

# 113<sup>th</sup> MEETING OF THE CANADIAN ENGINEERING QUALIFICATIONS BOARD January 28, 2021 11:30 a.m.-3:30 p.m. EST

# Virtual meeting

## **AGENDA**

	Agenda item		
		Presenter	
1	Opening of the meeting		
1.1	Call to order	Mahmoud Mahmoud	
1.2	Approval of the agenda	Mahmoud Mahmoud	
1.3	Declaration of conflict of interest (attachment 1.3)	Mahmoud Mahmoud	
1.4	Introduction activity	Mahmoud Mahmoud	
	Approval of minutes of the previous meeting (attachment 2)	Mahmoud	
2	Motion: That the minutes from the 112 <sup>th</sup> meeting of the Qualifications Board held on September 21 <sup>st</sup> , 2020 be approved as distributed.	Mahmoud	
3	Review of action items from last meeting	Ryan Melsom	
4	Committee and task force reports		
	Syllabus Committee		
4.1	Draft Computer Engineering Syllabus (attachment 4.1. A-B)	Amy Hsiao	
	Motion: That the revised Computer Engineering Syllabus be approved and distributed on the public site.		
4.2	Task Force on Workplace Gender Equity	Margaret Anne Hodges	



5	New task force	
5.1	Feasibility study on alternative methods of assessing non-CEAB applicants (attachment 5.1)	
	Motion: That the Task Force for a Feasibility study on alternative methods of assessing non-CEAB applicants be struck.	Mahmoud
6	Comments from observers	
7	Items added to the agenda	Mahmoud Mahmoud
8	Future meetings The next CEQB Teleconference will be held on April 10, 2021. A CEQB Teleconference will be held in August 2021 and will be determined by Doodle poll. The next Fall CEQB meeting will be held in Vancouver, on September 18-19, 2021. A CEQB Teleconference call will be held on January 25, 2022.	Mahmoud Mahmoud
9	Review of action items of 113 <sup>th</sup> Qualifications Board meeting	Ryan Melsom
	Generative discussion on how to be effective as a volunteer board during COVID-19	Mahmoud
10	Breakout exercise for CEQB members.	
11	Conclusion	Mahmoud Mahmoud



# MINUTES OF THE 113<sup>TH</sup> MEETING

## 1. Opening of the meeting

The Chair welcomed everyone to the meeting. All attendees were invited to participate in an interactive icebreaker activity prepared by the CEQB Secretariat.

## 1.1. Call to order and introduction of attendees

	Mahmoud Mahmoud, PhD, FEC,	Chair	
	P.Eng.		
	Frank George, FEC, FGC (Hon.),	Vice-Chair	
	P.Eng.		
	Ron LeBlanc, FEC, P.Eng.	Past Chair	
	Anil Gupta, P.Eng., FEC, FGC (Hon.)	Alberta, Northwest Territories and	
		Nunavut Representative	
Canadian Engineering	Frank Collins, FEC, P.Eng.	Atlantic Provinces Representative	
Qualifications Board	Amy Hsiao, PhD, MBA, P.Eng.	Atlantic Provinces Representative	
Members	Karen Savage, FEC, P.Eng.	British Columbia, Yukon	
Weilibers		Representative	
	Margaret Anne Hodges, FEC, FGC	Member-at-Large Representative	
	(Hon.), P.Eng., PMP		
	Qing Zhao, PhD, P.Eng.	Member-at-Large Representative	
	Roydon Fraser, PhD, FEC, P.Eng.	Ontario Representative	
	Nadia Lehoux, ing., PhD	Québec Representative	
	Ian Sloman, MEng, P.Eng.	Saskatchewan, Manitoba	
		Representative	
Engineers Canada Board	Jeff Holm, FEC, P.Eng., FGC (Hon.)		
Appointees	Changiz Sadr, FEC, P.Eng., CISSP (GDPR), TOGAF		
Engineers Canada Board	Jean Boudreau, FEC, P.Eng.		
	Stephanie Price, P.Eng., CAE	Executive Vice President, Regulatory Affairs	
	Ryan Melsom, PhD	Manager, Qualifications and CEQB Secretary	
Engineers Canada Staff	Mya Warken	Manager, Accreditation and CEAB Secretary	
	Megan Falle	Manager, Regulatory Liaison	
	Isabelle Flamand	Coordinator, Qualifications	
	Kate MacLachlan, PhD, P.Geo., FEC		
	(Hon.), FGC	APEGS	
	Gillian Pichler, FEC, P.Eng.	Engineers and Geoscientists BC	
Observers	Jason Ong	Engineers and Geoscientists BC	
	Kate Sisk, MA, FEC (Hon.), FGC (Hon)	APEGNB	
	Michael Gregoire, P.Eng., FEC	Engineers Geoscientists Manitoba	



