

# 106<sup>th</sup> MEETING OF THE CANADIAN ENGINEERING QUALIFICATIONS BOARD SATURDAY, APRIL 6, 2019 9 a.m.-5 p.m. EDT

# OTTAWA CONFERENCE AND EVENT CENTRE 200 COVENTRY ROAD, OTTAWA, ONTARIO

# AGENDA OF THE 106th MEETING

	Agenda item	Presenter
1	Opening of the meeting	
1.1	Call to order and introduction of attendees	Ron LeBlanc
1.2	Approval of the agenda	Ron LeBlanc
2	Approval of minutes of the previous meeting (attachment 2)  Motion: That the minutes from the 105 <sup>th</sup> meeting of the Qualifications Board held on January 29 <sup>th</sup> 2019, be approved as distributed.	
3	Review of action items from last meeting	Mélanie Ouellette
4	Committee reports	
4.1	Environment and Sustainability Committee	Mahmoud Mahmoud
4.1.1	Draft White Paper on Environmental Engineering (attachment 4.1.1 A-B)  Motion: That the Revised "Draft White Paper on Environmental Engineering" be approved for consultation.	
4.2	Practice Committee	Frank George
4.3	Syllabus Committee	Dennis Peters
4.3.1	New Syllabus Creation Protocol and Revised Syllabus Review Protocol (attachment 4.3.1 A-C)	
	Motion: That the "Syllabus Creation Protocol" be approved for use by the Syllabus Committee-only and that recommended modifications be made to the Syllabus Review Protocol.	Dennis Peters



4.4	Engineer-in-Training Committee	Margaret Anne Hodges
4.5	Admission Issues Committee	Frank George
4.5.1	Revised Guideline on Work Experience Using Competency-Based Assessment (attachment 4.5.1 A-B)  Motion: That the Revised Guideline on Work Experience Using Competency-Based Assessment be sent for consultation.	Frank George
5	National Groups	
5.1	National Admissions Officials Group Update	Kyle Smith
5.2	National Discipline & Enforcement Officials Group Update	Shawna Argue
5.3	Comments from the regulators	Ron LeBlanc
5.4	Canadian Environment Experience Competencies (attachment 5.4)	Gill Pichler Kyle Smith
6	Information and Discussion Items from Other Engineers Canada Groups	Ron LeBlanc
6.1	Report from the Accreditation Board	Jeff Pieper
6.2	Report on Engineers Canada Board Activities and Decisions	David Lynch Christian Bellini
7	Qualifications Board Business	Ron LeBlanc
7.1	Update on website metrics	Ron LeBlanc
7.2	Current 2019-21 Work Plan Status Update (attachment 7.2)	Ron LeBlanc
7.3	2020 CEQB Work Plan Priorities and Process (attachments 7.3 A-H)	Ron LeBlanc
8	Items added to the agenda	Ron LeBlanc
9	Future meetings The next fall CEQB meeting will be held in St. John's, Newfoundland and Labrador, on September 15-16, 2019. The next CEQB Teleconference call will be held on January 23, 2020.	Ron LeBlanc
10	Review of action items of 106 <sup>th</sup> Qualifications Board meeting	Mélanie Ouellette
11	Conclusion	Ron LeBlanc



# MINUTES OF THE 106<sup>TH</sup> MEETING

# 1. Opening of the meeting

The Chair welcomed everyone. Canadian Engineering Qualifications Board (CEQB) members were asked to sign the new confidentiality policy from the Engineers Canada Board Policy Manual. The Engineers Canada Board representatives have already signed it. A CEQB member wondered the extent that the information is considered confidential; in response, the policy was thought to pertain to information expressed as confidential.

