will also provide consolidated reporting reflecting the combined assets of the portfolio on a quarterly basis.



## 8 Issues policies

## 8.1 Emerging disciplines policy

Date of adoption: September 26, 2018 (motion 5716) Date of latest amendment: May 22, 2020 (motion 5851)

Review period: Annual Date last reviewed: May 22, 2020

- 1. The protection of the public requires that the practice of engineering be regulated. The protection of the public requires that the practice of engineering in emerging areas be regulated.
- 2. The practice of engineering is a systematic knowledge, based on science, required to manufacture a product, carry out a process, or provide consultations and advice.
- 3. A new engineering area emerges when a unique core body of knowledge coalesces, and when this knowledge evolves to the development and design of devices, processes, systems, and services which affect the welfare and safety of the public, and therefore, Engineers Canada should do the following:
  - Engineers Canada shall monitor the state of emerging areas of practice on an ongoing basis.
  - Engineers Canada shall support the regulators by identifying emerging areas of engineering practice, as appropriate.
  - The engineering regulators shall decide if, when, and how to regulate identified emerging areas.
  - Engineers Canada shall make the public aware of the value-adding role of engineers in emerging areas of practice.

**Commented [ES1]:** The 2019-2020 Governance Committee strongly recommended that this policy be rescinded

Additionally, at the May 2020 meeting, the section 8 policies were discussed and this was captured (from the minutes):

"although they provide support for the strategic plan, they may no longer be helpful. It was noted that they are meant to articulate the Board's position to staff and assist in narrowing the scope for operational implementation."

Engineers Canada Board Policy Manual Section 8: Issues policies



# **5** Executive duties and limitations

## 5.4 Communication and support to the Board

Date of adoption: April 9, 2018 (Motion 5693)	Review period: Biennial
Date of latest amendment: May 22, 2020 (Motion 5851)	Date last reviewed:

The CEO shall ensure that the Board is informed and supported in its work. Further, without limiting the scope of the above statement, the CEO shall ensure that:

- (1) The Board has reasonable administrative support for Board activities including, but not limited to, resources supporting the work of the Accreditation Board and the Qualifications Board in accordance with the Strategic Plan.
- (2) Progress reporting required by the Board is submitted in a timely, accurate, and understandable fashion:
  - a) An annual performance assessment report of progress against the outcomes and objectives set in the Strategic Plan:
    - i. Is provided to the Board in February for review and approval; and,
    - ii. Is submitted to the Members for information at the Annual Meeting of Members.
  - b) Interim performance assessment reports of progress against the outcomes and objectives set in the Strategic Plan for the first, second, and third quarters of each year are presented to the Board at the May, September, and December meetings, respectively.
- (3) Financial reporting is provided to the Board (having been first reviewed by the Finance, Audit, and Risk Committee), including:
  - a) Quarterly financial updates for the first, second, and third quarters;
  - b) A year-end statement of operations; and,
  - c) The annual audited statements, which the Board will approve for submission to the Members at the Annual Meeting of Members.
- (4) The Board is aware of volunteer policies and procedures.
- (5) The Board is provided with the results of employee engagement surveys, and action plans to address any issues raised therein (having first been reviewed by the Human Resources Committee).
- (6) The Board is aware of any actual or anticipated non-compliance with policies, including when, in the CEO's opinion, the Board is not in compliance with its own policies.



- (7) The Board is aware of any incidental information it requires, including anticipated media coverage, threatened or pending lawsuits, and material or publicly visible external and internal changes or events, including changes in executive personnel.
- (8) No individual Board members are favoured or privileged over others, except when fulfilling individual requests for information or responding to Officers or Committees duly charged by the Board.
- (9) No Board Directors are appointed to operational committees.



# **5** Executive duties and limitations

## 5.4 Communication and support to the Board

Date of adoption: April 9, 2018 (Motion 5693)	Review period: <del>Annual<u>Biennial</u></del>
Date of latest amendment: May 22, 2020 (Motion 5851)	Date last reviewed: <del>May 22, 2020</del>

The CEO shall ensure that the Board is informed and supported in its work. Further, without limiting the scope of the above statement, the CEO shall ensure that:

- (1) The Board has reasonable administrative support for Board activities including, but not limited to, resources supporting the work of the Accreditation Board and the Qualifications Board in accordance with the <u>S</u>strategic <u>Pp</u>lan.
- (2) Progress reporting required by the Board is submitted in a timely, accurate, and understandable fashion:
  - a) An annual performance assessment report of progress against the outcomes and objectives set in the <u>S</u>strategic <u>pP</u>lan:
    - i. Is provided to the Board in February for review and approval; and,
    - ii. \_Is submitted to the Members for information at the Annual Meeting of Members-in May\_
  - b) Interim performance assessment reports of progress against the outcomes and objectives set in the <u>sS</u>trategic <u>pP</u>Ian for the first, second, and third quarters of each year are presented to the Board at the May, September, and December meetings, respectively.
- (3) Financial reporting is provided to the Board (having been first reviewed by the Finance, Audit, and Risk Committee), including:
  - a) Quarterly financial updates for the first, second, and third quarters:
  - b) A year-end statement of operations, and,
  - c) The annual audited statements, which the Board will approve for submission to the Members at the Annual Meeting of Members in May.
- (4) The Board is aware of volunteer policies and procedures.
- (5) The Board is provided with the results of employee engagement surveys, and action plans to address any issues raised therein (having first been reviewed by the Human Resources Committee).
- (6) The Board is aware of any actual or anticipated non-compliance with policies, including when, in the CEO's opinion, the Board is not in compliance with its own policies.



- (7) The Board is aware of any incidental information it requires, including anticipated media coverage, threatened or pending lawsuits, and material or publicly visible external and internal changes or events, including changes in executive personnel.
- (8) No individual Board members are favoured or privileged over others, except when fulfilling individual requests for information or responding to  $\Theta_{C}$  fficers or  $C_{C}$  committees duly charged by the Board.
- (9) No Board <u>4D</u>irectors are appointed to operational committees.



# 6 Engineers Canada Board committees and Task Forces

## 6.12 Human Resources Committee terms of reference

Date of adoption: May 24, 2019 (Motion 5756)	Review period: Biennial
Date of latest amendment: May 20, 2020 (Motion 5851)	Date last reviewed:

The Human Resources (HR) Committee enhances the Board's effectiveness and efficiency by attracting new volunteers and monitoring and assessing the performance of the Board, Committees, Directors, and the CEO so that Engineers Canada can deliver on its mandate.

## **6.12.1** Responsibilities

- (1) The HR Committee is tasked to fulfill Board responsibility #1: Hold itself, its directors, and its direct reports accountable, and Board responsibility #6: Provide orientation of new directors and continuing development of directors and others who work closely with the Board. The HR committee shall:
  - a) In consultation with each outgoing Committee chair, annually nominate new Committee members and recommend Committee chairs as per Board policy 6.1, *Board Committees and Task Forces*;
  - b) Regularly review policies which provide for the sound management of Engineers Canada's volunteers and personnel;
  - c) Establish, administer, and annually review Competency Profiles for the Board, individual Directors, and chairs;
  - d) Provide oversight of the Director onboarding and development program;
  - e) Annually review succession planning for the CEO, the Board, and its Committees;
  - f) Annually confirm succession plans for the direct reports to the CEO;
  - g) Develop and recommend annual objectives for the CEO to the Board;
  - h) Conduct regular CEO assessments and make recommendations to the Board regarding annual CEO compensation; and,
  - i) Review results of the employee engagement survey.

## 6.12.2 Authority

The Committee has the authority to recruit or contract external resources to assist with its work within the Budget allocated by the Board.



## 6.12.3 Composition

- (1) The HR Committee is comprised of the President, President-Elect, and Past President, as well as a member from the CEO Group and a minimum of two other Directors, all of whom are voting members.
  - a) The Past President normally serves as chair of the Committee, unless the HR Committee decides otherwise.
  - b) The outgoing HR Committee shall, annually, nominate at least two Directors and one alternate to the next year's HR Committee. The alternate Director shall only serve if one of the other Directors is elected by the Board as President-Elect.
  - (2) Quorum shall be set at 50 per cent of the members plus one.
  - (3) The Engineers Canada's Director of Human Resources shall provide support to the HR Committee.



# 6 Engineers Canada Board committees and <u>T</u>task <u>F</u>forces

## **6.12 Human Resources Committee terms of reference**

Date of adoption: May 24, 2019 (Motion 5756)Review period: AnnualBiennialDate of latest amendment: May 20, 2020 (Motion 5851)Date last reviewed: May 22, 2020

The Human Resources (HR) Committee enhances the Board's effectiveness and efficiency by attracting new volunteers and monitoring and assessing the performance of the Board, Committees, Directors, and the CEO so that Engineers Canada can deliver on its mandate.

## 6.12.1 Responsibilities

- (1) The HR Committee is tasked to fulfill Board responsibility #1: Hold itself, its directors, and its direct reports accountable, and Board responsibility #6: Provide orientation of new directors and continuing development of directors and others who work closely with the Board. The HR committee shall:
  - a) In consultation with each outgoing <u>C</u>eommittee chair, annually nominate new <u>C</u>eommittee members and recommend <u>C</u>eommittee chairs as per Board policy 6.1<u>, Board Committees and</u> <u>Task Forces</u>-;
  - b) Regularly review policies which provide for the sound management of Engineers Canada's volunteers and personnel i-
  - c) Establish, administer, and annually review <u>C</u>eompetency <u>P</u>profiles for the Board, individual directors<u>Directors</u>, and chairs<sub>i</sub>.
  - d) Provide oversight of the <u>dD</u>irector onboarding and development program-;
  - e) Annually review succession planning for the CEO, the Board, and its Ceommittees:-
  - f) Annually confirm succession plans for the direct reports to the CEO2-
  - g) Develop and recommend annual objectives for the CEO to the Board
  - h) Conduct regular CEO assessments and make recommendations to the Board regarding annual CEO compensation; and,-
  - i) Review results of the Employee employee Engagement engagement survey.

## 6.12.2 Authority

The Committee has the authority to recruit or contract external resources to assist with its work within



the **budget** <u>Budget</u> allocated by the Board.

## 6.12.3 Composition

- The HR Committee is comprised of the <u>pP</u>resident, <u>presidentPresident-electElect</u>, and <u>pP</u>ast\_-<u>pP</u>resident, as well as a member from the CEO Group and a minimum of two other <u>dD</u>irectors, all of whom are voting members.
  - a) The <u>Ppast</u> <u>P-president normally serves as chair of the <u>C</u>eommittee, unless the HR Committee decides otherwise.</u>
  - b) The outgoing HR Committee shall, annually, nominate at least two <u>D</u>directors and one alternate to the next year's HR Committee. The alternate <u>dD</u>irector shall only serve if one of the other <u>D</u>directors is elected by the Board as <u>P</u>President-<u>E</u>elect.
  - (2) Quorum shall be set at 50 per cent of the members plus one.
  - (3) The Engineers Canada's Director of Human Resources shall provide support to the HR Committee.



## **BRIEFING NOTE:** For decision

By-law amendments	4.5
Purpose:	To approve the amendments to the Engineers Canada By-law
Link to the Strategic Plan:	Board responsibility 4: Ensure the development and periodic review of Board policies
Motion(s) to consider:	THAT the Board recommend to the Members, for approval at the 2021 Annual Meeting of Members, the following amendments to the By-law, on recommendation of the Governance Committee: 1.1 "Per Capita Assessment" means the annual amount to be paid by each Member as determined by its number of Registrants, as further defined in Article <u>7</u> 8. 5.8 "The Board shall submit recommendations to the Members on the following matters, by a vote passed by a majority of not less than two-thirds of the votes cast, provided that no decision in respect thereof shall have any force or effect until approved by the Members in accordance with section 3.4 of this By-law:  (b) <u>Amendments to The amount of the</u> Per Capita Assessment"
Vote required to pass:	Two-thirds majority, as per article 5.8 d) of the By-law
Transparency:	Open session
Prepared by:	Evelyn Spence, Legal Counsel and Corporate Secretary
Presented by:	Nancy Hill, Chair of the Governance Committee

## **Problem/issue definition**

- Within Board policy 6.8, *Governance Committee Terms of Reference*, the Governance Committee is tasked to "[r]eview and make recommendations on the currency and relevance of the By-laws and Articles of Continuance."
- There have been no recent changes to the corporation's statement of purpose, restrictions on activities, classes of members or distribution of property so as to require any recommended updates to the Articles. It is, however, a good practice for corporations to regularly consider their By-laws and determine whether they are correct and reflective of the corporation's practices. In light of this, the committee reviewed the Engineers Canada By-law, and is proposing that two amendments be made.

## **Proposed action/recommendation**

- That the Board approve the proposed By-law amendments, by recommending them to the Members for their (final) approval at the meeting of Members in May 2021.
  - Only two amendments are required; to correct reference from 'Article 8' to 'Article 7' within the definition of "Per Capita Assessment," and to update section 5.8, to bring it in-line with the new Per Capita Assessment provisions that were added in May 2020.

## Other options considered

• The Board could hold off recommending any changes to the By-law and wait to make improvements when more substantive changes are required.

## **Risks**

• Operating under By-laws with errors or inconsistencies leads to confusion, inconsistent application of the rules, and in extreme cases, can invite legal challenges.

## **Financial implications**

• The suggested By-law revisions do not bring with them any financial implications.

## **Benefits**

• Opportunity to correct errors and inconsistencies that exist in the By-law.

## Consultation

• The Governance Committee have reviewed and agreed to put forward the proposed By-law amendments.

## **Next steps**

- If the Board passes the motion to recommend the By-law changes to the Members, the proposed By-law revisions will be circulated to the Members immediately following the February Board meeting.
- Members will be asked to share the proposed By-law amendments with their respective Councils so that the presidents may receive instructions and be prepared to cast a vote at the 2021 Annual Meeting of Members, when the Members will be asked to approve the amendments.
- Thereafter, if approved, the revised By-law will take effect.

## Attachments

- Appendix 1: Summary of By-law revisions, with rationale for update
- Appendix 2: Draft By-law, with proposed edits tracked into the document

#### **APPENDIX 1**

Current By-law	Recommended update	Rationale
1.1 "Per Capita Assessment" means the annual amount to be paid by each Member as determined by its number of Registrants, as further defined in <u>Article 8</u> ."	"Per Capita Assessment" means the annual amount to be paid by each Member as determined by its number of Registrants, as further defined in <u>Article 7</u> ."	The definition refers to the wrong Article.
<ul> <li>5.8 "The Board shall submit recommendations to the Members on the following matters, by a vote passed by a majority of not less than two-thirds of the votes case, provided that no decision in respect thereof shall have any force or effect until approved by the Members in accordance with section 3.4 of this By-law:</li> <li></li> <li>(b) <u>Amendments to the Per Capita Assessment</u></li> </ul>	"(b) <u>The amount of the</u> Per Capita Assessment	Reference to "Amendments to the Per Capita Assessment" was appropriate when s. 7 of the By-law referred to the Per Capita Assessment being fixed at \$10.21 per Registrant. Now that the By-law does not make reference to a set fee, and instead must be determined annually, it does not make sense to refer to 'amendments' being made. This provision needs to better align with the new s. 7.2, which suggests that the Board shall recommend to the Members the amount of the Per Capita Assessment.

A By-law relating generally to the business and affairs of ENGINEERS CANADA

BE IT ENACTED as a By-law of Engineers Canada as follows:

#### 1 INTERPRETATION

#### 1.1 **Definitions**

All terms contained herein and which are defined in the Act or the Regulations shall have the meanings given to such terms in the Act or Regulations.

"**Act**" means the *Canada Not-For-Profit Corporations Act*, S.C. 2009, c.23, including Regulations made pursuant to the Act, and any statute or regulations that may be substituted, as amended from time to time.

"**Advisor**" means a person appointed by Board policy to make recommendations and/or provide key information to the Board.

"Board" means the Board of Engineers Canada comprised of Directors and Advisors.

"**Board members**" means the Directors and Advisors elected or appointed in accordance with this By-law.

"Chief Executive Officers Group" means the group comprised of the chief staff officer of each of the Members.

"Major Capital Project" means a capital project with a value of more than 10% of the annual operating budget.

"Member" means a Member as further defined in Article 2.

"**Per Capita Assessment**" means the annual amount to be paid by each Member as determined by its number of Registrants, as further defined in Article <u>87</u>.

"**Registrant**" means an individual registered with a Member at December 31, with the exception of applicants and students.

"**Secretary**" is an office held by the Chief Executive Officer of Engineers Canada or such other person appointed by the Board.

"**Special National Initiative**" means any project or program which would require a special assessment of Members or an increase in Per Capita Assessment and any major capital project.

"Standards" means accreditation criteria.

"Strategic Plan" means the plan to achieve Engineers Canada's envisioned future.

**"2/3-60% Majority**" means a resolution passed by a minimum of two-thirds of the Members voting, who represent a minimum of sixty percent of represented Registrants.

#### 1.2 Interpretation

In the interpretation of this By-law, words in the singular include the plural and *vice-versa*, words in one gender include both genders.

#### 1.3 Language

Equal recognition shall be given to Canada's two official languages in the operation of Engineers Canada. In the event of any inconsistency between the English language text of a By-law or other document and the French language text of such By-law or other document, the English language text shall govern.

#### 2 MEMBERSHIP

#### 2.1 Membership

Each of the following shall be a Member until such time as its status as a Member is withdrawn or terminated as provided herein, namely:

- (a) Association of Professional Engineers and Geoscientists of Alberta (APEGA);
- (b) Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB);
- (c) Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS);
- (d) Association of Professional Engineers and Geoscientists of the Province of Manitoba (APEGM);
- (e) Association of Professional Engineers of Nova Scotia (APENS);
- (f) Association of Professional Engineers of Ontario (PEO);
- (g) Association of Professional Engineers of Yukon (APEY);
- (h) Northwest Territories Association of Professional Engineers and Geoscientists (NAPEG);
- (i) Ordre des ingénieurs du Québec (OIQ);
- (j) The Association of Professional Engineers and Geoscientists of British Columbia (APEGBC);
- (k) The Association of Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL);
- (I) The Association of Professional Engineers of the Province of Prince Edward Island (APEPEI); and
- (m) Other provincial or territorial entities established for the purpose of regulating the practice of engineering in any province or territory of Canada as may be approved by a 2/3-60% majority resolution of the Members.

### 2.2 **Resignation of Membership**

A Member may resign from membership by notice in writing to the Secretary not less than twelve months prior to the next following Annual Meeting of Members.

#### 2.3 Termination of Membership

- (1) Membership may be terminated if, at a special meeting of the Members called for such purpose, a resolution is passed terminating such membership, provided that the Member shall be granted the opportunity to be heard at such meeting.
- (2) Notwithstanding a resignation or termination of membership, a Member shall remain liable for payment of outstanding and due Per Capita Assessment up to and including the effective date of the resignation or termination.

#### 3 MEETINGS OF THE MEMBERS

#### 3.1 Notice of Meeting of Members

- (1) Notice of the time and place of a Meeting of Members shall be given to each Member entitled to vote at the meeting and to each Director and the public accountant, if applicable, by telephonic, electronic, or other communication facility during a period of 21 to 35 days before the day on which the meeting is to be held. If a Member requests that the notice be given by non-electronic means, the notice will be sent by mail, courier, or personal delivery.
- (2) A special resolution of the Members is required to make any amendment to this By-law to change the manner of giving notice to Members entitled to vote at a Meeting of Members.