	Carol MacQuarrie, P.Eng.	APEGNB	
Regrets			
Qualifications Board	Nikeetta Marshal, MSc, P.Eng.	Member-at-Large Representative	
Members	Samer Inchasi, P.Eng., PMP	Member-at-Large Representative	

## 1.2 Approval of the agenda

It was requested that two additional items be added under item 7, *Items added to the agenda*, the first being the 2022 CEQB Workplan, and the second being results of the survey distributed to CEQB members regarding potential in-person meetings in 2021.

Motion: That the agenda of the 113<sup>th</sup> Meeting of the Qualifications Board be approved with the two additional items, moved by Margaret Anne Hodges, and seconded by Anil Gupta. None were opposed. The agenda was approved.

#### 1.3 Conflict of interest

CEQB members have an ongoing obligation to conduct themselves in an ethical, professional, and lawful manner, and 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"). Members that cannot act in the best interests of Engineers Canada or are conflicted should recuse themselves from the relevant part of the meeting, and they shall not vote on the decision at hand. Members must support the legitimacy and authority of CEQB decisions, regardless of their personal position on the issue, and shall not publicly discuss the varying opinions of individual members.

Roydon Fraser expressed that he does not have a conflict of interest, although it was previously perceived as such, and asked that this be rectified with the Engineers Canada Board.

A member stated that the document should explicitly say that an individual's interests/expertise is not a conflict of interest, and highlight the financial gain aspect of a conflict of interest. CEQB members were reminded that the perception of conflict is up to the individual member to assess. Engineers Canada's Governance Committee has been made aware of previous and continuing concerns expressed by CEQB members.



#### 2. Minutes

Motion: That the minutes from the 112<sup>th</sup> meeting of the Qualifications Board held on September 21<sup>st</sup>, 2020 be approved as distributed, moved by Changiz Sadr, and seconded by Karen Savage. None were opposed. The minutes were approved.

## 3. Review of action items from last meeting

	Action item	Assigned to	Status
112.1	Make edits to the minutes to specify that Mahmoud Mahmoud	Secretariat	Completed
	chaired the July meeting, not Ron LeBlanc.		
112.2	Make edits to the Public guideline on risk management as	Secretariat	Completed
	distributed before the meeting and send it to the Engineers		
	Canada Board for final approval and distribution on the public		
	website.		
112.3	Members are encouraged to send to Isabelle Flamand, via	CEQB	Completed
	email, organizations or individuals that they think should be	members	
	included in the distribution list of the survey in support of the		
	Guideline for engineers and engineering firms to foster gender		
	inclusive workplaces.		
112.4	Distribute additional training information to CEQB members	Secretariat	Completed
	along with the meeting survey.		
112.5	Confirm that the training will also be made available to	Secretariat	Completed
	regulator staff.		
112.6	Highlight in the instructions, circulated when the consultation	Secretariat	Completed
	process begins in January, that CEQB members are encouraged		
	to consult with their colleagues on their proposed priorities		
	(carried forward).		

## 4. Committee report

## 4.1 Syllabus Committee

Amy Hsiao, chair of the Syllabus Committee, presented. Since September, the Syllabus committee met in November to finalize and approve the revised Computer engineering syllabus for CEQB final approval. The Syllabus Committee also asked for further review of the Software engineering syllabus for recommendations on the amount of required examinations in Group A (compulsory).

Furthermore, the development of the new Aerospace engineering syllabus has now begun. Two additional expert panels are also currently being created to review the 2004 Agricultural/biosystems/bioresource/food engineering syllabus and the 2010 Metallurgical engineering



syllabus. The Complementary studies syllabus review will begin late 2021.

#### 4.1.B. Draft Computer Engineering Syllabus

In April 2020, the CEQB approved that the previous <u>Basic studies</u>' Discrete Mathematics examination (BS-16) be moved to the Computer and Software engineering syllabi. Given the lack of program information about computer and software engineering programs at that time, the CEQB agreed to add the new <u>20-Comp-B14 Discrete Mathematics</u> as Group B examinations and review program information to make a decision on whether they should remain as Group B examinations (optional) or be moved as Group A examinations (compulsory). Discrete Mathematics is found as a compulsory topic in only 8/12 Computer engineering programs. For that reason, the expert recommended keeping Discrete Mathematics in Group B.