# 1.1. Call to order and introduction of attendees

	PontaPlana FFC P Fng	Chain	
	Ron LeBlanc, FEC, P.Eng.	Chair	
	Mahmoud Mahmoud, PhD, FEC,	Vice-Chair	
	P.Eng.		
	Dennis Peters, PhD, FEC, SMIEEE,	Past Chair	
	P.Eng.		
	Frank Collins, FEC, P.Eng.	Atlantic Provinces Representative	
	Frank George, FEC, FGC (Hon),	Alberta, Northwest Territories and	
	P.Eng.	Nunavut Representative	
Canadian Engineering	Roydon Fraser, PhD, FEC, P.Eng.	Ontario Representative	
Qualifications Board	Margaret Anne Hodges, FEC, FGC	Member-at-Large	
Members	(Hon), P.Eng., PMP		
	Amy Hsiao, PhD, MBA, P.Eng.	Atlantic Provinces Representative	
	Samer Inchasi, P.Eng., PMP	Member-at-Large	
	Nikeetta Marshal, MSc, P.Eng.	Member-at-Large	
	Diane Riopel, PhD, FIC, ing.	Québec Representative	
	Karen Savage, FEC, P.Eng.	British Columbia, Yukon	
	·	Representative	
	lan Sloman, MEng, P.Eng.	Saskatchewan, Manitoba	
		Representative	
	Qing Zhao, PhD, P.Eng.	Member-at-Large	
Engineers Canada Board	Christian Bellini, FEC, P.Eng.		
Representatives	David Lynch, PhD, FCAE, FCIC, FEIC, FEC, FGC (Hon.), P.Eng.		
Canadian Engineering	Jeff Pieper, PhD, FEC, P.Eng.		
Accreditation Board		·	
Representative			
National Discipline and	Shawna Argue, MBA, FCSSE, FEC,	Association of Professional Engineers	
Enforcement Officials Group	FGC (Hon.), P.Eng.	and Geoscientists of Saskatchewan	
Representative			
-	Stephanie Price, P.Eng., CAE	Executive Vice President, Regulatory	
		Affairs	
Engineers Conside Staff	Mélanie Ouellette, MA, MBA	Manager, Qualifications	
Engineers Canada Staff	David Lapp, FEC, P.Eng.	Manager, Globalization and	
	, , ,	Sustainable Development	
	Kyle Smith, MSc, P.Eng.	Manager, Assessments	
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	Catherine Christoffersen	Coordinator, Qualifications
	Amit Banerjee, P.Eng.	APEGA
	Gillian Pichler, FEC, P.Eng.	Engineers and Geoscientists BC
Observers	Kate Sisk, MA, FEC (Hon), FGC	Engineers Geoscientists NB
	(Hon)	

# 1.2. Approval of the agenda

A CEQB member requested allowing questions at the end of the meeting, if time allows.

Motion: that the agenda of the 106<sup>th</sup> meeting of the CEQB be approved as amended, moved by Ian and seconded by Dennis. All were in favour. The agenda was approved.

# 2. Approval of minutes of the previous meeting (attachment 2)

Motion: That the minutes from the 105<sup>th</sup> meeting of the CEQB, held on January 29, 2019, be approved as distributed, moved by Dennis and seconded by Samer. All were in favour. The minutes were approved.

#### 3. Review of action items from last meeting

	Action item	Assigned to	Status
104.2	Consider a Guideline on Professionalism prior to the next round of the process for determining the next year's work plan.	CEQB	Carried forward
105.1	Add an explanation of Annex A to the Consultation Paper on Entrepreneurship.	Secretariat	Completed
105.2	Correct a typo on page 2 of the Draft Guideline on Continuing Professional Development.	Secretariat	Completed
105.3	Revise CEQB documents to incorporate new terminology.	Secretariat	In progress

# 4. Committee reports

#### 4.1. Environment and Sustainability Committee

Mahmoud Mahmoud, chair of the Environment and Sustainability Committee, presented. The first session of the massive open online course (MOOC) "Sustainability in Practice" based on the National Guideline on Environmental Stewardship and Sustainable Development was completed last fall with about 1500 participants. The current session is on-going.