#### 3.2 General and Special Meetings

Other meetings of the Members, whether special or general, may be convened at any time and place by order of the president or the president-elect or by the Board or on request by any Member.

#### 3.3 Error or Omission in Notice

The non-receipt of any notice by any Member or Members shall not invalidate any resolution passed or any proceedings taken at any meeting of Members.

#### 3.4 Votes to Govern at Members' Meetings

Each Member present at a meeting shall have the right to exercise one vote. This vote shall be exercised by the current chair/president of a Member.

- (1) A Member may, by means of a written proxy, appoint a proxy holder to attend and act at a specific meeting of Members, in the manner and to the extent authorized by the proxy.
- (2) All questions arising at a meeting of the Members shall require a resolution passed by at least a 2/3-60% Majority.
- (3) The chair of any meeting of Members shall not have the right to vote thereat and, in case of an equality of votes the chair of the meeting shall have no casting vote and such motion before the Members shall be deemed to be defeated.

#### 3.5 **Quorum**

- (1) A quorum at any meeting of the Members shall be at least two-thirds of the total number of Members, representing at least sixty percent of the total number of Registrants.
- (2) If a quorum is present at the opening of any meeting of Members, the Members present may proceed with the business of the meeting even if a quorum is not present throughout the meeting.

#### 3.6 Electronic Voting

Meetings of Members may be held entirely by means of a telephonic, electronic or other communication facility.

#### 3.7 Chair

Meetings of the Members shall be chaired by the president of Engineers Canada or a person chosen by the Members.

#### 4 DIRECTORS AND ADVISORS

#### 4.1 Nomination of Directors

- (1) Each Member shall deliver a list of nominees, who are engineers in good standing, to the Secretary for consideration at the Annual Meeting of Members.
- (2) Only individuals nominated in accordance with this nominations policy are eligible to be a director.

#### 4.2 Composition and Election of Directors

- (a) The number of directors shall not exceed twenty three (23).
- (b) Directors shall be elected on the basis of nominations received as follows:

One (1) from the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador;

One (1) from the Association of Professional Engineers of Nova Scotia;

One (1) from the Association of Professional Engineers of the Province of Prince Edward Island;

One (1) from the Association of Professional Engineers and Geoscientists of New Brunswick;

Four (4) from l'Ordre des ingénieurs du Québec;

Five (5) from the Association of Professional Engineers of Ontario;

One (1) from the Association of Professional Engineers and Geoscientists of the Province of Manitoba;

One (1) from the Association of Professional Engineers and Geoscientists of Saskatchewan;

Four (4) from the Association of Professional Engineers and Geoscientists of Alberta; Two (2) from the Association of Professional Engineers and Geoscientists of British Columbia:

One (1) from the Association of Professional Engineers of Yukon;

One (1) from the Northwest Territories Association of Professional Engineers and Geoscientists.

#### 4.3 Advisors

- (1) The Board may establish policy to appoint persons as Advisors.
- (2) Advisors shall, upon invitation by the Board, be entitled to attend and participate in discussions at meetings of the Board, in whole or in part (as determined by the Board), but shall not have the right to vote thereat.
- (3) Advisors may perform such other duties as shall from time to time be requested by the Board.

#### 4.4 Remuneration and Expenses

- (1) Board members shall serve without remuneration.
- (2) Board members shall not receive any financial gain by virtue of serving as a Board member.

(3) Board members may be reimbursed for reasonable expenses incurred in the performance of duties.

#### 4.5 Filling Vacancies

A vacancy occurring in the Board shall be filled by the Members from a list of nominees from the Member that nominated the director who has left the Board and the director appointed to fill the vacancy shall hold office for the remainder of the term of the director who left the Board.

#### 4.6 Term Limits

- (1) Directors shall be elected to the Board for a term of three (3) years.
- (2) No director may be elected to the Board for more than two (2) terms, or a lifetime maximum of six (6) years.
- (3) The foregoing term limits shall not apply to a director who is elected or confirmed, as applicable, to hold office as president-elect, president, or past-president prior to the expiration of their second term, in which case they may continue on the Board until they have finished serving as past-president.
- (4) The Members shall have the authority to extend a director's term beyond those described above, in extenuating circumstances, in order to ensure effective governance.

### 5 MEETINGS OF THE BOARD

#### 5.1 Number of meetings

The Board shall hold at least one meeting per fiscal year and as many additional meetings as are deemed necessary, for the purpose of transacting the business of Engineers Canada.

#### 5.2 Notice

The president, the president-elect, or any five directors may at any time convene a meeting of the Board.

#### 5.3 **Open meetings**

- (1) Except as provided for in this section, all meetings shall be open to the Members, Advisors, and invited observers.
- (2) A meeting or part of a meeting may be closed to the Members, Advisors, or invited observers by the chair of the meeting at his or her discretion if the subject matter being considered concerns:
  - (a) the security of Engineers Canada;
  - (b) personal matters about an identifiable individual;
  - (c) the proposed or pending acquisition of assets by Engineers Canada;
  - (d) litigation or potential litigation;
  - (e) the receiving of advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and
  - (f) any other matter which the Board determines.

#### 5.4 **Quorum**

- (1) At any meeting of the Board, a majority of the total number of directors shall constitute a quorum. Provided a quorum is present at the beginning of a meeting, the meeting may continue or adjourn even though directors leaving reduce the number to less than a quorum.
- (2) Directors who have declared a conflict of interest on a particular question shall be counted

in determining a quorum. Notwithstanding any vacancy among the directors, a quorum of the Board may exercise all the powers of the Board.

#### 5.5 Voting

- (1) Each director shall have one vote at meetings of the Board.
- (2) Any question arising at a meeting of the Board shall be decided in accordance with *Robert's Rules of Order*, unless otherwise provided in this By-law.

#### 5.6 Absentee Directors

If a director is absent from a meeting of the Board, the Member that nominated that director may send an observer. Such observer may participate in discussions.

#### 5.7 Approvals Requiring Two-thirds Majority

A Board resolution passed by a majority of not less than two-thirds of the votes cast on that resolution is required to make a decision in respect of the following matters:

- (a) Board Recommendations required in section 5.8;
- (b) Approval of the Budget or any amendments thereto;
- (c) Adoption, amendment, or repeal of any Board policies or procedures;
- (d) Adoption, amendment, or repeal of Standards;
- (e) Board decisions in respect of any litigious or potentially litigious matters that may endanger the organization's public image, credibility, or its ability to fulfill the purposes.

#### 5.8 Board Recommendations

The Board shall submit recommendations to the Members on the following matters, by a vote passed by a majority of not less than two-thirds of the votes cast, provided that no decision in respect thereof shall have any force or effect until approved by the Members in accordance with section 3.4 of this By-law:

- (a) Approval of the Strategic Plan;
- (b) Amendments to The amount of the Per Capita Assessment;
- (c) Approval of Special National Initiatives; and
- (d) Amendment or repeal of the Articles of Continuance (which includes changes to Engineers Canada's name and purposes) or By-law.

#### 5.9 Minutes of Meetings

The minutes of all meetings of the Board shall be sent to all Board members and to all Members.

#### 6 OFFICERS

- 6.1 The officers shall be the president, the president-elect, the past-president, the Chief Executive Officer, the Secretary and such other officers as the Board may from time to time by resolution determine.
- 6.2 Any officer may be removed at any time by a two-thirds majority resolution of the Board.

#### 7 PER CAPITA ASSESSMENT

7.1 Prior to January 31st of each year, each Member shall report the number of Registrants in its association.

- 7.2 No later than January 1st of each year, the Board shall recommend to the Members the amount of the Per Capita Assessment that will be in effect on the second following January 1st. The Members will consider the recommendation and finalize the amount of the Per Capita Assessment no later than July 1st of each year with the decision by the Members to take effect on the second following January 1st (18 months notice).
- 7.3 Each Member shall pay to Engineers Canada the Member-approved Per Capita Assessment per Registrant within two months of receipt of invoice for same or pursuant to payment schedule reflective of the Member's registrant payment schedule.
- 7.4 In the event that the Members are unable to finalize the amount of the Per Capita Assessment by July 1<sup>st</sup>, the Per Capita Assessment last determined by the Members shall remain in effect.

#### 8 AUDITOR

- 8.1 The Members shall appoint a chartered professional accountant (CPA) licensed to practise public accounting in Ontario as auditor of Engineers Canada annually.
- 8.2 The auditor shall audit the accounts of Engineers Canada after the close of the fiscal year and make a report thereon, and on the financial statements of Engineers Canada, to the Members at the Annual Meeting of Members.

#### 9 FISCAL YEAR

9.1 The financial year of Engineers Canada shall be the calendar year.

#### 10 RULES OF ORDER

10.1 In all cases for which no specific provision is prescribed by law or made in the By-law, the rules and practice of the latest edition of *Robert's Rules of Order* shall govern as far as applicable, provided that no action shall be invalid by reason only of a failure to adhere to such rules.

#### 11 AMENDMENT OF BY-LAW

11.1 A proposal for the amendment or repeal of the By-law may be put forward by a Member.



## **BRIEFING NOTE:** For decision

Director assessment		4.6
Purpose:	To approve content of the survey for the 2021 Director assessment, as per Board policy 4.13 Individual Director Assessment	3,
Link to the Strategic Plan:	Board responsibility 1: Hold itself, its Directors, and its Direct Reports accountable Board responsibility 6: Provide orientation of new Directors, and continuing development or Directors and others who work closely with the Board	f
Motion(s) to consider:	THAT the Board approve the content of the Director self- and peer-assessment survey, on recommendation of the HR Committee.	
Vote required to pass:	Simple majority	
Transparency:	Open session	
Prepared by:	Christina Mash, Governance Administrator	
Presented by:	David Lynch, Director from Alberta and Chair of the HR Committee	

## **Problem/issue definition**

- This is the second year that the Engineers Canada Board will be implementing the annual assessments for Directors.
- The Board has established Board policy 4.13, *Individual Director Assessment* to ensure that opportunities exist to evaluate and discuss individual Directors' performance and contributions. To support these assessments, the following policies are in place:
  - Board policy 4.2, *Directors' Responsibilities*
  - o Board policy 4.8, Board Competency Profile
- The assessment survey (included as Appendix 1) has been created in accordance with these policies and is similar to the survey issued last year, with the following improvements noted:
  - o Improving the timing so the surveys are spread out, reducing the risk of possible survey fatigue;
  - Adding messaging to encourage respondents to not use "same as above" or similar, which hinders data delivery as the reference is hard to clarify while maintaining confidentiality;
  - Ensuring the President-Elect is experienced in delivering constructive feedback. This is a specialized skill that may vary in comfort amongst candidates holding the position, and the HR Committee will discuss annually to determine if/what support is required;
  - Adjusting the committee participation question to a ranked response format, and to include the 30 by 30 champion position, which was omitted in 2020; and,
  - Enhanced rating scales.

## Proposed action/recommendation

• That the Board review and approve the content of the survey.

## **Other options considered:**

• None.

## **Risks**

- Not implementing the assessments for Directors would put Directors and the organization at risk in terms of compliance with policies and the strategic plan.
- Delivery of the assessment results is the responsibility of the President-Elect. Constructive feedback delivery is a specialized skill, that requires years of experience and this responsibility may not be suited to every President-Elect candidate. In the years where the President-Elect candidate is not comfortable delivering the peer review results to Directors, the Human Resources (HR) Committee will discuss options, including transferring the responsibility to another committee member who has experience in this area.

## **Financial implications**

None

## **Benefits**

- Measuring the actions of Directors will have the following benefits:
  - increased effectiveness of the Board as a governing body;
  - opportunity for the Directors to reflect on their contributions, and to receive feedback from their peers; and,
  - o opportunity to identify actions that can be taken to increase the value of Director contributions.
- Results will inform development opportunities, succession planning, and future role assignment activities.

## Consultation

• The survey is created in accordance with the Board policy manual and was approved by the HR Committee at their December meeting.

## Next steps (if motion approved)

- Upon Board approval, staff will launch the survey and circulate to Directors for completion. The survey will be open for two (2) full business weeks.
- Once the survey closes and tabulated reports have been prepared for Directors who have been assessed by their peers, the President-Elect, or their designate, will review and deliver the reports.
- Following delivery of the reports, discussions with the President-Elect, or their designate, will be scheduled if requested by the peer-assessed Directors.

## **Appendices**

• **Appendix 1**: Structure and content of the Director self- and peer- assessment survey

## **Appendix 1** - Structure and content of the survey for Director assessments

### A. Director self-assessment

#### Background

This assessment is developed using Board policies 4.2 *Directors' Responsibilities*; 4.8 *Board Competency Profile*; and 4.13 *Individual Director Assessment*. All Directors are asked to complete the self-assessment annually, with new Directors receiving the questionnaire during onboarding.

#### Introduction to Director self-assessment

Engineers Canada's Director assessment process is in place to support the development of individual Directors, help them enhance their contribution to the Board, and enable them to have a more positive experience as an Engineers Canada Director.

How will your responses be used? The individual Director evaluation process is conducted with the goals of:

- providing Board members with an opportunity to reflect on their contribution, and to receive feedback from their peers;
- determining actions that can be taken to increase the value of Director contributions; and,
- informing the President-Elect of the strengths, weaknesses, abilities and desires of individual Board members they will be leading in the coming year.

The tabulated results will also contribute to the creation of competency profiles for Directors and Board as a whole, which will be used for nominations, ongoing Director development, and populating committees.

Thank you for your responses, which will be used for future planning and will remain unattributed.

1. Please provide your name

#### Measuring Director demographics

The Board supports as much diversity as possible in its makeup and two demographic goals have been set for active monitoring. Your responses to the questions below will assist the Board in measuring its efforts.

- 2. Are you currently an active engineering practitioner? Yes / No / Other (please explain)
- 3. In accordance with its Diversity and Inclusion policy, the Board strives to include at least 30 per cent women. Please select the group you represent: Female / Male / I identify as \_\_\_\_\_\_(field to enter gender) / I prefer not to respond

*Optional questions:* Engineers Canada has an interest in understanding how the Board reflects the Canadian population at large. The following questions do not relate to the competency profile as included in the Board policy manual, but they relate directly to Engineers Canada approved strategies:

- 4. Academic background I am a graduate of: a Canadian Engineering Accreditation Board (CEAB) accredited program / a non-CEAB-accredited engineering program / my path was different (details): \_\_\_\_\_
- 5. Do you identify as Indigenous (e.g. First Nations (North American Indian), Métis, or Inuit)? Yes / No / I prefer not to answer

#### Measuring Director competencies

Engineers Canada's Board competency profile (Board policy 4.8, *Board Competency Profile*) reflects the collective skills and experience that are deemed necessary to effectively govern. No single Board member is expected to have all competencies contained in this profile. Collectively, the Board of Directors should have sufficient experience to reflect all competencies.

Tabulated responses to the ratings below will assist the HR Committee in informing future calls to regulators for Director nominations and Director training.

6. Considering the following desired competencies, rate your experience and knowledge in each area:

Director competencies (as per Board policy 4.8, Board Competency Profile)	3 - Highly skilled in this area.	2 - Skilled in this area.	1 –Some experience in this area.	0 – No experience in this area.	Comments (please type out in full)
6.1. Board governance, experience, and leadership: Experience with board governance, preferably on a regulator Council or other governing body. Possesses a clear understanding					
of the distinction between the role of the Board versus the role of management.					
6.2. Business/management experience: Experience with sound management and operational					
business processes and practices. Includes an understanding of topics such as managing					
complex projects, leveraging information technology, planning and measuring performance,					
and allocating resources to achieve outcomes.					
6.3. Regulator experience: Practical knowledge of the working of provincial/territorial					
Regulators, including such matters such as accreditation, licensure, practice issues, and					
discipline and enforcement.					
6.4. Accounting/financial experience: Understanding of accounting or financial management.					
Includes analyzing and interpreting financial statements, evaluating organizational budgets,					
and understanding financial reporting and knowledge of auditing practices.					
6.5. Strategic planning experience: Experience in developing strategic direction for an					
organization while considering broad and long-term factors. Understands how an					
organization must evolve in light of internal and external trends and influences. Able to					
identify patterns, connections, or barriers to addressing key underlying issues.					
6.6. Risk management experience: Experience with enterprise risk management. Includes					
identifying potential risks and recommending and implementing preventive measures,					
organizational controls, and compliance measures.					

#### Measuring Director responsibilities

The following questions outline the responsibilities of each Director, as included in Board Policy 4.2, *Directors' Responsibilities*. Tabulated responses to the ratings below will assist in informing future calls to Regulators for Director nominations.

Director responsibility (as per Board policy 4.2, Board Responsibilities)					Comments
7.1. How well do you know the business of Engineers Canada?	I have an in-depth understanding	I have a strong understanding	I have a limited understanding	I require more support	
7.2. Are you able to ensure sufficient time to fulfill your Director's duties and responsibilities?	Yes / No / N/A	Yes / No / N/A			
7.3. How well are you informed of issues affecting, or likely to affect, Engineers Canada and the Regulators?	I have an in-depth understanding	I have a strong understanding	I have a limited understanding	l require more support	
7.4. How well do you contribute to the Board's decision-making process by discussing all matters freely and openly at Board meetings?	l am a very strong contributor	l am a strong contributor	l am a moderate contributor	I am a limited contributor	
7.5. How well do you contribute to the Board's decision-making process by working towards achieving a consensus which respects divergent points of view?	l am a very strong contributor	l am a strong contributor	I am a moderate contributor	I am a limited contributor	
7.6. How well do you contribute to the Board's decision-making process by respecting the rights, responsibilities, and decisions of the Regulators?	I am a very strong contributor	l am a strong contributor	l am a moderate contributor	I am a limited contributor	
7.7. How well do you contribute to the Board's decision-making process by participating actively in the work of the Board, including by serving on committees or task forces?	l am a very strong contributor	l am a strong contributor	I am a moderate contributor	I am a limited contributor	
7.8. Do you bring the views, concerns, and decisions of the Board to your Regulator?	Yes / No / Sometime	s / N/A			
7.9. Are you seeking your regulator's input on issues to be discussed by the Board so as to be able to communicate their position to the Board?	Yes / No / Sometime	s / N/A			
7.10. Are you advising your Regulator of issues to be presented to the Members?	Yes / No / Sometime	s / N/A			
7.11. How knowledgeable are you of the rules, regulations, policies, and procedures governing the Regulator that nominated you?	I have an in-depth understanding	I have a strong understanding	I have a limited understanding	l require more support	
7.12. How familiar are you with the incorporating documents, By-law, policies, and legislation governing Engineers Canada as well as the rules of procedure and proper conduct of meetings?	I have an in-depth understanding	I have a strong understanding	I have a limited understanding	l require more support	
7.13. Do you participate in Board educational activities that will assist you in carrying out your responsibilities?	Yes / No / N/A				

7. Considering each Director responsibility, rate your personal understanding/contributions in each area:

- 8. The following information will be used in confidence by the HR Committee to advise the selection of next year's committee members and chairs. Considering your full term as a Director of the Board, please indicate the following:
  - 8.1. I would like to work towards the following position(s):
    - President-Elect (succession eventually leads to HR Committee chair and President, then Past President)
    - Governance Committee chair
    - FAR Committee chair
    - There are other ways I would like to contribute (comment box)
    - I will continue in my capacity as Director for now
    - This question is not applicable due to my current term status
  - 8.2. Please rank your interest in participating in the following Board committee(s) and roles for a one-year term, beginning in June 2021 (1 being highest interest, 8 being lowest):
    - Governance
    - HR (Human Resources)
    - FAR (Finance, Audit, and Risk)
    - Director appointee to the CEAB (Canadian Engineering Accreditation Board)
    - Director appointee to the CEQB (Canadian Engineering Qualifications Board)
    - 30 by 30 Champion
    - I would prefer to observe the various committees at this time
    - This question is not applicable due to my current term status

## B. Director peer-assessment

#### Background

This assessment is developed using Board policies 4.2, *Directors' Responsibilities* and 4.13, *Individual Director Assessment*. Directors will be peer-reviewed in year two of their first mandate, and year one of their second mandate; the names included below reflect this.