Motion: That the revised Computer Engineering Syllabus be approved and distributed on the public site, moved by Amy Hsiao, and seconded by Karen Savage. None were opposed. Motion was carried.

## 4.2 Task Force on Workplace Gender Equity

Margaret Anne Hodges, chair of the Task Force on Workplace Gender Equity, presented. The survey on workplace gender equity, which replaced the April 2020 workshop, closed November 27, 2020. The survey had 1155 respondents (after tidying the data), the highest portion of responses being from women (69%), individuals in their mid-career (46%), and residents of Ontario & BC (49%). Non-engineers working in engineering environments were also invited to complete the survey. The task force will be meeting twice in February to finalize the draft General direction for CEQB approval in April 2021.

#### 5. New task force

## 5.1 Feasibility study on alternative methods of assessing non-CEAB applicants

In December 2019, the Engineers Canada Board passed a motion which requested that a feasibility study on a national academic examination be assigned to the Canadian Engineering Qualifications Board (CEQB). In Spring 2020, the CEQB consulted Officials Groups on the 2021 priorities, which included the proposal for a "New national feasibility study for entry-to-practice exam". NAOG expressed their support and desire to participate in the development of a feasibility study, but added the request that the scope be extended to include more than one particular approach to assessing the knowledge requirement for licensure. The feasibility study has thus been expanded to investigate how to best assess and confirm the knowledge requirements for non-CEAB applicants, including the feasibility of an entry-to-practice exam as one component.

A call for expression of interest was sent to CEQB members in January 2021 and will be sent to



regulators in February 2021 should the task force be struck. The membership will include four NAOG members and one CEAB member which will be determined by the Executive Committee in consultation with the appointed task force chair. The remainder of the membership will consist of CEQB members which will be determined by the chair, with input from the CEQB. It is anticipated that a CEQB June 2021 workshop will be dedicated to this topic. All other task force members will also be invited to the workshop. A member expressed concerns about the collegiality of the membership selection process and stated that the motivation for the study's development was "political." It was clarified that the study's proposed scope has been developed in alignment with Engineers Canada Board policy, and has followed a fulsome consultation process with all regulators, receiving strong support. It was requested that the task force's terms of reference be presented to the CEQB for approval when they become available (action item 113.1).

Motion: That the Task Force for a Feasibility study on alternative methods of assessing non-CEAB applicants be struck, moved by Mahmoud Mahmoud, and seconded by Karen Savage. None were opposed. The motion carried.

#### 6. Comments from observers

Observers thanked the CEQB for allowing them to join their meetings.

## 7. Items added to the agenda

#### 2022 Workplan

CEQB members are welcome, but not required, to propose workplan items to the CEQB secretariat by March 1, 2021. Non-CEQB stakeholders (e.g. officials groups) may also submit items for consideration. Those who wish to submit workplan items are invited to consult with their colleagues prior to making the proposal. The revised template will be available on the CEQB Collaboration Space on February 1, 2021.

The CEQB was advised that several proposed workplan items that already received regulator interest/assent in 2020 do not need to be resubmitted, and that these may take precedence over new topics. They will be brought forward again at the CEQB April 2021 meeting (action item 113.2). The proposed workplan items will be approved for consultation at the next CEQB meeting on April 10, 2021.

## Results on CEQB survey for future meetings

A Survey was sent to CEQB members to gage their level of comfort with potential in-person meetings in 2021. Nine out of sixteen CEQB members responded. Most respondents felt comfortable meeting in-person now as well as later in the year, as restrictions permitted. Other respondents preferred meeting virtually for the time-being.



## 8. Future meetings

The next CEQB Teleconference will be held on April 10, 2021.

A CEQB Teleconference will be held in August 2021 and will be determined by Doodle poll.

The next Fall CEQB meeting will be held in Vancouver, on September 18-19, 2021.

A CEQB Teleconference call will be held on January 25, 2022.

## 9. Review of action items of 113th Qualifications Board meeting

	Action item	Assigned to
113.1	Present the terms of reference of the Task Force for a Feasibility study on alternative methods of assessing non-CEAB applicants to the CEQB for approval when they become available.	Secretariat
113.2	Bring forward the previously proposed workplan items that received regulator interest/assent in 2020 at the CEQB April 2021 meeting.	Secretariat

#### 10. Conclusion

The meeting concluded.

Prepared by: Isabelle Flamand, Coordinator, Qualifications on behalf of:

Mahmoud Mahmoud, PhD, FEC, P.Eng.

Chair, Canadian Engineering

**Qualifications Board** 

Ryan Melsom, PhD

Secretary, Canadian Engineering

**Qualifications Board**