#### 4.1.1 Draft White Paper on Environmental Engineering (attachment 4.1.1 A-B)

The committee is developing a White Paper on Environmental Engineering, which was requested by the National Practice Officials Group (NPOG) and the National Discipline and Enforcement Officials Group (NDEOG). To develop the white paper, the committee sought input from regulators and subject matter experts. Environmental engineering covers a wide range of disciplines, and the white paper covers four



of them: site remediation, air-quality management, water management, and waste management. The white paper also addresses the impact of climate change and environmental engineering, as well as the overlap of other professions, like natural scientists, agrologists, biologists with environmental engineering.

A motion to approve the white paper for consultation, which was amended following the discussion, was approved as follows:

Motion: That the Revised "Draft White Paper on Environmental Engineering" with minor grammatical edits and a table of contents added be approved for consultation, moved by Mahmoud and seconded by Karen. All were in favour. The motion carried.

Several CEQB members commented that the draft white paper is excellent. It was noted the white paper is long and a synopsis would be useful. It was agreed that before sending the white paper for consultation with regulators, a table of contents will be added, and it will be reviewed again for spelling and grammatical errors (action item 106.1). It will undergo legal and editorial review before being submitted to the CEQB for final approval. It was suggested that a memo be provided during the consultation stating that the committee is looking for feedback on content, not typographical errors.

The MOOC "Sustainability in Practice" is available worldwide, and has had participants from every engineering regulator in Canada. The most common age group in the first session was 26-40 years old, and about 8 per cent of registrants bought the certificate of completion. A short summary on the MOOC will be provided to the Engineers Canada Board at its next meeting (action item 106.2.).

#### 4.2. Practice Committee

Frank George, chair of the Practice Committee, presented. In the fall, the committee archived the Model Guide on Concepts of Professionalism and the Model Guide on Authentication of Engineering Documents, following the CEQB's decisions at its September 2018 meeting. The committee will submit a revised Public Guideline on Risk Management to the CEQB for consultation approval in September 2019. Paul Amyotte, a past Engineers Canada president and a past chair of CEQB, was hired to prepare a draft revised guideline for the committee to discuss.

It was commented that others outside of CEQB may not understand why the Model Guide on Concepts of Professionalism was archived. A note will be added to the document to explain (action item 106.3).

#### 4.3. Syllabus Committee

#### 4.3.1. New Syllabus Creation Protocol and Revised Syllabus Review Protocol (attachment 4.3.1 A-C)

Dennis Peters, chair of the Syllabus Committee, presented. The committee completed the Software Engineering Syllabus and the draft Regulators Guideline on the Use of the Syllabi is currently under consultation. After receiving a request to develop a new syllabus on aeronautical/aerospace



engineering, the committee developed a new Syllabus Creation Protocol. It also revised the Syllabus Review Protocol to be consistent with the Syllabus Creation Protocol. The protocols are internal CEQB documents. Minor revisions to the Syllabus Creation Protocol will be made from the version distributed in the meeting package: removing "under the upcoming strategic plan" in the first paragraph to prevent the document from becoming outdated, and under point 3, revising the wording to "until certain content patterns emerge" (action item 106.4).

Motion: That the "Syllabus Creation Protocol" be approved for use by the Syllabus Committee-only and that recommended modifications be made to the Syllabus Review Protocol, moved by Dennis and seconded by Roydon. All were in favour. The motion carried.

Next, it was presented that the draft Regulators' Guideline on the Use of Syllabi has been challenging and gone through several versions. Pending consultation results, the committee will bring the guideline to the CEQB for final approval in September 2019. The committee received feedback that the guideline should focus on the use of syllabi. In September, the committee also plans to seek consultation approval from the CEQB for the aeronautical/aerospace engineering syllabus, the basic studies syllabus, the biomedical/biochemical engineering syllabus, and the structural engineering syllabus.

It was questioned how regulators can be provided tools to assess non-Canadian Engineering Accreditation Board (CEAB)-accredited applicants whose disciplines are not represented in CEAB-accredited programs. The committee discussed this question extensively. Firstly, the defensibility of the existing syllabi lies in that they represent CEAB-accredited programs. The committee decided to reflect this defensibility in the Syllabus Review Protocol. Secondly, the Regulators Guideline on the Use of the Syllabi proposes tools to allow for syllabi to be mixed, and non-CEAB-accredited programs to be assessed, without matching to existing syllabi.