#### Introduction to Director peer-assessment

The peer-assessment process is performed for Directors who are serving their second year of their first term and the first year of their second term. The tabulated results of this survey are provided to each Director being evaluated and will be reviewed by the President-Elect or their designate. To ensure your feedback is managed correctly, please use the appropriate columns when providing open-ended comments. Thank you for taking the time to evaluate your Director colleagues.

#### Measuring peer Director responsibilities

2 – strong contributor

The following question outlines the responsibilities required by each Director as determined in Board policy 4.2, Board Responsibilities.

- 1. Considering each Directors' performance, rate their understanding/contributions in each area using these scales:
  - Scale A

3 – demonstrates an in-depth understanding	<ol> <li>1 – demonstrates a limited understanding</li> </ol>

- 2 demonstrates a strong understanding 0 Not able to measure
- Scale B
  - 3 very strong contributor
    - 0 limited contributor

1 – moderate contributor

- Unable to measure

- Scale C
  - Yes
  - No

Direc	tor responsibility (as per Board policy 4.2, <i>Board Responsibilities</i> )	Jean	Danny	Justin	Kelly	Changiz	Jane	Mike	Chris
		Boudreau	Chui	Dunn	Reid	Sadr	Tink	Wrinch	Zinck
1.1.	Knows the business of Engineers Canada. (Scale A)								
1.2.	Ensures sufficient time to fulfill their Director's duties and								
	responsibilities? (Scale C)								
1.3.	Is informed of issues affecting, or likely to affect, Engineers Canada								
	and the regulators. (Scale A)								
1.4.	Contributes to the Board's decision-making process by discussing all								
	matters freely and openly at Board meetings. (Scale B)								

Director responsibility (as per Board policy 4.2, <i>Board Responsibilities</i> )		Jean Boudreau	Danny Chui	Justin Dunn	Kelly Reid	Changiz Sadr	Jane Tink	Mike Wrinch	Chris Zinck
1.5.	Contributes to the Board's decision-making process by working								
	towards achieving a consensus which respects divergent points of								
	view. (Scale B)								
1.6.	Contributes to the Board's decision-making process by respecting								
	the rights, responsibilities, and decisions of the regulators. (Scale B)								
1.7.	Contributes to the Board's decision-making process by participating								
	actively in the work of the Board, including by serving on								
	committees or task forces. (Scale B)								
1.8.	Is knowledgeable of the rules, regulations, policies, and procedures								
	governing the regulator that nominated/elected them. (Scale A)								
1.9.	Is familiar with the incorporating documents, Bylaw, policies, and								
	legislation governing Engineers Canada as well as the rules of								
	procedure and proper conduct of meetings. (Scale A)								
1.10.	Participates in Board educational activities that will assist them in								
	carrying out their responsibilities. (Scale C)								
There are two opportunities to provide open feedback:									
2. A	2. Anonymous feedback: These comments are intended for the								
P	resident-Elect (or their designate) <u>only</u> and will not be shared. Please								
e	nsure that comments are typed out in full so they can be properly								
a	nalyzed.								
3. <b>C</b>	<b>Ppen feedback</b> : These comments will be shared (unattributed) in your								
с	olleague's peer assessment report. Please ensure that comments are								
t	yped out in full so they can be shared with the individual.								

### Providing results: Post peer-evaluation

Those being peer evaluated are provided with a report that includes the tabulated responses and open feedback shared through the survey. Each peer-evaluated Director has the option of scheduling a discussion with the President-Elect, or their designate to discuss their results. This meeting is optional, and would focus on:

- Training opportunities: areas for improvement and potential supports required by the Director
- Involvement opportunities: Identification of the Director's interests in future board contributions and roles, as well as succession opportunities



## **BRIEFING NOTE:** For decision

Payout of excess affinity revenues						
Purpose:	To implement a policy for management of excess affinity partner revenue					
Link to the Strategic Plan:	Internal Enabler					
Motion(s) to consider:	THAT the Board direct the Governance Committee, in consultation with the FAR Committee, to develop a policy that will pay out excess affinity sponsorship revenue, related to PEO members, to the Regulator affinity program partners in accordance with their respective prorated Total Written Premium Volume (TWPV).	'ז				
Vote required to pass:	Two-thirds majority, as per article 5.7 c) of the By-law					
Transparency:	Open session					
Prepared by:	Chris Zinck, Director from Nova Scotia					
Presented by:	Chris Zinck, Director from Nova Scotia					

## **Problem/issue definition**

- Before 2018, the affinity contract with TD Insurance (TDI) provided Engineers Canada with a revenue percentage of 1.3% of total written premium volume (TWPV) for home and automobile insurance business. The matching agreement between Engineers Canada and the Regulator affinity program partners (the "affinity partner contracts"), which took effect in 2018, had Engineers Canada's share of the revenue at 87% and the Regulators share was 13%.
- In 2017, when the new TDI Engineers Canada affinity agreement was being renegotiated (the "new TDI agreement"), the revenue percentage doubled from 1.3% to 2.6% of TWPV.
- During the negotiations, Engineers Nova Scotia suggested two foundational principles for the new affinity partner contracts, as a necessary step for acceptance by the Regulators participating in the affinity program (the "Regulator affinity partners"). First, is that Engineers Canada was fully funded and should not receive more revenue. Second, the Regulator provinces/territories that generated the affinity revenue should receive a larger share than Engineers Canada. These principles were used to determine the minimum increase in revenue required in the new TDI agreement and the sharing percentages between Engineers Canada and the Regulator affinity partners.
- The new affinity partner contract was set up to provide all the new revenue to the Regulator affinity partners. The percentages of TWPV (1.274% and 1.326%) were chosen so that Engineers Canada received 49% of the affinity revenue and the Regulator affinity partners received 51%. Because the revenue was doubled from the old contract, this percentage share provided a similar net revenue amount for Engineers Canada as the previous TDI agreement and all new revenue went to the Regulator affinity partners.
- In 2019, at the request of Engineers Nova Scotia, the affinity partner contracts were amended to include a two-tier revenue sharing arrangement. That arrangement provides that insurance policies written since January 2020 will generate revenue that is shared based on a new formula of 90% partner / 10% Engineers Canada. This new arrangement will not be materially relevant in the short-to-medium term.
- Due to the doubling of affinity revenue under the new TDI agreement and the increase in Regulator partner share, the annual PEO amount that is generated by Ontario professional engineers in the affinity program jumped from a few hundred thousand dollars under the old agreement to over \$1.5 million in the first year of the new TDI agreement. The PEO amount is projected to be \$2.3M in 2020, \$2.62M in 2021 and \$3.1M in 2023.

- While the affinity partner contract does not explicitly provide the Engineers Canada percentage of TWPV, it does provide the total percentage (2.6%) and the partner share percentage (1.326%), therefore showing an Engineers Canada percentage share as 1.274%.
- Retaining all the Ontario affinity revenue goes against the 1.274% share and the two foundational principles of the agreement.
- The Regulator affinity partners (currently, Engineers Nova Scotia, Engineers and Geoscientists New Brunswick, Engineers PEI, PEGNL, Engineers Yukon and NAPEG) have a contractual agreement with Engineers Canada that describes the sharing of TDI affinity revenue. Each Regulator partner has a separate contract with Engineers Canada.
- TDI pays the affinity program 2.6% of their TWPV for the Engineers Canada affinity plan policies. Amounts are paid for the previous year's TWPV. The affinity partner contracts specify that 1.326% of TDI's TWPV will go to the Regulator affinity partners based on their TWPV share, with the remaining 1.274% staying with Engineers Canada. These percentages give the Regulator affinity partners 51% of the total TDI affinity revenue and 49% stays with Engineers Canada.
- Ontario resident professional engineers purchase TDI insurance from the Engineers Canada affinity program but PEO is not part of the affinity program. The revenue generated from this activity comes to Engineers Canada as part of the affinity program. However, the TDI contract directs that affinity revenue can only be paid to those Regulators participating in the affinity program and to date, PEO has not joined the program. All the Ontario revenue has stayed with Engineers Canada.
- In 2019, \$2.14M was generated by Ontario professional engineers and would have gone to PEO if they had become a Regulator affinity partner. This table shows the revenue split if PEO were a Regulator affinity partner:

TDI Revenue for 2019 (scenario if PEO was a Regulator affinity partner)	(millions)
(affinity revenue is paid on previous year's TWPV)	
Total Written Premium Volume (Revenue generated by policies in 2018)	317.30
Total revenue paid out by TDI (2.6% of TWPV)	8.25
Engineers Canada Share (1.274% of TWPV or 49% of payout)	4.04
Regulator (Partners) Share (1.326% of TWPV or 51% of payout)	4.21

• However, PEO did not become a Regulator affinity partner, and in 2019 the amount stayed with Engineers Canada. This changed the totals as shown below:

TDI Revenue for 2019 (actual scenario since PEO is not a Regulator affinity	(millions)
partner) (affinity revenue is paid on previous year's TWPV)	
Total Written Premium Volume (Revenue generated by policies in 2018)	317.30
Total revenue paid out by TDI (2.6% of TPVW)	8.25
Engineers Canada Share (1.948% of TWPV or 74.9% of payout)	6.18
Regulator (Partners) Share (0.651% of TWPV or 25.1% of payout)	2.07

• By not paying out the Ontario revenue as per the contracted percentages, Engineers Canada's share changes from 1.274% to 1.948% or 74.9% of the 2019 TDI payout revenue.

## **Proposed action/recommendation**

• That the Board approve the motion and direct the Governance Committee, in consultation with the FAR Committee, to develop a Board policy which will set out the policy and process for Engineers Canada to pay out excess affinity sponsorship revenue, related specifically to PEO members, to the Regulator affinity partners in accordance with their respective prorated TWPV.

• The affinity partner contracts were constructed to deal with the additional revenue created under the new TDI agreement and to solve a set of problems with the previous affinity program arrangement. The existence of unclaimed Ontario affinity revenue has undone the solution that the new TDI agreement provided and exacerbated the unbalanced funding model. This motion will reassert the principles of the new TDI agreement and help rebalance the funding model.

#### **Other options considered**

None.

### **Risks**

- Risks of inaction:
  - The affinity partner contracts are silent on the issue of revenue generated from non-participating Regulators. However, the practice of retaining all the PEO non-partner revenue breaks both the implicit Engineers Canada percentage share and the foundational principles of the agreement.
  - As Directors, we have a fiduciary responsibility to provide good governance to Engineers Canada. The current practice regarding the PEO affinity revenue is not good for the organization as it increases the risk of affinity partner legal action, breaks implicit/explicit agreements between it and its owners, and provides more imbalance to an already dysfunctional revenue stream.

## **Financial implications**

- The Engineers Canada budgeting process assumes that PEO will participate in the affinity program until a decision is received annually in December, see page 87 to 91 of the December 7 agenda book.
- The 2022-2024 Strategic Plan priorities will need to be re-considered to fit within the conservative unrestricted reserve projections.

#### **Benefits**

- The revenue balance between Regulator assessment and affinity revenue will be improved (the percentage of total revenue provided by affinity revenue will be reduced). Inaction on this issue will result in an increasing imbalance of revenue sources as the PEO affinity revenue grows.
- The unrestricted reserve growth rate will be reduced.
- The affinity revenue sharing arrangement of 51% Regulator partners and 49% Engineers Canada will be restored.

## Consultation

• The CEO of Engineers Canada was advised of this matter when the briefing note was first delivered.

## Next steps (if motion approved)

- Should the Board accept this motion, the Governance Committee will be charged with developing an
  appropriate policy, in consultation with the FAR Committee, that enables the payout of excess affinity
  sponsorship revenue, as described in this note.
- Once developed, that policy will then come to the Board and if approved, will thereafter be implemented.

## **Appendices**

• Appendix 1: Report on affinity program agreements and revenues (background information)

## Report on affinity program agreements and revenues (background information)

## I. History

Over the past sixty years, Engineers Canada and TD Meloche Monnex Inc. (MMI) have partnered on a Group Affinity Auto & Homeowner Insurance Program (the "Program"). The Program was designed to be a national program, available to all of the Regulators and their members.

#### I. 2000 Affinity Agreement

Beginning in 2000, Meloche Monnex, with the consent of the Canadian Council of Professional Engineers (CCPE), offered a home, automobile, travel, and small business insurance program to members of the Regulators in Alberta, Ontario, Yukon, Northwest Territories, New Brunswick, Nova Scotia and PEI (EGBC, APEGS and EGM could not participate due to pre-existing provincial programs). The agreement governing that offering took effect on May 27, 2000 and provided for financial consideration to CCPE as follows:

- 2001: \$300,000
- 2002: \$750,000
- 2003: the greater of \$1,000,000 or the amount of \$1,000,000 adjusted in proportion to the change in premium volume between 2001 and 2003.
- Each year after 2003 until the end of the term (2010): based on the consideration for the previous year and adjusted in proportion to the change in premium volume between the year in question and the previous year, unless otherwise amended.

The 2000 Affinity Agreement did not provide for any financial consideration flowing to the Regulators.

#### *II* 2007 Affinity Agreement

In 2007, a new affinity agreement was negotiated between CCPE and TD Meloche Monnex, which replaced and revoked the 2000 Affinity Agreement. The revised agreement took effect December 22, 2007 and was intended to continue for a period of twelve (12) years, subject to automatic renewal for additional periods of five (5) years.

Under the 2007 Affinity Agreement, sponsorship payments were payable to CCPE, as well as to the Regulators participating in the Program (the "Regulator affinity partners") as follows:

- Payment to CCPE: \$1,200 per \$100,000 of written premiums under the Program applicable on the current year but based on the results of the previous year as at December 31<sup>st</sup> of each year.
- Regulator affinity partners: \$300 per \$100,000 of written premiums under the Program applicable on the current year provided (a) there was an agreement between CCPE and the Regulator affinity partners, and (b) the Regulator affinity partners met all the conditions. The sponsorship amount to the Regulator affinity partners commenced in 2009.

OIQ joined the program on April 1, 2010 for a period of five (5) years subject to automatic renewal for additional periods of one (1) year. Due to provincial restrictions regarding sponsorship revenue calculations, MMI paid a flat fee to OIQ and Engineers Canada.

The sponsorship calculation payable to Engineers Canada under the 2007 Affinity Agreement was amended on December 18, 2015, to be:

• Effective January 1, 2016, MMI will pay to Engineers Canada 1.3% of the Total Written Premium Volume ("TWPV") of the previous calendar year, ending December 31<sup>st</sup>.

## II. Current Status

In 2017, Engineers Canada renegotiated a new Insurance Affinity Agreement with MMI/TD Insurance (TDI) for a period of twelve (12) years starting on January 1, 2018 (the "new TDI Agreement").

As outlined in Schedule "C" of the new TDI Agreement, sponsorship payments are identified as follows:

- Engineers Canada to receive 2.6% of TWPV (the "total sponsorship")
- From the total sponsorship, Engineers Canada is to pay the Regulator affinity partners: 1.3% of their respective TWPW (the "partner sponsorship").

During the Program negotiations, certain representatives of the Regulator affinity partners identified that a change in the way the sponsorship revenue was shared with the partners was desired. To that end, it was decided that the partner sponsorship would represent a split delivering 51% of sponsorship to the Regulator affinity partners, with 49% returning to Engineers Canada, as the sponsor of the Program. The 1.3% identified in Schedule "C" of the new TDI Agreement remained intact, as it provided TDI with assurance that the minimum amount paid to the Regulator affinity partners would be 1.3% of their respective TWPV.

Subsequently, Engineers Canada concluded agreements with each of the Regulator affinity partners, namely: APEGA, Yukon, NAPEG, APEGNB, Engineers Nova Scotia, Engineers PEI and PEGNL, whereby the partners were promised 51% of the total sponsorship based on the TWPV from their respective jurisdictions, provided they undertook certain activities and agreed to stated terms and conditions.

Following discussions between Engineers Canada's CEO and Engineers Nova Scotia's former CEO regarding Nova Scotia's dissatisfaction with the current allocation of partner sponsorship fees (1.326%), a motion was passed at an emergency Board meeting on September 6, 2019, which provided for an increase in the sponsorship payable to the Regulator affinity partners. The motion read as follows:

"THAT the Engineers Canada Board authorise the CEO to change the TD Insurance Affinity Agreements with participating regulators such that the sharing ratio for the distribution of sponsorship payments is changed from 51%/49% (Regulator/EC) to 90%/10% for all <u>new</u> policies added to the program commencing January 1, 2020 and onwards."

The motion was carried and the changes were incorporated into a new agreement between Engineers Canada and the Regulator affinity partners (the "2019 affinity partner agreements"). The 2019 affinity partner agreements provide the same terms and conditions as the previous partner agreements, but re-state the sponsorship payments as follows: Engineers Canada will pay the Regulator affinity partner:

- 1.326% of its TWPV generated under the Program for all policies issued up to and including December 31, 2019 ("Existing Business"); and
- 2.34% of its TWPV generated under the Program for all polices that are issued beginning January 1, 2020 ("New Business")

## **III. PEO Situation**

During negotiations of the new TDI Agreement, TDI requested that the agreement allow PEO the option of becoming a Regulator affinity partner (i.e. Eligible Association) at any point in the future. Both Engineers Canada and TDI have had discussions with PEO in this regard. Under the terms of the new TDI Agreement, PEO is eligible to sign on at any time over the 12-year term of the agreement.

As per Schedule "C" of the new TDI Agreement, unless otherwise agreed to in writing between the Parties [Engineers Canada and TDI], Associations that are not Eligible Associations would not be entitled to receive any portion of the sponsorship.

To secure the Ontario sponsorship monies for TWPV as at December 31, 2017 (\$2.14 M), PEO was required to sign a Regulator affinity partner agreement with Engineers Canada no later than December 31, 2018. At the March 1, 2019 Board Meeting, Motion 5735, the Board approved PEO's request to hold the 2017 derived sponsorship monies for Ontario from the Home/Auto insurance program in abeyance until April 30, 2019. At the May 2019 meeting, the Board learned that PEO would not be availing itself of the \$2.14M in revenue for 2018.

The new TDI Agreement is silent on how the monies received from Ontario policies would be managed should PEO not join the Program, nor was this matter discussed with the Regulator affinity partners during negotiations. As such, and according to the wording of the new TDI Agreement, if PEO does not sign onto the Program, the funds flow directly into Engineers Canada general revenue on an annual basis.

To ensure compliance with the new TDI Agreement, Engineers Canada has regular discussions with TDI in respect of the PEO situation. Engineers Canada also keeps TDI apprised on a yearly basis of PEO's decision regarding whether to sign onto the Program and become a Regulator affinity partner.

On December 8, 2020, PEO advised Engineers Canada that they have elected, again, not to sign onto the Program in 2020. This means that the TWPV revenue from PEO members that otherwise would have been payable to PEO in 2021 will revert to Engineers Canada. PEO's decision has been communicated to TDI.

## IV. Establishment of the Per Capita Assessment Fee

In January of 2018, the Board struck a Funding Task Force (FTF) to review Engineers Canada's funding model. The creation of the FTF was due in part to concerns from some Regulators about the transparency of the contract and revenues generated and distributed through the TDI affinity Program. With the significant increases in revenue, questions arose regarding the appropriateness of Engineers Canada retaining all PEO revenues and whether a greater proportion of revenues should be provided to the Regulators.
Having determined that the new TDI Agreement precluded providing funds to non-participating Regulators, and that Engineers Canada could not distribute funds to our member Regulators directly due to tax implications, the FTF recommended to the Engineers Canada Board that the Finance, Audit, and Risk Committee (FAR) consider ways to:

1) limit the growth of the operational budget (excluding major projects);

2) develop a policy that would cap Engineers Canada's unrestricted reserves at \$2M (subject to periodic review); and,

3) propose options for the disposition of any amount above the \$2M.

Instead of disbursing money to the Regulators, the final solution developed by the FTF and FAR was to limit the size of Engineers Canada's reserves by adjusting the annual Per Capita Assessment Fee. As a result, at its May 23, 2020 Annual Meeting of Members, the Engineers Canada Board recommended to the Members that By-law 7.2 be amended to allow for the Per Capita Assessment Fee to be set annually by the Members to provide them with control over the size of Engineers Canada's budget and reserves. If/when reserves grow, the Per Capita Assessment Fee can be reduced, resulting in lower fees for Regulators.

By actively managing the Per Capita Assessment revenue, Engineers Canada can manage its annual financial results and, given that the annual surplus/deficit flows directly into the unrestricted reserves, ultimately manage the levels of the reserves.

During Engineers Canada's budgeting process, multi-year projections are now developed to estimate the future balance of all reserves (restricted and unrestricted). Once the impact of all factors affecting reserves is projected, the future annual Per Capita Assessment Fee revenues are estimated, such that unrestricted reserves remain in the required range. Engineers Canada's reserves are actively managed, and Regulator dues will be reduced when reserves get too large.

At its December 7, 2020 Board Meeting, the Board presented Motion 2020-12-4D, recommending that the 2023 Per Capita Assessment Fee remain at \$10.21 per licence holder, on recommendation of the FAR Committee. The Members will consider this recommendation and set the 2023 Per Capita Assessment Fee in May 2021. The current \$10.21 Per Capita Assessment Fee will remain in effect for January 2021, and January 2022.



# **BRIEFING NOTE:** For decision

OIQ request to apply to h	Nost the World Engineers Convention 20274.8
Purpose:	To endorse Engineers Canada submitting an application to the World Federation of Engineering Organizations (WFEO), on behalf of l'Ordre des ingénieurs du Québec (OIQ), so that Montreal may host the 8 <sup>th</sup> World Engineers Convention in 2027.
Link to the Strategic Plan:	N/A
Motion(s) to consider:	THAT the Board endorse Engineers Canada submitting a proposal to the WFEO, on behalf of OIQ, to host the World Engineers Convention in Montreal in 2027
Vote required to pass:	Simple majority
Transparency:	Open session
Prepared by:	Kathy Baig, Director from Québec
Presented by:	Kathy Baig, Director from Québec

# **Problem/issue definition**

- Every four years, the World Federation of Engineering Organizations (WFEO) holds a World Engineers Convention (WEC), which brings together thousands of engineers from around the world. OIQ, together with the Palais des Congrès de Montréal (the "PCM"), has indicated its interest in hosting the event in 2027. In order to do so, however, and in accordance with section 4 and Annex E of the WFEO's Rules of Procedures (attached as Appendix 2), it needs Engineers Canada, who is a WFEO member, to submit a proposal to the WFEO on OIQ's behalf.
- The WFEO rules further state that a proposal to host a WEC must be submitted at the earliest possible date, and a minimum of six years in advance. This year, the WFEO's Executive Council is meeting from October 25 to 29, 2021 to consider and decide the venue for the 2027 WEC, such that the proposal to host the event in Montreal in 2027 must be submitted over the coming weeks (before the end of April).
- While Engineers Canada is needed to support the OIQ/PCM's candidacy to host the WEC (which possibly . may include signing documentation related to the nomination as well as any resulting agreement with WFEO, if the proposal is accepted), Engineers Canada would not be expected to assume any costs, responsibility, or liability at any stage in the project. OIQ would coordinate the entire project, including the preparation and development of the proposal, in collaboration with the PCM and a professional conference organizer.
  - It is expected that this understanding, limiting Engineers Canada's obligations and legal liability, may need to be memorialized in a formal written agreement between Engineers Canada and OIQ/PCM at some point after the Board approves this motion and before the proposal is submitted to the WFEO. At the time of writing, no such agreement is drafted or in place.

# Proposed action/recommendation

That the Board approve Engineers Canada submitting a proposal to the WFEO to have the 8<sup>th</sup> WEC hosted in Montreal in 2027, on the understanding that all work required to prepare the proposal, and all work required to carry out the resulting project, if the proposal is successful, will be completed by OIQ and its partners.

# Other options considered

None

## **Risks**

• As the OIQ will be assuming complete responsibility for this venture, there is no risk for Engineers Canada.

## **Financial implications**

• None, subject to negotiation of acceptable terms between Engineers Canada and OIQ.

## **Benefits**

• The project has several potential benefits for OIQ and its members and stakeholders, including the engineering profession in Quebec.

# Consultation

• None.

## Next steps (if motion approved)

- Engineers Canada and OIQ/PCM will negotiate terms of an agreement confirming Engineers Canada's limited liability in respect of the proposal and project.
- OIQ, together with the PCM, will coordinate the preparation of the proposal, which Engineers Canada will sign and deliver to the WFEO.

## **Appendices**

- Appendix 1: Board resolution from OIQ's January 28, 2021 meeting
- Appendix 2: 2027 8<sup>th</sup> World Engineers Convention Project Description (from OIQ)
- **Appendix 3**: Excerpts from WFEO Rules of Procedures (section 4 and Annex E)

.....

#### EXCERPT FROM THE MINUTES OF

#### THE BOARD OF DIRECTORS

#### MEETING ON JANUARY 28, 2021

#### CDA-2021-029 2027 8TH WORLD ENGINEERS CONVENTION - WEC

#### <u>Resolution</u>

WHEREAS the Palais des Congrès de Montréal approached the OIQ to confirm its interest in submitting a proposal for Montreal to host the 8th World Engineers Convention (WEC) of the World Federation of Engineering Organizations (WFEO);

WHEREAS the WEC is held every four years and is attended by thousands of engineers from around the world;

WHEREAS Engineers Canada (EC) is the Canadian national member of the WFEO;

WHEREAS WFEO member organizations of the WFEO must submit a proposal to host the WEC six years in advance of the WEC concerned, which means no later than this year for the 2027 edition;

WHEREAS between October 24 and 29, 2021, the WFEO Executive Council will meet to vote on its chosen candidate for the 2027 event following a recommendation by its Executive Board;

WHEREAS the OIQ must officially notify Engineers Canada of its desire to submit a proposal;

WHEREAS the Board of Directors of Engineers Canada will have to endorse the OIQ's proposal before notifying the WFEO of its intention to submit a proposal;

WHEREAS the OIQ will have to form a Local Committee of volunteers to support the OIQ in the candidacy application process;

WHEREAS in its letter of January 12, 2021, the Palais des Congrès de Montréal formally committed to provide several services free of charge, in support of the OIQ's candidacy application process;

WHEREAS if the OIQ's proposal is selected, it will have to co-sign an MOU with the WFEO and EC;



.....

WHEREAS if the OIQ's proposal is selected, a professional convention organizer (PCO) will be mandated following a call for tenders for the 2027 Convention;

WHEREAS the OIQ does not wish to take any financial risk in connection with this project and the PCO will have to agree to assume all financial responsibility for the convention;

WHEREAS after verification with various organizations, the potential chances of success of the initiative are real and the context is favorable;

WHEREAS in its 2020-2025 strategic plan, the OIQ wishes to position itself as a professional order and a profession that inspires, notably by exercising influential leadership in the public arena on issues that affect the protection of the public and by participating in major events;

WHEREAS the project has several potential benefits for members and stakeholders of the profession:

[...]

CDA-2021-029.1

THE BOARD OF DIRECTORS APPROVES the OIQ's commitment to submit, via Engineers Canada, a proposal to the WFEO with the goal of hosting the 2027 WEC in Montreal.

Certified true copy M<sup>e</sup> Pamela McGovern, attorney

Secretary of the OIQ and Director of Legal Services



#### Annex

#### 2027 8th World Engineers Convention - WEC

#### **Project Description**

The Ordre des ingénieurs du Québec (the OIQ) was recently approached by the Palais des Congrès de Montréal (Montreal convention centre) to confirm its interest in submitting a proposal for Montreal to host the 8th World Engineers Convention (WEC) of the World Federation of Engineering Organizations (WFEO).

With the goal of understanding the scope of the project and the level of involvement required of all actors concerned, the OIQ met with Marc-André Gemme, Business Development Manager at the Palais, and Nathalie Roy, Associate Professor in the Civil and Building Engineering Department of the Université de Sherbrooke, who recently prepared a proposal to host an international earthquake engineering convention in Quebec in collaboration with the Palais. We also consulted directly with the WFEO, Engineers Canada (EC), and Engineers and Geoscientists BC (EBGC).

### The World Federation of Engineering Organizations (WFEO)

The WFEO is an international organization founded in 1968 under the auspices of UNESCO. It has a membership of 100 engineering institutions around the world and represents 30 million engineers (<u>http://www.wfeo.org/about-us/</u>). The WFEO calls itself the "international voice" of engineering and is recognized by the United Nations as a leading non-government organization (NGO) in science and technology. It addresses global issues, especially to advance the United Nations Sustainable Development Goals through engineering. The Canadian national member of this organization is EC.

#### World Engineers Convention (WEC)

Nicknamed the "Olympics of Engineering," the WEC is held every four years and attended by thousands of engineers from around the world. It takes place over several days and its programming covers topics of interest to the engineering profession which are presented by internationally renowned speakers. Here is a link to the programming for the most recent WEC held in 2019 in Melbourne: <u>https://wec2019.org.au/welcome/</u>.

#### Proposal submission process and the OIQ's involvement

According to the WFEO's Rules of Procedure, WFEO member organizations must submit a proposal to host the WEC at least six years in advance of the WEC concerned, which means that this year is the cut-off for the 2027 WEC. Once the OIQ has confirmed its interest, EC, the national WFEO member, must be officially informed and its Board must endorse the project before notifying the WFEO of its intention to submit a proposal. EC has already signaled its openness to this project.

The OIQ would need to play a key role throughout the project, from developing the proposal and planning the event to executing it. As far as the proposal is concerned, the OIQ would have the following responsibilities:

- form a local committee (LCO) of volunteers who want to actively participate in preparing the proposal, which will include the theme, the program, the technical visits and the suggested social program, with support from the Palais (see below for more details).
- support the LCO and assist its members in establishing the convention framework to ensure that topics of importance to the OIQ and the profession are on the program and bring the desired visibility.

Between October 24 and 29, 2021, the WFEO Executive Council will meet to vote on the chosen proposal for the 2027 event following a recommendation by its Executive Board;

If the OIQ's proposal is selected, an MOU will be signed between the WFEO and EC (which will require a commitment from the OIQ possibly even as a co-signer of the MOU).

Then, the OIQ will carefully oversee the implementation of the convention plans in collaboration with the PCO (private supplier which specializes in organizing conventions).

#### Engineers Canada's role

As previously mentioned, EC, as national member of the organization, must show interest in and support a Canadian proposal to the WFEO by the end of April 2021, and potentially sign the documents related to the proposal.

Engineers Canada will not be asked or expected by the OIQ to get involved further or participate, financially or otherwise, in the organization of the WEC. The OIQ will coordinate the entire project specifically with a local committee, the Palais des Congrès de Montréal, and a professional congress organizer (PCO).

Agenda book page 224

Agenda item 4.8 - OIQ request to apply to host the World Engineers Convention 2027 **Appendix 3:** Excerpts from WFEO Rules of Procedures (section 4 and Annex E) Full text available here: http://www.wfeo.org/strategic-documents/



Approved by the Executive Council, 30 October 2020

### **RULES OF PROCEDURE**

### 4. Hosting Meetings

Members of the Federation are invited to submit to the Executive Director proposals for hosting meetings: of the Executive Council or of the General Assembly in keeping with the requirements of Annex D; of World Engineers Conventions (WEC) and World Congresses in keeping with the requirements of Annex E; and of Workshops, Seminars and Conferences. The Executive Board shall make recommendations to the Executive Council for its decision, and such decisions shall be subject to conclusion of appropriate contractual arrangements within six (6) months of the Council decision.

### **Annex E World Engineers Convention and World Congress**

- 1. A proposal from a National Member to host at World Engineers Convention (WEC) or a WFEO endorsed World Congress is to be submitted to the Executive Director at the earliest possible date; for a WEC at least six years in advance, and for a Congress at least five years in advance.
- 2. Congresses may be held in conjunction with a General Assembly, a meeting of the Executive Council, a meeting of a Standing Committee or may stand alone. From 2011, the WEC will be held in conjunction with the General Assembly and continue on a four-year cycle, i.e.: 2015, 2019 etc.
- 3. Basic requirements for a WEC or Congress are that keynote speakers should have or merit a worldwide reputation, and that the Congress takes a global approach to its subject, and to attracting an audience. In addition, it is necessary that the host National Member's government imposes no restriction on the free travel of delegates to the meeting. To facilitate entry, the host National Member should arrange a government endorsed letter of invitation.
- 4. A detailed proposal relating to the proposed WEC or Congress is to be submitted in accordance with the guidelines below.
- 5. Proposals will be favored
  - 1. Where there is a strong international organizing committee;
  - 2. Where there is a strong program on a matter of world engineering interest;
  - 3. Where the host National Member accepts full financial responsibility; and
  - 4. Where some form of support for air fares and accommodation costs and congress fees can be provided to delegates from developing nations.
  - 5. Where the Congress is held in conjunction with a General Assembly or Executive Council meeting, suitable venues should be provided at little or no cost to the Federation.

### **Guidelines for Proposals and Information Required**

A proposal to hold a WEC or Congress shall be submitted to the Executive Director in accordance with the following guidelines.

### 1. Proposed Timing

- 1. Preferred and alternate dates
- 2. Conflict with other meetings
- 3. Air fares prevailing and discounts available
- 4. Length of Congress and relation to other events
- 5. Climate

### 2. Proposed Host Country

- 1. Equality of treatment with respect to race, sex, color, religion, national origin
- 2. Political stability
- 3. Economic stability
- 4. Currency stability and convertibility
- 5. Public Transport/infrastructure
- 6. Air Safety Record

### **3.** Proposed Theme and Speakers

- 1. Proposed Theme of Congress
- 2. Importance of Theme to World Engineers
- 3. Intended Sources of Speakers
- 4. Minimum expected attendance, local and overseas
- 5. Proposed registration fees: full and student.
- 6. Working language or languages
- 7. Plans to publish papers
- 8. Number of invited papers planned
- 9. Plans for social program and partners program
- 10. Support of Federation meetings and attendance costs
- 11. Support for developing country delegates

### 4. Proposed Organization

- 1. Support from National Engineering Organizations
- 2. Support from other National and business organizations
- 3. Support from State, National or Local Government
- 4. Support from international or other National organizations
- 5. Financial underwriting
- 6. Technical organizing group
- 7. Management organizing group
- 8. Local experience with similar events

### 5. Proposed Venue

- 1. City and location of auditorium
- 2. Capacity of Plenary auditorium
- 3. Meeting room numbers and capacity
- 4. Facilities for speakers and preparation of presentations
- 5. Poster sessions space
- 6. Exhibition plans, proximity to Congress venue
- 7. Facilities available for associated Federation activities
- 8. Hotel accommodation and rates
- 9. Student accommodation and rates

Detailed arrangements must be made to ensure that WFEO meetings can be held effectively within the overall program.



# **BRIEFING NOTE:** For information

Risk register		5.1
Purpose:	To update the Board on risks to the organization	
Prepared by:	Mélanie Ouellette, Manager, Strategic and Operational Planning	
Presented by:	Dwayne Gelowitz, Director from Saskatchewan and Chair of the FAR Committe	ee

## Background

- A risk is anything that could potentially impact our timelines, performance, reputation, or Budget. Risks are potentialities, and if they become realities, they are classified as "issues" to be addressed. Risk management is the process of identifying, categorizing, prioritizing, and planning for risks that arise within the organization before they become issues. Risk management isn't reactive only; during planning, potential risks and how to control them is considered.
- A risk register is a tool for documenting risks, their level, symptoms, and mitigating actions.
- The risk register is comprised of two sections:
  - Engineers Canada Board risks are external and strategic risks that might lead to a change in organizational priorities. Identifying and monitoring these risks is the responsibility of the Board, who delegate their in-depth review to its Finance, Audit and Risk (FAR) Committee.
  - **Operational risks** are external and internal risks that might impact the organization's ability to achieve the current strategic plan. The CEO is responsible for managing these risks, with oversight from the Board.
- All risks are evaluated against potential likelihood and impact as per the figure below:

			IMPACT			
		Insignificant/ Négligeable 1	Minor/ Mineur 2	Moderate/ <i>Modéré</i> 3	Major/ <i>Majeur</i> 4	Catastrophic/ Catastrophique 5
LIKELIHOOD / PROBABILITÉ	Extremely likely/ Extrêmement probable 5	5	10	15	20	25
	Likely/ Probable 4	4	8	12	16	20
	Moderate/ Modérée 3	3	6	9	12	15
	Unlikely/ Improbable 2	2	4	6	8	10
	Low/ <i>Faible</i> 1	1	2	3	4	5

## Status update

- Board risks were reviewed by the FAR, HR and Governance Committees.
- Staff reviewed the 30 by 30 targets risk, and all other operational risks.
- The Strategic Plan Task Force reviewed risk #1: Poor Vision or Strategy and decreased the likelihood to a 1 based on the now well-established process for strategic plan development. Additional information is provided on page 3.
- FAR met in January to agree on a new, high-level approach to risk management.

### Next steps

• The FAR Committee will make recommendations to the Board on a new risk management approach at an upcoming Board meeting.

### **Appendices**

- Risk register (updated December 2020)
- Critical risk review summaries for the following risks in the red area of the heat map:
  - o 19 Financial
  - o 26 Accreditation process

### **Engineers Canada Board risks**

The following action is recommended:

Risk	Description of change
#1 Poor vision or	Engineers Canada has operated under a Strategic Plan since 2019. Regulators
strategy	have expressed satisfaction with the development process and the content of the upcoming 2022-2024 Strategic Plan, which establishes a vision and strategic direction for the organization. It is anticipated that we will continue to have a Strategic Plan, and to develop it with Regulators. As a result, the Strategic Plan Task Force recommended that the likelihood of this risk be reduced to low (1).

The following heat map provides an overview of the Board risks:

			IMPAC	Г		
		Insignificant/ <i>Négligeable</i> 1	Minor/ Mineur 2	Moderate/ <i>Modéré</i> 3	Major/ Majeur 4	Catastrophic/ Catastrophique 5
LIKELIHOOD / PROBABILITÉ	Extremely likely/ Extrêmement probable 5		45			
	Likely/ <i>Probable</i> 4			47 48		
	Moderate/ <i>Modérée</i> 3		17	46		26
	Unlikely/ Improbable 2			28 43	Л	35
	Low/Faible 1				3 1 5	

### Table 1 – Board risks heat map, as of December 2020

#### Legend

- 1 Poor vision or strategy
- 3 Succession planning for CEO
- 5 Duty of care Board
- 17 Investment market risk
- 26 Accreditation process
- 28 AB and QB oversight
- 35 Holism of the federation

- 43 Implementation of governance improvements
- 45 Failure to demonstrate consistent regulatory practices nationally
- 46 Long-term financial stability
- 47 30 by 30 targets will not be met
- 48 Emerging disciplines and licensure of
- entrepreneurs

Board risks are further expanded upon with suggested monitoring and response plans in the following table. Engineers Canada staff will support the Board in managing these risks, as requested.

### Table 2 – Board risks, details, as of December 2020

Risk #	Risk category	Title	Description	Symptoms	Risk response strategy	Monitoring method	Responsible
	Strategic	Poor vision or strategy	A lack of vision, direction or strategy for Engineers Canada would result in owners' needs not being met.	Diminished confidence by the owners Diminished engagement of owners Decreased staff morale and productivity	Prevention	Stakeholder feedback	Strategic Plan Task Force
3	Operations	Succession planning for CEO	Without effective succession planning, loss of the CEO would compromise Engineers Canada's ability to deliver due to lost knowledge	CEO leaves with no clarity in how this role will be filled Key duties are neglected	Prevention Mitigation	Board review in conjunction with CEO evaluation	HR Committee
5	Operations	Duty of care - Board	Inability to meet the required duty of care would lead to ineffective decision making and legal liability for Directors	Lack of preparation to inform decisions Length of time to make decisions is unnecessarily long Lack of preparation or knowledge	Prevention	Self-evaluation and performance monitoring of Directors, by Directors.	Governance Committee
17	Operations	Investment market risk Excessive risk in Engineers Canada investment would impact the fair value of future cash flows of reserves or investment funds		Low market value of investments. Low rate of return of investments.	Mitigation	Monthly investment statements. Annual audit	FAR
26	Strategic	Accreditation process	An ineffective accreditation process would cause loss of confidence by Key Stakeholders and withdrawal of higher education institutions from the accreditation process.	HEI or Regulator withdraws from accreditation Dissatisfaction of Regulator with accreditation	Mitigation	Stakeholder feedback	CEAB

Risk #	Risk category	Title	Description	Symptoms	Risk response strategy	Monitoring method	Responsible
28	Operations	AB and QB oversight	Lack of oversight of AB and QB could lead to disengagement with Purpose and strategic direction of Engineers Canada	Board observers do not contribute to AB and QB Board does not engage with AB and QB reports AB and QB not in alignment with Engineers Canada strategic direction	Prevention	AB and QB reports to the Board	Governance Committee
35	Strategic	Holism of the federation	If any engineering Regulator chooses to leave Engineers Canada, the value of the organization as a whole is diminished.	Dissatisfaction of the Regulators Lack of engagement of the Regulators Lack of participation of Regulator staff or their volunteers or their Directors	Prevention	Stakeholder feedback Relationship management	Board
43	Operations	Implementation of governance improvements	There is a risk that the organization does not implement or sustain the GSPC improvements (Strategic Plan, governance, accountabilities, Consultation)	lack of adherence to policies, accountabilities, plans or programs operationalized from GSPC	Prevention	Consultation program to track number of Consultations and use of input. Journey to Excellence Program: Results of regular self assessments and external site verification visits	Governance Committee

Risk #	Risk category	Title	Description	Symptoms	Risk response strategy	Monitoring method	Responsible
45	Strategic / Reputational	Failure to demonstrate consistent regulatory practices nationally (new title)	Differences in licensure, enforcement and discipline practices of the Regulators could be interpreted as meaning that some are weaker than others, causing lack of confidence in the engineering profession as a whole.	Differences in how non-CEAB applicants are assessed across the country. Inconsistent application of the international mobility agreements and accords, potentially leading to loss of signatory status. Complaints from applicants and licence holders. Questions from governments, fairness commissioners, or human rights tribunals about differences. Third-party reviews of regulatory practices.	Mitigation	Feedback from Regulators.	FAR
46	Strategic / Financial	Long-term financial stability	Reliance on any single source of income could pose a risk if that source were reduced or eliminated. A funding model with lower direct participation of the Regulators may be perceived to mean less control of Engineers Canada by the Regulators. Demographic changes may lead to lower numbers of licensed engineers, with a negative impact on all revenue streams. Changing demographics of the Regulators' membership could result in increases or decreases to revenue.	Marked decrease in any one revenue source. Overall downward trend in revenue. Dissatisfaction of the Regulators.	Monitoring	Budget Audited financial statements Quarterly financial statements Membership report and projections from Regulators	FAR

Risk #	Risk category	Title	Description	Symptoms	Risk response strategy	Monitoring method	Responsible
47	Strategic / Safeguarding / Reputational	30 by 30 targets will not be met.	Engineers Canada and the Regulators have set a very public target to have 30% of newly licensed engineers be women by the year 2030. There is a risk that this target will not be met.	Less than 30% of EITs are women. Less than 30% of engineering students are women. Less than 30% newly licensed engineers are women. Public perception of engineering as not inclusive. Loss of women from the profession post-graduation and in later career stages - retention issue.	Prevention / Mitigation	National Membership Report. Enrolment and Degrees Awarded Report. Aspirational 30 by 30 scorecard."	30 by 30 Champion
48	Strategic / Reputational	Emerging disciplines and licensure of entrepreneurs	A lack of licensure of entrepreneurs and in emerging disciplines and fields of practice would impact the relevance and scope of the engineering profession.	Decreasing rates of licensure of CEAB graduates Little to no expansion of fields of practice recognized by the Regulators	Prevention / mitigation	Stay abreast of Regulators licensure and enforcement activities	FAR

#### **Engineers Canada - Operational risks**

The following heat map includes risks that are the responsibility of Engineers Canada's CEO and that meet the following criteria:

- Risks that are currently in the yellow, orange or red areas of the map, and •
- Risks that have shifted from a yellow, orange, or red area of the map to a green area in this reporting • period

Risks that remain in green, or that shift from one green area to another green area are not included. The senior leadership team reviews these risks prior to each reporting period. The following scores have been adjusted:

Risk	Description of change
# 16 Financial planning	The likelihood of ineffective financial controls leading to fiscal jeopardy has been
and monitoring	reduced to 1 because of increased monitoring and the alignment of budget to
processes	priorities in the past two budgets that have been presented to the Board.

#### Table 3 – Operational risks heat map, as of December 2020

	IMPACT									
		Insignificant/ <i>Négligeable</i> 1	Minor/ Mineur 2	Moderate/ <i>Modéré</i> 3	Major/ <i>Majeur</i> 4	Catastrophic/ Catastrophique 5				
LIKELIHOOD / PROBABILITÉ	Extremely Likely/ Extrêmement probable 5				19					
	Likely/ Probable 4									
	Moderate/ <i>Modérée</i> 3			2	14					
	Unlikely/ Improbable 2				4 29					
	Low/ <i>Faible</i> 1				16					

#### Legend

- 2 Resource utilization
- 4 Succession planning for executive team
- 14 Cyber-attack

- 19 Financial
- 29 Business continuity

- 16 Financial planning and monitoring processes
- 32 IT strategy

Additional risks are not shown on the heat map, due to ongoing green status. These risks are still monitored by Engineers Canada staff and include:

- 6 Duty of care all staff
- 8 Contracting
- 9 Asset management
- 10 Staff retention
- 11 Staff recruitment
- 12 Travel policy
- 13 Liability
- 15 Inadequate internal controls Fraud
- 21 Adverse publicity
- 22 Not-for-profit status

- 24 Accuracy of website
- 25 Poor adoption of change
- 27 Internal support to staff
- 30 Legislative compliance
- 31 Trade-mark risks
- 36 Shadow IT
- 41 Critical financial info captured in paper only
- 42 Consultation program engagement
- 44 Use of third-party service providers

Operational risks located in the yellow-orange-red areas of the map are further expanded upon with suggested monitoring and response plans in the following table.

### Table 4 – Operational risks, details, as of December 2020

Risk #	Risk category	Title	Description	Symptoms	Risk response strategy	Monitoring method	Responsible
2	Operations	Resource utilization	Loss of a key operational resource who is the single expert or point person for a program would lead to delays or decrease in services from Engineers Canada.	Loss of staff or reduction in ability to perform work	Prevention Mitigation	Employee engagement survey Performance conversations Informal feedback from HR Working Group and staff 1:1	Director, HR
13	Operations	Liability	Legal claims against Engineers Canada would cause financial hardship and reputational damage.	Lawsuits filed or threatened	its filed or Transfer We only become aware legal claims when they a filed or threatened.		Legal Counsel
14	Operations	Cyber attack	Unintentional data breach, leading to loss or compromised data and potential privacy breach.	Cyber attack	Prevention	Annual privacy survey done by staff	Legal Counsel
	Reporting	Financial planning and monitoring processes	Ineffective financial planning and monitoring processes would lead to fiscal jeopardy	Overspending Underspending Budget items do not match priorities	Mitigation	Approval of budget and annual operating plan Annual audit	Director, Finance
19	Operations Financial Los wor		Loss of a key income source would disrupt financial plans	Withdrawal of Regulator Insolvency of affinity provider	Prevention	Touchpoint meetings with affinity providers, including Regulators. Review of affinity provider financials. Third party review of program financials. Heightened monitoring of policy retention.	VP, CA & SP

Risk #	Risk category	Title	Description	Symptoms	Risk response strategy	Monitoring method	Responsible
29	Operations	Business continuity	Unclear processes, protocols and communications in the event of an emergency would lead to Engineers Canada not being able to operate and /or injuries to staff or volunteers.	Staff are unaware/unclear of the processes, protocols and communication in the event of an emergency Lack of training for new staff	Mitigation	Annual testing of the developed business continuity plan.	Manager, Organizational Excellence
32	Operations	IT strategy	Failure of IT infrastructure would cause service disruption.	Unavailability of IT infrastructure Lack of reliability of IT infrastructure	Prevention	Backup sets send email notifications on failure. Cloud vendor found to backup Office365 content	Manager, Operational Infrastructure



# **RISK REGISTER:** Critical risk review summary

Risk: Financial	Risk number: <b>19</b>				
Overview:	Loss of a key income source would disrupt financial plans				
Link to the Strategic Plan and policies:	Board responsibility 3: Provide ongoing and appropriate strategic direction Board responsibility 5: Ensure the CEO maintains and acts on a robust and effective risk management system which reflects the Board's risk tolerance level and directs Board-approved mitigation strategies Policy 5.6 planning: The CEO shall ensure than an annual operating plan and budget are in place that allocate resources in a way that aligns with the Board's three-year Strategic Plan and that ensures fiscal security.				
Date of risk becoming critical:	August 2019				
Projected date for risk reduction:	February 2022				
Prepared by:	Gerard McDonald, Chief Executive Officer				

# Background

APEGA's decision to exit the TD insurance affinity program, effective August 16, 2019, has increased the financial risk to Engineers Canada. Approximately 40% (\$3.7M in 2019) of the total revenues generated by the TD affinity program result from the Alberta market.

Engineers Canada revenues will be directly affected with the reduction of TD sales in Alberta. APEGA will be marketing a new program from a competing insurance company to their members. Although TD has prepared a marketing plan to mitigate the effect of competition on the existing client base, it is too early to determine at what rate revenues will decrease.

Upon receiving notification of APEGA's decision, the likelihood score of this risk was increased to 5 (Extremely likely) to reflect the departure of a participating Regulator from the TD affinity program. In addition, the impact score has been increased to 4 (major – important, serious, or significant) to reflect that APEGA was one of the largest participants in the program and potential long-term impact for Engineers Canada.

# **Actions taken**

- The Engineers Canada CEO is in regular contact with TD.
- TD has designed a marketing/client retention campaign to mitigate the loss of the current client base in Alberta. This campaign has been reviewed by Engineers Canada management.
- The Finance, Audit, and Risk (FAR) Committee is monitoring the situation closely through the review of monthly status updates and data provided by TD.
- In an effort to stabilize the situation and increase satisfaction amongst participating Regulators, the Board passed a motion in September 2019 to authorize the CEO to adjust the sharing ratio for the distribution of TD sponsorship payments from 51/49% (Regulator/EC) to 90/10% for all new policies added to the program, commencing January 1, 2020 and onwards.

## Next steps

- The FAR will continue to closely monitor changes to TD revenues in Alberta.
- Engineers Canada will continue oversight of the Alberta marketing campaign.
- Once the effect on revenues is better understood, adjustments as necessary will be considered in future budget processes.

# **Timeline for risk reduction**

The degree to which the marketing campaign will mitigate the anticipated reduction in sales is difficult to estimate. However, TD has advised they expect it will take up to two years for the market to re-stabilize. Consequently, we do not anticipate this risk moving out of the critical area before February 2022 when the affinity revenues stabilize resulting in a reduction of the risk's impact score.



# **RISK REGISTER:** Critical risk review summary

Risk: Accreditation process	Risk number: <b>2</b>
Overview:	An ineffective accreditation process would cause loss of confidence by key stakeholders and withdrawal of higher education institutions from the accreditation process.
Link to the Strategic Plan:	Operational Imperative 1: Accreditation of undergraduate engineering programs Strategic Priority 2: Accountability in Accreditation
Date of risk becoming critical:	Date summary updated: November 2, 2020 Date identified as critical: May 2017
Projected date for risk reduction:	Unknown
Prepared by:	Bob Dony, Chair, CEAB Pierre Lafleur, Vice-Chair, CEAB Luigi Benedicenti, Past-Chair, CEAB Mya Warken, Manager, Accreditation and CEAB Secretary Stephanie Price, Executive Vice President Regulatory Affairs

# Background

In 2015, the CEAB accreditation criteria related to graduate attributes (GAs) and continual improvement (CI) became mandatory. Higher Education Institutions (HEIs) have expressed concern that these criteria significantly increase workload and were introduced without a suitable evaluation framework, thereby introducing uncertainty. Despite this, it is CEAB's perception that HEIs believe the GA/CI system brings some advantages in terms of program assessment, and in some provinces, the GA process aligns well with mandatory provincial quality assurance processes.

Some HEIs were under the impression that the introduction of the GA/CI criteria would lead to the elimination of input measures (currently measured in "accreditation units" or AUs). Today, some deans suggest that the input measures should be eliminated in favor of moving entirely to an outcomes-based accreditation system.

In August 2016, a forum on the future of accreditation was held. At this forum, several changes to accreditation were suggested, including the elimination of AUs. These suggestions have formed a significant portion of the improvement work of the CEAB's's Policies & Procedures Committee (P&P) ever since.

At the October 2016 annual general meeting of Engineers and Geoscientists BC, the then-dean of UBC again raised concerns with AUs and threatened to withdraw from the accreditation process. Subsequently, in early 2017, several deans formed a working group to investigate piloting their own alternatives to accreditation and AUs. At the same time, the P&P also launched a task force to investigate alternatives to the AUs.

These actions led to the creation and criticality of this risk, which was introduced at the "red" level in May 2017. The impact of an HEI withdrawing was deemed to be "catastrophic" given that it could lead to further withdrawals and threaten the value of accreditation, which is perceived as the highest-value work of Engineers Canada. The probability of such a withdrawal was rated "moderate" meaning that there was a reasonable expectation that it could occur. It remains at this level based on recent feedback and actions from the HEIs including: negative responses to recent Consultations, pushback on recent changes, and a move to seek concurrent ABET accreditation.

Since the last time this briefing note was shared with the Board, Engineering Deans Canada (EDC) has expressed a desire to conduct an independent review of the accreditation system and some institutions have questioned

the flexibility of the CEAB accreditation criteria in relation to education delivery methods implemented due to the COVID-19 pandemic. The latter has amplified calls to adopt an outcomes-only accreditation system.

## **Actions taken**

Remembering that the primary purpose of accreditation is to serve the licensure needs of the Regulators, the Engineers Canada Board and the CEAB are responding to concerns from the HEIs with the following actions:

1. Efforts to reduce HEI workload associated with the accreditation process.

Examples: added flexibility in the visiting team schedule, the development of a web-based data management system to enable the submission and maintenance of accreditation documents (i.e. Tandem), increased focus on GA/CI process (and less on non-aggregated data), reducing the documentation burden on HEIs (through a working group specifically struck to examine and make recommendations on the required accreditation visit materials by the end of 2020).

2. Increased communication with HEIs to alleviate fears regarding the accreditation process.

Examples: yearly summary of accreditation decisions/results, webinars to provide bi-annual updates to all HEI staff after each meeting of the engineering deans, monthly accreditation newsletter, attendance at and support for graduate attribute summits, attendance at and support for the Canadian Engineering Education Association annual meetings, meet-and-greet sessions between visiting team chairs (CEAB members) and representatives of the HEIs they assess, means for new programs to contact the CEAB secretariat for advice and guidance.

**3.** Introduction of a structured and transparent Consultation program to get feedback from Regulators and all HEIs on proposed changes within the accreditation process.

The Consultation program has been applied to three Consultations (AU Task Force Report, Curriculum Content Measurement: Beyond the AU paper recommendations, and the Engineering Design Task Force report). Lessons learned have been recorded and will inform Engineers Canada's organization-wide Consultation program. The feedback gathered during Consultations is used to inform continual improvement of the accreditation system.

4. Increased frequency and collaboration of the P&P with the Deans' Liaison Committee, a subcommittee of EDC.

This has resulted in jointly-developed proposals and solutions to some of the deans' concerns and provides a forum for issues to be raised and resolved.

### 5. Creation of the AU Task Force.

The AU Task Force considered an alternative to the AU and envisaged a linkage between the AUs and graduate attributes. The task force defined the "Learning Unit" (LU) as an alternate method to quantify engineering education curriculum and recommended that a pilot project be initiated to test the use of an LU. The proposed pilot was not supported by EDC and the CEAB continues to consider how to address this recommendation. The P&P continues to discuss how to address the recommendation to appropriately link the AUs and GAs.

Stemming from the task force's work, a reduction in the minimum number of AUs (from 1,950 to 1,850) was approved by the Engineers Canada Board, receiving wide support from HEIs.

6. The development of an annual assessment for the accreditation process through Strategic priority #2: Accountability in Accreditation.

This work recognizes the need to improve the transparency and effectiveness of the accreditation process. It has developed a means of annually assessing these attributes, from the point of view of

*Regulators, HEIs, and others. The annual assessment will result in a means of tracking the trends and identifying future improvements. Data collection is underway and the first report will be available October 2021.* 

7. Creation of two working groups in response to the COVID-19 pandemic.

Two working groups were struck in 2020 to consider the short, medium, and long-term impacts of the pandemic on CEAB accreditation criteria and processes. The CEAB Working Group on Student Learning Experiences in the Age of COVID is to study how measures taken by programs to respond to the pandemic challenge are supported by the accreditation criteria. The Working Group on Virtual Visits is to develop an approach to conduct virtual visits in the 2020/2021 visit cycle and to undertake analysis of these visits to identify best practices for future virtual CEAB accreditation visits, as necessary. Both groups are on track to present their reports at the February 2021 CEAB meeting.

## **Next steps**

- 1. Continue communication, Consultation, and collaboration as outlined above.
- 2. Conduct first measurement of the transparency and effectiveness of the accreditation process through the Accountability in Accreditation program evaluation in 2020/2021. This will provide a basis for future evaluation of the probability of realizing this risk.
- 3. Continue to evaluate options and alternatives for AUs and the linkage between the input measures (currently the AUs) and output measures (the graduate attributes). The reports from the working groups in response to the COVID-19 pandemic are expected to advance this work.

## **Timeline for risk reduction**

It is unknown when the probability of this risk being realized will be reduced. Ongoing monitoring of Consultation feedback, and results from each evaluation through Accountability in Accreditation, will provide the means to objectively monitor the sentiment of the HEIs and to estimate their likelihood of withdrawal.

## **Appendices**

- 2019-2021 Strategic Plan (Click here to access page 11, strategic priority 2, Accountability in Accreditation)
- CEAB 2021 work plan (<u>Click here to access</u> page 111-113, Board's December 2020 agenda book)



# **BRIEFING NOTE:** For information

30 by 30 operation	nal update: Report on Regulators' best practices in EIT programs	5.6a
Purpose:	To compile and publish Regulator best practices on EIT/MIT/engineering intern program licensure assistance programs (LAP) and employer awareness programs (EAP) offered be Regulators	ns, yy
Link to the Strategic Plan:	Strategic priority 3: Recruitment, retention, and professional development of women in engineering profession	n the
Prepared by:	Cassandra Polyzou, Manager, Diversity, Equity, and Inclusion Jeanette Southwood, Vice President, Corporate Affairs and Strategic Partnerships	
Presented by:	Gerard McDonald, Chief Executive Officer	

# Background

- Engineers Canada's Strategic priority 3: Recruitment, retention, and professional development of women in the engineering profession and the accompanying 'Retention action plan' outlined the goal for Engineers Canada to compile and publish Regulator best practices on EIT/MIT/engineering intern programs, licensure assistance and employer awareness programs (EAP) offered by Regulators.
- In July 2020, Engineers Canada's posted an RFP for 'Gender-based analysis of national engineering licensure assistance and engineering employer awareness programs' and hired PRA Inc. to conduct the research and analysis (see Appendix 1).
- The research aims to:
  - a) review the types of programs and services offered to engineering graduates, EIT/MIT/engineering interns, and newly licensed engineers available from each provincial and territorial Regulator;
  - b) gather data on the number and diversity (i.e. gender, Indigenous, LGBTQ2+, etc.) of individuals who benefit from these programs; and
  - c) identify best practices in licensure assistance and employer awareness programs using a genderbased analysis (GBA+) lens.
- PRA Inc. conducted an environmental scan of Regulator programs and activities related to equity, diversity, and inclusion (EDI), followed by an online bilingual survey on their programs and services offered to undergraduate engineering students, EITs/MITs/engineering interns, and newly licensed engineers. The survey gathered data on the types of programs, participation numbers, and demographics of participants. Finally, key informant interviews were conducted with representatives from the Regulators to gain deeper insights into the barriers and opportunities facing those who wish to be licensed.
- The analysis and data collected informed the creation of the 30 by 30 aspirational scorecard to be used by the Board and Regulators with yearly targets (see agenda item 5.6b, 30 by 30 aspirational scorecard).

# Status update

- Barriers on the pathway to licensure are outlined in the report for each stage (i.e. undergraduate students, EITs/MITs/engineering interns, and newly licensed engineers), as well as barriers to entry and retention for women, Indigenous peoples, and foreign-trained engineers (see section 4.0 in Appendix 1).
- The report provided an analysis of the role of the Regulators with respect to increasing diversity in the profession, including suggestions as to what a Regulator could do regarding EDI (see section 5.0 in Appendix 1).
- Examples of best practices are included in section 4.3 in Appendix 1.

- Recommendations for Regulator supports for EDI are outlined in section 7.0. Section 8.0 identifies the need for a fulsome GBA+ process for Engineers Canada and all the Regulators, as well as the development of a strategy for gathering consistent data on diversity demographics in engineering across the country.
- PRA Inc. provided a final report as well as 12 separate discovery reports that present more precise
  information for each Regulator. These discovery reports will be presented directly to CEOs and the 30 by 30
  Champions at each Regulator and will be accompanied by the 30 by 30 aspirational scorecard to support the
  creation of measurable targets for each jurisdiction.

### **Next steps**

- Engineers Canada to publish and distribute the final GBA+ report to 30 by 30 Champions network, Regulator CEOs, and other stakeholders (i.e. NSERC Chairs for Women in Science and Engineering, Engendering Success in STEM research consortium, etc.).
- Manager, Diversity, Equity, and Inclusion (DEI) to initiate meetings with Regulator 30 by 30 Champions and CEOs on GBA+ research findings, individual discovery reports and 30 by 30 data trends in each jurisdiction, as well as the use of the 30 by 30 aspirational scorecard for setting measurable targets.
- Manager DEI, in collaboration with 30 by 30 Champions network, will plan a Q2 virtual 30 by 30 conference, including presentations from 30 by 30 Champions on best practices in licensure assistance and employer awareness programs, and collection of diversity demographic data. Presentations from a variety of stakeholders within the 30 by 30 Champions network, including Regulators, higher education institutions, and engineering employers on addressing the culture of exclusion and addressing the conversion between graduation to licensure.

## **Appendices**

• **Appendix 1**: Report - Gender-based analysis of national engineering licensure assistance programs and employer awareness programs.

Agenda book page 244



## Gender-based analysis (GBA+) of national engineering licensure assistance and employer awareness programs

# FINAL DRAFT REPORT

January 13, 2021

Prepared for:

Engineers Canada

WINNIPEG | OTTAWA admin@pra.ca www.pra.ca

# **Table of Contents**

Acron	yms
1.0	Introduction4
2.0	Methodology4
3.0	GBA+
4.0	Common barriers and supports94.1Barriers on the pathway to licensure
5.0	Role of the regulators195.1Member data20
6.0	Ability to achieve 30 by 3020
7.0	Organizational factors that support EDI21
8.0	Conclusions and recommendations
Refere	nces24

Appendix A – Number of EITs by Regulator: 2015 to 2019



## Acronyms

APEGA	Association of Professional Engineers and Geoscientists of Alberta
APEGNB	Association of Professional Engineers and Geoscientists of New Brunswick
APEGS	Association of Professional Engineers and Geoscientists of Saskatchewan
EAP	Employer awareness programs
DEI	Diversity, equity, and inclusion
EIT	Engineer-in-training
EGM	Engineers Geoscientists Manitoba
GBA+	Gender-based analysis plus
ISED	Innovation, Science and Economic Development Canada
LAP	Licensure assistance programs
NAPEG	Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists
OIQ	Ordre des ingénieurs du Québec
PEGNL	Professional Engineers and Geoscientists Newfoundland & Labrador
PEO	Professional Engineers Ontario



## 1.0 Introduction

This document constitutes the final report of the gender-based analysis (GBA+) of national engineering licensure assistance programs (LAP) and employer awareness programs (EAP). In order to support Engineers Canada's Strategic Priority 3: recruitment, retention, and professional development of women in the engineering profession, and Operational Imperative 9 (OP9): promote diversity and inclusion in the profession that reflects Canadian society, Engineers Canada hired PRA Inc. to analyze the current national licensure assistance programming and employer awareness programming provided by the 12 provincial and territorial engineering regulators using a GBA+ lens, and identify best practices. This report summarizes the findings of that analysis and is intended to provide Engineers Canada's senior leadership with recommendations.

The following sections provide an overview of the methodology used to conduct the analysis, a discussion of GBA+ and how it relates to diversity, equity, and inclusion (DEI), a summary of the review's findings, as well as conclusions and recommendations.

Finally, a quick note on nomenclature. Certain regulators use terms such as "engineering interns" or "members-in-training" to denote individuals who have graduated from an undergraduate engineering program and who are in the process of qualifying for their professional licence. For consistency in reporting across regulators, the term "engineer-in-training" (EIT) is used throughout this report to refer to all such individuals.

## 2.0 Methodology

This project drew on three lines of evidence. First, an environmental scan was conducted that included a review of the regulators' websites, annual reports, policy documents, and other relevant publicly-available material. The environmental scan collected information primarily on organizational considerations related to GBA+, including determining whether the regulators had any committees, working groups, or staff positions related to DEI, whether there were any programs targeted at various diversity groups, details on their mentorship and internship programs (as applicable), and any other relevant diversity events or actions. Second, an online, bilingual survey was sent to each of the regulators to better understand the programs and services they offer to undergraduate engineering students, EITs, and newly licensed engineers. The survey gathered data not only on the types of programs offered but also the number of individuals who benefit from the programs and the types of individuals the programs target. Finally, key informant interviews were conducted with representatives of each of the regulators to gain deeper insights into some of the barriers facing those who wish to become professional engineers, the perceived role of the regulators, as well as various organizational considerations. An interview with a representative of Engineers Yukon could not be conducted.



### 3.0 GBA+

### **Defining GBA+**

The federal government defines GBA+ as "an analytical process used to assess how diverse groups of women, men, and gender diverse people may experience policies, programs and initiatives" (Women and Gender Equality Canada, 2020). Arguably, the key concept here is "analytical process." This means that GBA+ is not, fundamentally, about setting targets for the engagement of diverse groups of women, men, and gender diverse individuals. It is rather an introspective process allowing an organization to learn about itself, and the extent to which the activities it carries out effectively reach all intended beneficiaries. In other words, GBA+ is about access, including both barrier-free access to the activities or programs being offered by an organization, and to the benefits that are expected to result from these programs and activities.

GBA+ does not always mean doing more, but it may well mean doing things differently. It is ultimately about being institutionally mindful of what the organization is undertaking, to be as inclusive as possible.

It is also important to consider what falls under the "plus" portion of GBA+. Indeed, people have "multiple, and diverse intersecting identity factors that impact how they understand, and experience [...] initiatives" (Status of Women Canada, 2020). While not all of these factors may be useful for Engineers Canada and the regulatory bodies to consider, it is important to understand that they do exist and to engage in a discussion as to which are most relevant for the engineering profession to consider.



Figure 1: Identity factors considered under GBA+ (Status of Women Canada, 2020)



### Implementing GBA+

GBA+ is operationalized within an organization's sphere of control. There may well be a broader range of systemic challenges or barriers in the environment in which an organization operates, and these must certainly be acknowledged. However, the primary goal of GBA+ is to allow an organization to make whatever change may be necessary to ensure that its programs and activities are genuinely inclusive. For instance, Indigenous individuals may face a number of challenges in attempting to become professional engineers. Each institution involved in addressing these challenges must therefore be engaged, from the school system, to the universities, to the regulators, and beyond. The GBA+ process asks these institutions to question whether any of its programming or activities could be altered to ensure that no systemic barrier limits access to Indigenous individuals.

How the *analytical process* is undertaken is something that must be tailored to each organization. Typically, it would involve the articulation of the overall vision that the organization is pursuing and the most predominant challenges that have emerged (i.e. underrepresentation of women and other groups as applicable in engineering). On that basis, the process involves gathering relevant data on the programs and activities being undertaken and the groups and subgroups targeted, including the identification of data gaps and how they can possibly be addressed. The next key step is to engage all key individuals within the organization to develop options and make recommendations. As these changes are implemented, the organization is expected to undertake monitoring and evaluation activities and to make corrections as required.

### **GBA+** and **DEI**

Finally, it may be helpful to distinguish between GBA+ and what is commonly referred to as DEI. First, GBA+ is an institutional process, whereas DEI is a broader concept that may be used in a variety of contexts. For instance, a DEI action plan may include a range of actions undertaken to achieve a certain goal; this would be the case of the 30 by 30 initiative. Adopted by Engineers Canada in 2014, this initiative sets a national goal to have 30 per cent of newly licensed engineers be women by 2030. As part of Engineers Canada's 2019-2021 Strategic Plan, the 30 by 30 initiative was further expanded to include the retention and professional development of women within the profession (Strategic Priority 3) (Engineers Canada, 2018). Another example of a DEI-related initiative is the recent 50 - 30 Challenge launched by Innovation, Science and Economic Development Canada (ISED) in December 2020 that aims to "improve access for racialized persons, people who identify as LGBTQ2, people living with disabilities, as well as First Nations, Inuit and Métis to positions of influence and leadership on corporate boards and in senior management" (ISED, 2021). Participating organizations are encouraged to work towards the goal of having gender parity ("50 per cent") in their management structures, as well as a significant representation ("30 per cent") from other under-represented groups, including racialized persons, people living with disabilities and members of the LGBTQ2 community, along with representatives from Indigenous communities.

Achieving these goals involves a range of actors that must act collaboratively. As part of such initiatives, any organization may decide to proceed with a GBA+ to better understand how inclusive its own programs and activities are. Ultimately, GBA+ and DEI are related, but they are of a different nature.



1

# 3.1 Demographic profile of regulators

The table below presents some of the key metrics on which most of the regulators gather data. Data on professional engineers is from 2019. Unless otherwise indicated, all remaining metrics are presented as a five-year average (between 2015 and 2019) to avoid any over-representation of outliers.<sup>1</sup> The data comes from the 2020 Survey of Regulators as well as Engineers Canada's 2020 National Membership Report. While some regulators also gather data on such things as the number of foreign-trained or Indigenous engineers, only gender-based demographic data is presented here for consistency and ease of comparison. No regulator currently gathers data on gender nonconforming persons, Black people and people of color, or other demographic groups.

Data from 2014 to 2019 for each regulator, as presented in Engineers Canada's 2020 National Membership



Table 1: Profile of engineers along the pathway to licensure <sup>2</sup>												
Program	APEGA (AB)	APEGNB (NB)	APEGS (SK)	Engineers and Geoscientists BC	EGM (MB)	Engineers Nova Scotia	Engineers PEI	Engineers Yukon	NAPEG (NWT and NT)	OIQ (QC)	PEGNL (NL)	PEO (ON)
Professional engineers												
Total	54,003	4,143	13,304	31,583	8,369	7,228	839	1,073 <sup>3</sup>	1,982	64,664	3,796	85,649
Women	7,345	539	1,721	4,655	1,026	910	92	120	180	9,898	433	10,026
% women	14%	13%	13%	15%	12%	13%	11%	11%	9%	15%	11%	12%
Undergraduate engineering student members												
Total	1,517	N/A <sup>4</sup>	-	389	600	N/A	192	-	-	716	-	8,269 <sup>5</sup>
Women	342	N/A	-	76	N/A	N/A	27	-	-	148	-	1,830
% women	23%	N/A	-	20%	N/A	N/A	14%	-	-	21%	-	22%
Engineers-in-training												
Total	5,058	547	1,946	1,496	349	820	134	46	41	13,290	523	13,800
Women	1,143	114	360	302	68	176	18	13	17	2,469	133	2,892
% women	23%	21%	19%	20%	19%	22%	14%	28%	42%	19%	25%	21%
Newly licensed engineers												
Total	2,387 <sup>6</sup>	167	265	883	186	197	16	7	14	3,591	116	2,466
Women	450	23	53	161	36	40	3	2	2	543	23	430
% women	19%	13%	20%	18%	19%	20%	18%	27%	17%	15%	20%	17%

<sup>&</sup>lt;sup>6</sup> The number for APEGA's newly licensed engineers is from Engineers Canada's National Membership Report. It represents the five year average from 2014 to 2018.



<sup>&</sup>lt;sup>2</sup> For ease of review, percentages have been rounded to their nearest whole number.

<sup>&</sup>lt;sup>3</sup> The data presented here is from 2020 and includes the total number of individual members. Members include professional engineers but also EITs and those with a limited license. As such, the data presented includes more types of engineers than does the data in other jurisdictions.

<sup>&</sup>lt;sup>4</sup> "N/A" indicates that, while the regulator does offer student memberships, no data was provided on the number of members. "-" indicates that the regulator does not offer student memberships.

<sup>&</sup>lt;sup>5</sup> The data presented here represents a four-year average (from 2015 to 2018) as data on female students was not available in 2019.

## 4.0 Common barriers and supports

## 4.1 Barriers on the pathway to licensure

As Canada has a strong demand for engineering both presently and in the future, LAP and EAP are critical to promoting engineering licensure while simultaneously supporting increased diversity and inclusivity within the profession. For such programs to be effective and for them to support Engineers Canada's 30 by 30 initiative, it is important that they understand and address the barriers facing women and other underrepresented groups. Indeed, those wishing to become professional engineers may face a number of challenges in their pathway to licensure. Though these are presented below by step along the pathway—as undergraduate engineering students, as EITs, and as newly licensed engineers—it is important to note that barriers are not necessarily limited to certain steps and can actually be complementary to those at other points along the path.

The findings below were gathered from interviews with regulators only and are presented in summary form. As such, any insights about students, EITs, newly-licensed engineers, and employers comes from regulators and not directly from any individuals in the aforementioned groups.

## 4.1.1 Undergraduate engineering students

One of the most common barriers undergraduate engineering students face is simply being unaware of what being a professional engineer entails. This includes misconceptions that with graduation they receive a licence and can begin practising, as well as a general lack of awareness of the licensing process. This is compounded by the lack of mentorship opportunities available to university students.

Similarly, not all of those enrolled in engineering programs wish to be engineers upon graduating. Some may leverage their engineering degree to pursue professions that are not directly related to engineering or may use the degree as a stepping stone to other education (i.e. a law degree).

For students who intend to find employment as engineers, the several-year timeframe before they can apply to be a professional engineer (P.Eng.) can be a deterrent to starting the process. For those committed to the licensure process, they can face challenges finding a job that meets the requirements of their regulator. This is particularly true in more niche disciplines (i.e. aerospace engineering), in smaller regions with fewer job opportunities as well as in regions where the availability of engineering-related jobs is closely tied to the current state of extractive industries. This barrier is closely related to those faced by EITs.

Students in Canada's three territories face an additional barrier as none of these regions have an accredited university engineering program. As such, high-school students wishing to pursue engineering at the tertiary level must leave their territory to do so.


# 4.1.2 Engineers-in-training

The single largest barrier faced by EITs is finding a job that enables them to meet their regulator's requirements. This includes finding a suitable and willing mentor that shares their career development priorities. Many employers may either not have professional engineer(s) on staff (i.e. in small and medium enterprises) or are so large that the EIT works in a different area altogether from the professional engineer on staff. Moreover, according to certain regulators, some EITs have expressed unease with being paired with a mentor that is of the opposite gender. This can prove particularly challenging for EITs who are women as there are far fewer professional engineers who are women and therefore fewer available to serve as mentors.

Another significant challenge is that employers may not incentivize or value professional engineers. This can include a reticence among these employers to cover any costs associated with their licensing application, as well as an unwillingness to adjust an employee's salary in recognition of their licence. In such instances, there can be a lack of incentive for the EIT to pursue licensure.

In more specialized areas of engineering or in smaller regions, it can be difficult for EITs to find relevant work. Similarly, EITs often face a quandary shared by new graduates in many disciplines, notably that employers want skilled people but new graduates cannot get a job to get the skills needed. In these cases, EITs may decide to forgo the licensure process, may move to another region, or may struggle to find work during the time period outlined by the regulator.

While the timeframes vary by regulator, EITs must generally demonstrate several years' worth of experience over a given period (e.g. four years of experience in a six-year period). EITs who take leave (e.g. sick leave, parental leave) may struggle to meet this requirement especially as the effect of the leave is generally longer than the leave period itself. For example, employers may remove an EIT from key projects in anticipation of their leave, and it may take a while for an EIT returning from leave to be assigned to a project.

While regulators have mechanisms whereby engineers can file complaints against companies who may have breached the regulator's code of ethics (i.e. by engaging in discriminatory practices), several regulators indicated that such mechanisms are rarely, if ever, used by individuals. The complaints process can be perceived as onerous and time consuming for the engineer, and, anecdotally, regulators indicated that the aggrieved individual is likely to change employers to "solve" the issue rather than address it through formal mechanisms.

## 4.1.3 Newly licensed engineers

The most common barrier facing newly licensed engineers throughout the country is finding relevant work in their field. This is particularly challenging in smaller provinces and outside major urban centres. It is also challenging in those cities where the cost of living is high. This is compounded by employers who are either unwilling to remunerate engineers at a level that recognizes their licence, or who are seeking engineers with several years of experience. Newly licensed engineers facing these challenges are more likely to leave the profession.



## 4.2 Barriers to entry and retention by demographic group

In order to support Engineers Canada's Strategic Priority 3: recruitment, retention, and professional development of women in the engineering profession and Operational Imperative 9 (OP9): promote diversity and inclusion in the profession that reflects Canadian society, the present review also gathered data on the barriers to entry and retention faced by women and Indigenous persons. These findings are presented in the sections below. Though not identified as a specific demographic group for study under this review, several key informants spoke to barriers of entry and retention faced by foreign-trained engineers. These are discussed in section 4.2.3.

## 4.2.1 Women

In addition to the aforementioned barriers, women seeking to become professional engineers may face other challenges. In one jurisdiction, it was reported that women leave the profession in the first five years at a rate of 1<sup>1</sup>/<sub>2</sub> to two times that of men. These additional challenges faced by women can broadly be grouped under three categories that, while presented separately below, are related and mutually reinforcing. These include an engineering culture which is generally unwelcoming towards women, familial constraints, and a lack of mentors, peers, and leaders who are women.

Many of the key informants interviewed indicated that engineering is still a profession that is generally unwelcoming to women. The engineering culture was described as masculine, competitive, and achievement oriented, which can be uninviting. As documented in one regulator's survey, it can manifest in outright ways such as bias, discrimination, bullying, harassment, and assault. It can also be through more subtle ways such as policies or compensation practices that disproportionately impact women. For example, employers may compensate their employees more by the years they have worked than by the competencies they display. Such practices are more likely to impact those who take parental leave. While such conclusions are supported by data on gender and pay equity gathered by one regulator's survey of employers, there is a lack of comparable data in most of the country.

While familial considerations were highlighted by several regulators to be a significant hurdle for women, there is an ongoing debate within the research community as to the validity of this claim. Notwithstanding, for those regulators that cited familial considerations as a hurdle, it was noted that engineering jobs can require significant amounts of travel to remote work sites for long periods of time and, in certain regions, it was noted that there are few part-time jobs and employers generally do not allow employees to work from home or work flexible hours. This can put strains for those with children or other dependents, a task which tends to fall more to women. Key informants indicated that the Perceived unintended positive effect of allowing engineers who are women achieve a better work-life balance. Certain key informants expressed a desire for these more flexible working conditions to continue beyond the pandemic as they would reduce barriers not only for women but potentially other underrepresented groups.

As evidenced by the available data, there is a lack of mentors, peers, and leaders who are women in the engineering profession. Research conducted by one key informant found that women lack a sense of belonging and connection in their workplaces, mostly because there are so few other women. For those already in the profession, this can create feelings of loneliness or tokenism, or reinforcing impressions of glass ceilings. For students and EITs, the lack of female visibility can



act as a deterrent as engineering quite literally becomes a profession they cannot see themselves in. Though several regulators have programs in place to have engineers who are women engage in outreach activities such as presenting at high schools, one noted that such initiatives have an unintended negative outcome. More precisely, such outreach appears to nearly always be voluntary and during school/work hours. As such, engineers who are women, especially in the private sector, must forgo some of their billable hours in order to participate. This can put them at a disadvantage compared to male colleagues during performance reviews and salary negotiations. This can be especially burdensome in smaller regions where the pool of engineers who are women is small and so the same individuals may be over-solicited to engage in outreach activities.

## 4.2.2 Indigenous persons

According to regulators, barriers to Indigenous participation in engineering begin even before university. These are a series of systemic challenges that exist for Indigenous persons that make it more difficult for them to succeed in any profession. In terms of engineering, rural, reserve, and Indigenous schools do not all offer the prerequisites that would enable a high school student to enter a university engineering program. Moreover, a post-secondary education may not always be a priority for Indigenous parents who may prioritize traditional ways of knowing. There are also socio-economic barriers and those related to remoteness. For example, a regulator might only organize outreach activities to high schools in urban centres.

For Indigenous persons who do enroll in undergraduate engineering programs, the transition to the job market can be sudden and there are a lack of Indigenous-targeted supports. As with women, there is a lack of Indigenous engineers which makes it challenging for younger Indigenous students and engineers to find mentors or role models. And like women, not seeing others like yourself in positions throughout an organization can result in a lack of connection and feeling of belonging. As evidenced by focus groups with Indigenous engineers conducted by one regulator, many report a feeling of tokenism and they do not feel like there is a real engagement on the part of the employer to support their integration or career progression.

Several key informants also noted that engineering was used as a tool of colonization, and that it is challenging to encourage Indigenous participation in such an industry, especially when there is ongoing discrimination. While some regulators are seeking to overcome this obstacle by raising awareness of the value of the profession to Indigenous people or by building relationships with local bands and councils, most regulators do not offer supports or initiatives that specifically target Indigenous persons. Part of this is due to a lack of data; most regulators do not consistently gather data on Indigenous students, EITs, or licensed engineers. This is partially attributed to challenges in formulating a proper definition for an Indigenous person while others are attributed to an unwillingness among Indigenous persons to self-identify for fear of being discriminated against.

## 4.2.3 Foreign-trained engineers

The key informants that spoke about this subgroup agreed that foreign-trained engineers face more barriers than Canadian-educated engineers. First, the process of recognizing a foreign-trained engineer's education and experience can be lengthy, costly, and discouraging. For example, since regulators generally require a certain number of years' experience in Canada, experienced foreigntrained engineers may have to accept a job at a lower level or salary than they otherwise would be offered for their level of experience. Some key informants indicated that certain employers take



advantage of this situation to pay foreign-trained engineers significantly less than Canadian employees with a licence.

Integration into Canadian society can also be difficult. This includes not only having to adapt to Canadian culture and potentially having to learn a new language but also having to learn about and navigate Canada's engineering system (i.e. provincial and territorial engineering regulation, licensure processes and requirements, etc.). One key informant noted that a lack of coordination with provincial ministries responsible for immigration can create inconsistencies in the process and can lead to confusion. For example, a government department may have issued a work visa to a foreign applicant despite the fact that the individual might not meet the engineering regulator's requirements to work.

It was further noted that additional barriers can be found at the intersection of gender and foreign status as women are more likely to have familial responsibilities and less interpersonal support networks than Canadian women.

### 4.3 Supports

Cognizant of the aforementioned barriers, the 12 regulatory bodies offer a variety of supports, programs, and initiatives to undergraduate engineering students, EITs, and newly licensed engineers. Given that these supports are but a small part of the factors that influence the attraction of students and the retention of engineers to the profession, it is challenging to say with certainty the extent to which these supports are helping to creating a more robust pathway to licensure. Notwithstanding, while the value of these supports cannot be measured, regulators consulted through this review agreed that these initiatives and programs are helpful.

As can be seen in Table 2, nearly all regulators offer lectures and talks to undergraduate engineering students on the licensure process. Most regulators also offer student memberships to their association, as well as scholarships, grants, or other financial supports to students. Several regulators provide guidance to students through a mentorship program. While it appears that students pay reduced membership fees and that other supports are offered for free, the survey and interviews did not gather enough data to make such statements conclusively.

The vast majority of regulators organize networking opportunities, professional development sessions, as well as training, workshops, and information sessions for EITs to help them navigate the licensing process (see Table 3). Several also seek to facilitate the technical mentorship requirement by recruiting volunteer mentors and pairing them with EITs. Career mentorship is less common, but regulators said they are trying to revise their mentorship programs, so they go beyond technical mentoring to provide broader experience. Some regulators expect both technical and career mentorship to be provided by the employer and a formal mentorship program is not necessary. However, it is unclear whether the regulators are consistently gathering data from employers as to whether these mentorship programs are offered. Some regulators offer awards or recognition to EITs, while only a couple offer them financial supports (i.e. reduced membership fees if they attend certain workshops, waiving membership dues if graduates register within a limited time frame after graduation) or provide feedback on their resumes or application package. It is unclear based on the available data whether such supports are offered free-of-charge to EITs.



The supports offered to newly licensed engineers are very similar to those offered to EITs, as evidenced in Table 4. Two differences worth noting are that most regulators have job boards for newly licensed engineers and that none offer financial supports to them. It is unclear based on the available data whether the supports presented in Table 4 are freely offered to newly licensed engineers. Regulators are more likely to offer these supports to all individuals as opposed to simply women, Indigenous persons, or foreign-trained individuals. This will be discussed further in Section 5.0 as it pertains to the regulators' perceived role.

Several of these initiatives appear to have been quite successful and are worth noting. While some of these examples were highlighted in interviews as best practices, information on other initiatives was gathered through a review of publicly-available information such as regulators' annual reports. This list is not intended to be exhaustive nor cover every regulator:

- ► For the past four years, Engineers PEI has collaborated with UPEI's Faculty of Sustainable Development Engineering (FSDE) on the Promoting Girls in Research in Engineering and Sustainability (ProGRES) initiative. ProGRES is a five-week summer research opportunity at the FSDE for high school girls going into grades 11 and 12. Students are paired with a faculty researcher, graduate student, or undergraduate student who is a woman and who acts as a direct mentor for the student's independent research project. The initiative also provides students with opportunities to learn more about engineering and what engineers do on a daily basis, and meet with other EITs and members who are women. They are hosted by the Women in Engineering Committee for various networking opportunities and have presented their projects at the Engineers PEI annual general meeting. There are currently seven engineering students at FSDE who are women who were supported through the ProGRES initiative, and the initiative appears to have been very well received by students and faculty members alike. The initiative is one that could be extended to other demographic groups (i.e. Indigenous students) or to other regions.
- Recognizing that EITs may struggle to find a mentor within their company, Professional Engineers Ontario's (PEO) created a LAP that links professional engineers licensed with PEO with EITs to provide the EITs with guidance and support as they progress towards obtaining their professional engineering licence. The LAP is offered by and run through PEO's local chapters. Thus, an interested EIT could reach out to their local chapter and seek to be paired with a volunteer mentor. While the LAP is not designed to help an EIT find employment, the mentor can help guide the EIT through their work experience report and can answers questions the EIT might have on the licensure process. The LAP has been well-received by EITs, especially by those who would otherwise struggle to find a suitable mentor. Engineers to impart their skills and knowledge to EITs in a variety of areas including career counselling, entrepreneurship, retirement and succession planning, and establishing a professional network. Indeed, technical or career mentorship is one of the most common supports provided by regulators for EITs.
- ► After noting that EITs who took leave (i.e. sick leave, parental leave) struggled to demonstrate the required four years'-worth of experience over a six-year period, APEGA sought to mitigate this barrier by automatically extending the application period to eight years and allowing EITs to apply for additional extensions equivalent to the time they were on leave. APEGA also reduces an EIT's dues by 25 per cent while they are on leave, and



published a document on managing the transition to and from leave, which includes information on such things as the conversations to have with human resources, how to stay in touch with the employer, how to prepare for a return, and other topics.

► The Ordre des Ingénieurs du Québec (OIQ) offers a variety of supports for foreign-trained engineers to better support their integration into Quebec society. For example, since 2003, the OIQ has collaborated with the Centre R.I.R.E. 2000, a not-for-profit organization based in Quebec City, on the *Programme d'accès rapide à l'OIQ*. This program supports foreign-trained engineers in preparing for their accreditation exams and gives them training to improve their employability in the context of the Quebec job market. Moreover, since 2016, the OIQ offers those with refugee status a reduction in admission costs, including application and examination fees. Finally, the OIQ is developing an action plan that would support collaborations with community or not-for-profit organizations. Under the action plan, the OIQ could refer foreign-trained engineers who are struggling to find work or to adapt to Quebec society to an organization that is better equipped and mandated to deal with such requests.

## 4.4 Employer Awareness Programs

While this review was intended to gather information on both LAP and EAP, significantly less information was available on EAP. Part of this pertains to the fact that, while regulators may engage in outreach and engagement sessions with employers, this does not always happen under the umbrella of a "program" per say. This explains why, in the responses to the survey presented in Table 4, none of the regulators indicated that they have an EAP. Another reason may be tied to regulators' perception that they have a limited amount of influence over employers and that, as such, their efforts to promote licensing are better spent on individuals. This is discussed further in section 5.0.

Nonetheless, regulators do offer a variety of programming targeted at employers. To take but one example, PEO and its chapters organize numerous events and presentations to speak with a variety of stakeholders on the value of licensure including private companies and employment agencies. PEO also organizes workshops for companies that deal specifically with the EIT process and what is needed from the employer. PEO is also working with employers who agree to track and share data on the per cent of new engineering recruits who are women, the per cent of engineering recruits who are women who obtain their licence, and the per cent of engineers who are women in leadership positions (C-suite; management). Such activities and initiatives are spearheaded by PEO's 30 by 30 Task Force. The Task Force has published an action plan<sup>7</sup> and a work plan<sup>8</sup> on its efforts in this regard, and has held action planning sessions with employers.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> https://www.peo.on.ca/sites/default/files/2019-12/30by30-PEO-Action-Planning-Employers.pdf



<sup>&</sup>lt;sup>7</sup> <u>https://www.peo.on.ca/sites/default/files/2019-08/30by30\_ActionPlan.pdf</u>

<sup>&</sup>lt;sup>8</sup> https://www.peo.on.ca/sites/default/files/2019-11/30by30TF WorkPlan.pdf

Table 2: Programs for undergraduate engineering students												
Program	APEGA (AB)	APEGNB (NB)	APEGS (SK)	Engineers and Geoscientists BC	EGM (MB)	Engineers Nova Scotia	Engineers PEI	Engineers Yukon	NAPEG (NWT and NT)	0IQ (QC)	PEGNL (NL)	PEO (ON)
Scholarships, grants, or other financial supports	Y <sup>10</sup>	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Student memberships	Y	Y	N	Y	Y	Y	Y	N	N	Y	N	Y
Lectures/talks for students	Y	Y	Y	Y	Y	Y	Y	Ν	N	Y	Y	Y
Mentorship programs for students (i.e. guidance offered to current undergraduate students)	Y	Y	N	Ν	N	Ν	Y	N	N	Y	N	Y
Other:	N	N	Ν	N	Y <sup>11</sup>	Ν	Y <sup>12</sup>	Ν	N	Ν	Ν	Ν



<sup>10</sup> Scholarships through APEGA's charitable foundation.

<sup>11</sup> 

Volunteer opportunities. Photocopying is provided free-of-charge at Engineers PEI's office. 12

Table 3: Programs for engineers in training												
Program	APEGA (AB)	APEGNB (NB)	APEGS (SK)	Engineers and Geoscientists BC EGM (MB) Scotia Engineers PEI PEI Scotia		NAPEG (NWT and NT)	OIQ (QC)	PEGNL (NL)	PEO (ON)			
Financial supports (i.e. reduction in dues)	Ν	Y	N	Ν	Ν	Ν	N	Ν	Ν	Ν	Ν	Y
Technical mentorship programs (i.e. supervision of an EIT by a licensed engineer)	N	Y	Y	Y	Y	Y	N	Ν	Y	Ν	Y	Y
Career development mentoring (i.e. career coaching, guidance; not necessarily done by one individual)	N	N	N	Y	N	N	Y	N	N	Ν	N	Ν
Networking opportunities	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Y
Professional development sessions	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Ν	Y	Ν
Training, workshops or information sessions on the licensing process	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y
Feedback on resumes	Y	Ν	N	Ν	Ν	Ν	N	Ν	Ν	Ν	Ν	Ν
Awards/recognition	Y	Y	Y	N	Y	N	Y	N	Y	Ν	N	Y
Other (specify)	Ν	Ν	N	Ν	Ν	Ν	N	Y <sup>13</sup>	Ν	Ν	Ν	Ν



Table 4: Programs for newly licensed engineers												
Program	APEGA (AB)	APEGNB (NB)	APEGS (SK)	Engineers and Geoscientists BC	EGM (MB)	Engineers Nova Scotia	Engineers PEI	Engineers Yukon	NAPEG (NWT and NT)	OIQ (QC)	PEGNL (NL)	PEO (ON)
Financial supports	N	N	N	N	N	N	N	N	N	Ν	N	N
Mentorship programs	Y	N	N	Y	Ν	N	N	Y	N	Ν	N	Ν
Job board	Y	Y	Y	Y	Y	Y	Y	Ν	Ν	Y	Y	Ν
Networking opportunities	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Y
Professional development sessions	Y	Y	Y	Y	Y	Y	Y	Y	Y	Ν	Y	Y
Training, workshops or information sessions	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Feedback on resumes	Y	N	N	N	Ν	N	N	Ν	N	Ν	N	Ν
Employer awareness	Ν	Ν	Ν	N	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Awards/recognition	N	Y	Y	N	Ν	Y	Y	Ν	Y	Ν	Y	Y
Other	Y <sup>14</sup>	N	Ν	N	Ν	N	N	Ν	N	Ν	N	Ν



## 5.0 Role of the regulators

All regulators indicated that their primary role is to regulate the profession in their respective regions, and to ensure that the licensing process protects the public. Similarly, raising awareness about the value of licensure and providing information on the licensing process and the profession more generally were highlighted by all as central elements of their role.

There was no consensus as to the role regulators should or can play with respect to increasing the diversity of the profession. Many regulators see their role largely focused on ensuring that those who apply to be professional engineers are properly vetted before receiving a license. In this view, it is not the role of the regulator to advocate for DEI or to offer supports or programs that target any group of people over another. A smaller number of regulators firmly hold that DEI considerations fall within the regulators' mandate and code of ethics.

Some believe that, as regulators, they can do much more to encourage adoption of policies and practices that embrace DEI and to recognize when existing policies and practices act as barriers to underrepresented groups. As such, it becomes an issue for the regulator since it pervades that which it regulates. Several regulators suggested they could: outline expectations of private employers and their employees; collect more detailed data on members; encourage private employers to publicly report on diversity and inclusion metrics to increase accountability; provide more information to volunteers, regulatory staff, and employers about why DEI is important; and encourage workplaces to take training in things like implicit bias. Some regulators argued that the members of the engineering profession should reflect the public it serves and, if it does not, it is the regulator's job to help make that happen. In this view, it is not necessarily about diversity and *inclusion* but rather about addressing system *exclusion*. The role of the regulator is to put the public interest first; by systematically excluding certain groups and preventing the profession from reflecting the public it serves, the profession may be blocking individuals who could be some of the profession's best talent.

It was also suggested that at a minimum, the regulator itself should be an example for its members. To this end, some regulators have looked at their own organization from a DEI perspective. For example, one regulator engaged a consultant do a review of their committees from a DEI perspective. These reviews examine such things as committee terms of reference, how committee positions are recruited and filled, the registration process, application forms, employee policies, volunteer policies, etc.

Regardless of a regulator's perceived role in supporting DEI, there was agreement that regulators are but one actor in the engineering ecosystem and that they actually have limited ability to affect significant change with respect to DEI considerations. In particular, three primary areas of the ecosystem were identified to fall outside of the regulators' sphere of influence. First, there is little regulators can do to increase the enrollment of underrepresented groups in undergraduate engineering programs. Second, regulators have no control over the number and types of foreign-trained engineers pursing licensure in Canada. Third, employers play an outsized role in shaping the culture of the profession as well as in creating policies and work environments that do or do not support DEI. Regulators currently do not have any control over employers and only very limited influence over them in some cases. While some regulators seek to increase awareness of the value of licensure and the importance of DEI to employers through such things as workshops and presentations, the extent to which employers are committed to DEI seems primarily dependent



on whether senior leadership and management within those organizations are committed to DEI and whether it is a strategic goal of the organization.

Several regulators also expressed reservations about creating any policies or programs that could be perceived to privilege one group over another, and noted that there has been reluctance from their membership to do so. That being said, others said regulators have a leadership role to play in this regard.

### 5.1 Member data

All regulators said it was important that they better understand who their members are. Most regulators collect only information about gender. Without gathering diversity information, any organization will struggle to know how diverse it actually is. While most regulators indicated that more effort could be made to gather such information, many had not yet determined how to go about it (i.e. questions built into licensing documents or gathered in a survey). The former was seen as intrusive and could even be seen as discriminatory. Further, some say that members do not like being asked, as they believe it highlights their differences or will make them susceptible to discrimination. Other regulators worry that a survey will not gather accurate information, though one regulator indicated that they were planning such a survey in the near future. Another regulator has formulated a list of information that it is recommending should be gathered at each step of the engineering experience (i.e. as students, EITs, and professional engineers). The recommended list includes: gender (including non-binary genders); Indigeneity; people of colour; persons with disabilities; LGBTQ+; foreign-trained; and caregiving responsibilities. In all cases it would allow people to voluntarily self-identify. It was said that knowing this information is the first step to influence future change.

### 6.0 Ability to achieve 30 by 30

In light of the limited extent of regulators' influence over the engineering ecosystem, most regulators questioned how achievable Engineers Canada's 30 by 30 initiative is. Those in smaller regions were more likely to say the goal was achievable, though cautioned that the low annual number of newly licensed engineers means that the addition of even one or two women can alter the proportions significantly, thus distorting the data. One regulator said they might achieve the goal because their university has set a goal of 40 per cent of their engineering and geoscience undergraduates to be women by 2030. Other regulators have developed action plans towards the goal. Most recently, the impacts of COVID-19 (i.e., on student job placements, co-op programs, and internships) have also been identified as reducing the ability to achieve the goal.

However, several regulators stressed that, even if the goal is not met, it is valuable in identifying a target and encouraging collective action toward it. Similarly, while 30 by 30 focuses on women, several of those interviewed were hopeful that programs and initiatives put in place for 30 by 30 will result in positive effects not only for women but also for other underrepresented groups.

For most regulators, a lack of resources was not identified as a significant barrier to reaching this goal. Although with resources more could probably be done to support the initiative (i.e. collect better data and analyze it from a variety of perspectives, organize a speaker series, do more outreach and advertising, bring leaders together work on opportunities, etc.), the achievement of



the goal is dependent on a variety of other factors and actors. However, for some smaller organizations, additional human resources for outreach activities could prove helpful.

Although all of the regulators had previously signed on in support of the 30 by 30 goal, a few regulators questioned the 30 by 30 goal and reproached it for being too focused on a precise metric in a given year and for not measuring inclusion. These regulators maintained that increasing the number of newly licensed engineers who are women did not necessarily translate to those women staying in the profession, ascending to leadership roles or creating a culture of inclusion and respect.

### 7.0 Organizational factors that support DEI

Despite having a limited scope within which to influence system-wide change, regulators are committed at an organizational level to the principles of DEI and many are actively seeking to gather data from their membership, revise existing policies and procedures, and implement new programs and initiatives that will support DEI. DEI considerations are integrated into regulatory bodies in a variety of ways including: committees, working groups or staff positions related to DEI (e.g. Director of Diversity and Inclusion, Equity, and Diversity Committee); training to staff on such things as unconscious bias; and awards in recognition of those who have demonstrated noteworthy support for diversity in the profession.

For organizations wishing to make a concerted effort to address DEI, best practices or facilitating factors were identified and are listed below.

- ► In order to get DEI initiatives started, it is important to have a **DEI champion with institutional power** within the organization. For example, some of the regulators who have considered DEI more carefully have done so because a president, CEO, council member, manager, or committee head spearheaded the initiative.
- ► Closely related, regulators would benefit from **dedicated and permanent financial and human resources**, if these are not already present, who not only understand the language of DEI but who also have institutional support to enact change. When a DEI champion is a volunteer or does not have access to consistent, dedicated funding (i.e. must spend time submitting grant and funding applications), they are not able to devote themselves as fully or efficiently to reviewing policies, creating programs, offering training, etc. Similarly, without meaningful powers or support from senior leadership and management, any DEI-related position is hobbled.
  - For example, Engineers Geoscientists Manitoba's council voted to include as one of its strategic policy "ends" that *practitioners reflect the diversity of the public*. This end not only grafts the 30 by 30 goal onto Engineers Geoscientists Manitoba's strategic operations but also calls for the increased representation of Indigenous persons among its membership. The council also voted to create two staff positions related to DEI, including making the Indigenous Professionals Initiative Committee Director a permanent staff position. Such initiatives were supported through an increase in member dues. While such a model may not work for all regulators and though there may be some opposition from the membership to increase dues to



support DEI-related work, Engineers Geoscientists Manitoba's example is one other regulators might wish to consider.

- ► The extent to which 30 by 30 has been **operationalized and institutionalized** within the vision of the regulator is also critical. For example, some regulators have included DEI considerations in their organization's strategic aims and goals, which helps to ensure its sustainability.
- ► Given the critical role universities play in attracting and enrolling women and Indigenous students to engineering programs, a **strong, sustained relationship with the local university(ies)** can prove to be very beneficial to regulators, as appears to be the case with Engineers PEI and the University of PEI, and several other regulators. While this best practice may be able to be successfully replicated in other jurisdictions with a small number of universities such as Saskatchewan, it will be more challenging in larger regions such as Quebec or Ontario, and impossible in the three territories as they do not have an accredited university engineering program.
- ► The importance of **dedicated and passionate volunteers** among the organization's membership was also highlighted as an important factor in ensuring the success of initiatives. However, it was cautioned that volunteers should not be over-solicited as, especially in smaller jurisdictions, volunteers are already asked to do a lot and may suffer from burnout.

While the various supports are a necessary part of any attempt at overcoming these barriers, a key informant noted that they are not sufficient to overcome systemic barriers present in the profession.

### 8.0 Conclusions and recommendations

The key conclusions that lead to recommendations for Engineers Canada are presented below. Note that these recommendations are not placed in any specific order of importance.

### GBA+

As noted in section 3.0 of the report, GBA+ is an institutional process that can be applied to any processes and activities in which an organization is involved, such as LAP or EAP. As for DEI, it is a broader concept that may be used in a variety of contexts. The 30 by 30 goal falls more squarely under DEI than GBA+. Ultimately, to support any DEI-related initiative that they elect to pursue, Engineers Canada and the regulators would benefit from proceeding with an explicit GBA+ process to systematically learn and document how their current activities and processes are contributing or limiting the contribution that each organization can make to achieving greater diversity, equity, and inclusion.

On that basis, the following two recommendations are proposed.

**Recommendation 1:** Engineers Canada and the 12 regulators should engage in a GBA+ review of their activities, policies, procedures related to licensure and employer awareness to support a full alignment with their collective goals on diversity, equity, and inclusiveness. It is likely that the analytical process would need to be tailored to each



organization, though would generally involve the articulation of the overall vision that the organization is pursuing and the most predominant challenges that have emerged, the collection of relevant data, the development and implementation of recommendations, and the monitoring and evaluation of those activities.

**Recommendation 2:** In collaboration with the 12 regulators, Engineers Canada should develop a strategy for data collection across the country that reflects the needs of the regulators and respects their varying capacity to collect such data. An informed discussion with all these stakeholders will be needed to determine the variables on which to gather data, as well as the best mechanism to gather the data (i.e. an annual survey of members, including demographic-based questions as part of annual membership renewal, etc.).

#### 30 by 30

As concerns Engineers Canada's 30 by 30 initiative more specifically, Engineers Canada recognizes that they and the 12 regulators are but one of many actors in Canada working to increase the representation of women in engineering, and there are a host of external factors that will affect the achievement of this goal. To that end, Engineers Canada works closely with over 50 per cent of the academic institutions that offer accredited engineering programs, as well as many engineering employers. Engineers Canada also collaborates and engages with government departments and agencies such as the Natural Sciences and Engineering Research Council of Canada (NSERC) (i.e. Chairs for Women in Science and Engineering), as well as with a variety of actors in the not-for-profit sectors, including the Canadian Coalition of Women in Engineering, Science, Trades and Technology (CCWEST) and the Society for Canadian Women in Science & Technology (SCWIST), as well as hEr VOLUTION and TechGirls Canada. Notwithstanding, there is an opportunity for Engineers Canada to work more closely with national engineering employers as this is a stakeholder group identified by the regulators as falling largely outside of their sphere of influence. However, given that Engineer Canada is mandated with serving the regulators, it will be important that any actions undertaken by Engineers Canada to engage with employers be directed by the regulators.

**Recommendation 3:** Provided Engineers Canada receives such a mandate from its regulators, it is recommended that Engineers Canada strategically target national engineering employers as an important stakeholder group in the engineering ecosystem, recognizing that they play a critical role in the representation of women in the engineering profession and thus, in the achievement of the 30 by 30 goal. Conversely, should the regulators wish to undertake such engagement themselves, Engineers Canada could support these efforts.



### References

- Engineers Canada. (2018, May 26). Engineers Canada Strategic Plan 2019-2021. https://engineerscanada.ca/sites/default/files/board/engineers-canada-strategic-plan-2019-2021.pdf
- ISED. (2021, January 5). *The 50 30 Challenge: Your Diversity Advantage*. https://www.ic.gc.ca/eic/site/icgc.nsf/eng/07706.html
- Status of Women Canada. (2020, August 6). *Introduction to GBA+*. Status of Women Canada. https://cfc-swc.gc.ca/gba-acs/course-cours/eng/mod02/mod02\_03\_01a.html
- Women and Gender Equality Canada. (2020, October 28). *What is GBA+.* https://cfcswc.gc.ca/gba-acs/index-en.html



Page 25 of 29

.

1

APPENDIX A: Number of EITs by	Engineers and		ADECC	5014	DEO	010	ADECNID	Engineers	Engineers	DECNU	NADEC	Engineers	Tatal
regulator: 2015 to 2019	Geoscientists BC	APEGA	APEGS	EGINI	PEO	υία	APEGNB	Nova Scotia	PEI	PEGNL	NAPEG	Yukon	Iotai
Engineers-in-Training		(AB)	(SK)	(MB)	(ON)	(QC)	(NB)			(NL)	(NWT and NT)		
2019													
Engineers-in-Training (male)	5,465	8,268	1,490	1,312	11,508	10,125	502	792	147	373	38	38	40,058
Engineers-in-Training (female)	1,857	2,507	357	312	3,186	2,515	150	242	23	142	20	9	11,320
Engineers-in-Training (gender unknown)	0	0	132	0	0	0	0	0	0	0	0	0	132
Total Engineers-in-Training	7,322	10,775	1,979	1,624	14,694	12,640	652	1,034	170	515	58	47	51,510
Percentage of Female Engineers-in-Training	25%	23%	18%	19%	22%	20%	23%	23%	14%	28%	34%	19%	22%
2018													
Engineers-in-Training (male)	5,132	8,213	1,775	1,296	11,543	11,752	479	717	139	377	42	36	41,501
Engineers-in-Training (female)	1,158	2,540	369	286	3,166	2,728	135	205	20	130	19	11	10,767
Total Engineers-in-Training	6,290	10,753	2,144	1,582	14,709	14,480	614	922	159	507	61	47	52,268
Percentage of Female Engineers-in-Training	18%	24%	17%	18%	22%	19%	22%	22%	13%	26%	31%	23%	21%
2017								1			1		
Engineers-in-Training (male)	4,407	8,205	1,562	1,277	10,966	11,150	432	629	108	401	42	32	39,211
Engineers-in-Training (female)	1,037	2,498	348	271	2,934	2,482	106	170	16	128	15	13	10,018
Total Engineers-in-Training	5,444	10,703	1,910	1,548	13,900	13,632	538	799	124	529	57	45	49,229
Percentage of Female Engineers-in-Training	19%	23%	18%	18%	21%	18%	20%	21%	13%	24%	26%	29%	20%
2016			1 1					1	1		1		
Engineers-in-Training (male)	3,884	8,680	1,500	1,135	10,405	10,669	409	557	94	405	40	33	37,811
Engineers-in-Training (female)	921	2,564	376	239	2,689	2,361	93	145	16	127	17	15	9,563
Total Engineers-in-Training	4,805	11,244	1,876	1,374	13,094	13,030	502	702	110	532	57	48	47,374
Percentage of Female Engineers-in-Training	19%	23%	20%	17%	21%	18%	19%	21%	15%	24%	30%	31%	20%
2015													
Engineers-In-Training (male)	3,641	9,514	1,469	1,107	10,128	10,441	342	525	90	393	41	28	37,719
Engineers-in-Training (remaie)	902	2,669	351	227	2,489	2,257	86	119	16	137	14	15	9,282
I otal Engineers-in-Fraining	4,543	12,183	1,820	1,334	12,617	12,698	428	644	106	530	55	43	47,001
Percentage of Female Engineers-In-Training	20%	22%	19%	17%	20%	18%	20%	18%	15%	26%	25%	35%	20%
2014	2.265	0.040	1 225	1.005	0.224	10 625	252	F 20	0.4	200	24		25.054
Engineers in Training (finale)	3,265	8,913	1,325	1,085	9,324	10,625	353	538	84	388	31	23	35,954
	810	2,465	321	1 204	2,2/4	12,022	/6	126	11	128	14	13	8,735
Dercentage of Female Engineers in Training	4,075	11,378	1,646	1,284	11,598	12,923	429	664	95	516	45	36	44,689
reitentage of remaie Engineers-in-Training	20%	22%	20%	15%	20%	18%	18%	19%	12%	25%	51%	36%	20%



1





**Draft – For Discussion Only** 







# **BRIEFING NOTE:** For information

30 by 30 operatio	nal update: Aspirational scorecard	5.6b
Purpose:	To publish, for the use of the Board and the Regulators, an aspirational scorecard for 30 30 with yearly targets	0 by
Link to the Strategic Plan:	Strategic priority 3: Recruitment, retention, and professional development of women in engineering profession	n the
Prepared by:	Cassandra Polyzou, Manager, Diversity, Equity, and Inclusion Jeanette Southwood, Vice President, Corporate Affairs and Strategic Partnerships	
Presented by:	Gerard McDonald, Chief Executive Officer	

# Background

- As part of the 2020 CEO objectives, Engineers Canada is to "publish, for the use of the Board and the Regulators, an aspirational scorecard for 30 by 30 with yearly targets."
- Current overall data trends do not project that the number of newly licensed engineers who are women will reach 30 per cent by the year 2030. However, the findings in the report, 'Gender-based analysis (GBA+) of national licensure assistance programs and employer awareness programs,' indicate that "even if the [30 by 30] goal is not met, it is valuable in identifying a target and encouraging collective action towards it" (Appendix 1).
- The purpose of this scorecard is to provide a tool for Regulators to set aspirational yearly targets that are measurable and expand the metrics that contribute to the 30 by 30 goal.
- The scorecard is voluntary.

## Status update

- The scorecard incorporates feedback from Regulators, as well as the research findings in the GBA+ of national licensure assistance programs and employer awareness programs report (see Board agenda item 5.6a, '30 by 30 report on Regulators' best practices in EIT programs').
- The categories provide clarity regarding the necessary targets along the pathway to licensure, programs that are widely used by Regulators that can support women along the pathway (i.e. mentorship programs, scholarships), as well as important metrics that indicate strong organizational commitment to gender equity (i.e. women as Regulator council members). Regulators are encouraged to create additional metrics specific to their organizations, as the scorecard is intended as a benchmarking tool that can be employed by all Regulators.
- The scorecard is supported by the research conducted by PRA Inc. in 2020. In addition to the final GBA+ report, PRA Inc. provided 12 separate discovery reports based on their survey of Regulator programs and services, that present detailed information on the data, challenges, and opportunities for each Regulator. These discovery reports will be presented directly to the CEOs and 30 by 30 Champions at each Regulator and will be accompanied by the 30 by 30 aspirational scorecard to support the creation of measurable targets for each jurisdiction. Regulators will be provided support from Engineers Canada's Manager, Diversity, Equity, and Inclusion, on the implementation and use of the scorecard, if they choose to use it.

### Next steps

• Manager, Diversity, Equity, and Inclusion (DEI) will initiate meetings in 2021-Q1 with Regulator 30 by 30 Champions and CEOs on GBA+ research findings, individual discovery reports and 30 by 30 data trends in each jurisdiction, as well as the use of the 30 by 30 aspirational scorecard for setting measurable targets.

- Manager, DEI will set up quarterly meetings with interested Regulators to establish and support 30 by 30 aspirational scorecard metrics.
- Manager, DEI, in collaboration with 30 by 30 Champions network, will plan Q2 virtual 30 by 30 conference, including presentations from 30 by 30 Champions on best practices in licensure assistance and employer awareness programs, and collection of diversity demographic data.
- Manager, DEI drafts 2021-Q4 report on 30 by 30 aspirational scorecard targets set by Regulators. Final report presented at February 2022 Board meeting.

## **Appendices**

• Appendix 1: Sample aspirational scorecard

#### Appendix 1

#### 30 by 30 aspirational scorecard

#### January 2021

The 30 by 30 aspirational scorecard tracks the percentage of licensed engineers, newly licensed women, EITs who are women, newly registered EITs who are women, and student members who are women, as well as the percentage of mentorship program participants, scholarship recipients, and Regulator council members who are women. Regulators can use the scorecard to set their own yearly targets for each of these categories out to 2030. If Regulators have other metrics they would like to track as part of the scorecard they are welcome to add their own Regulator-specific metrics.

The purpose of this scorecard is to provide a tool for Regulators to set aspirational yearly targets that are measurable and expand the metrics that contribute to the 30 by 30 goal.

Regulator name	Yearly Target			
Category	2020 (current)	2021	•••	2030
% Licensed engineers who are women				
% Newly licensed women				
% EITs who are women				
% Newly registered EITs who are women				
% student members who are women				
Mentorship programs; % women				
Scholarships; % women				
% Regulator council who are women				
Regulator-specific metrics (TBD by jurisdiction)				