A CEQB member suggested that the CEAB review this document because it contains practices that the CEAB might wish to adopt explicitly, even if it may already do them implicitly. The member commented that some syllabi could be combined, and that it is important to avoid directly matching to syllabi. It was responded that under the amended Syllabus Review Protocol, the committee would consider overlapping programs. A CEQB member stated that it should be recognized that the syllabi are simply a collection of examination topics that are not meant to match programs.

The protocols call for a minimum of two CEAB-accredited programs for a syllabus to be maintained; if there is only one, the regulator can simply check that program. CEQB members commented that the civil engineering and structural engineering syllabi, and the electrical engineering and instrumentation work are different disciplines in practice but both are grouped under one CEAB-accredited program.

#### 4.4. Engineer-in-Training Committee

Margaret Anne Hodges, chair of the Engineer-in-Training Committee, presented. The committee published new web content for engineers-in-training on the Engineers Canada website. It also held a



national workshop on entrepreneurship to determine questions, issues, and audiences regarding engineering entrepreneurs who wish to become licensed. The CEQB also discussed this topic at its previous teleconference. A discussion paper on entrepreneurship is currently under consultation. The committee discussed the paper with the Canadian Federation of Engineering Students (CFES) at their national meeting in March.

The topic will be further discussed, and more information will be provided at the CEQB workshop the next day. It was requested that additional time be allotted to the meeting to discuss the topic.

#### 4.5. Admission Issues Committee

Frank George, chair of the Admission Issues Committee, presented.

# 4.5.1. Revised Guideline on Assessment of Work Experience Using Competency-Based Assessment (attachment 4.5.1 A-B)

The committee is developing a revised Guideline on the Assessment of Work Experience Using Competency-Based Assessment, which is an update to the Guideline on Work Experience. The revised guideline is intended for regulators, to be published on Engineers Canada's members-only website. It was noted that most regulators are shifting to competency-based assessment (CBA). This guideline is a priority for the Engineers Canada Board. The guideline would not contain specific competencies.

A CEQB member commented that the guiding principles should state that the ultimate goal is that only competent and ethical individuals are licensed. They also commented that the guideline is missing ethics, an overview of CBA, and on-going proof of competency. It was discussed whether ethics should be included; two CEQB members thought it was unnecessary to include ethics, because ethics is already built into the framework; another CEQB member though it was important to highlight ethics. It was decided professional accountability to ethical considerations will be addressed in the draft guideline.

It was recommended that the guideline state why an additional interview is required, if that is the case. It was commented that the guideline assumes all regulators are moving towards CBA, which is not the case, and so "revised" should be removed from the title.

Another CEQB member questioned whether CBA removes barriers. The member commented that multiple pathways for assessing experience should exist, just like there are multiple assessment pathways for academics. They stated that the document should be called assessment *process*, because it does not contain principles on criteria for CBA. They were uncertain that CBA is motivated by protection of the public, but more by audit culture. Finally, it was commented that the guideline should not refer to websites whose content or links may change.

It was noted the competencies are mapped to the satisfactory experience guideline, so do not create new requirements. A CEQB member pointed out that although the competencies are mapped to graduate attributes, graduate attributes assess programs, not individuals; and as engineers gain more



experience, their education becomes less important. Another CEQB member noted that competency-based assessment is taking place throughout society.

Before the guideline is sent for consultation, it will be revised to clarify that CBA presents no additional burden to applicants, clarify the reason for an interview, address professional accountability and ethical matters, remove revised from the title, and note that the competencies are matched to graduate attributes (action item 106.5).

Motion: That the Revised Guideline on Work Experience Using Competency-Based Assessment be sent for consultation, as amended, moved by Frank George and seconded by Karen Savage. Roydon Fraser was opposed. The motion carried.

#### 5. National Groups

#### 5.1. National Admissions Officials Group Update

Kyle Smith presented on behalf of the National Admissions Officials Group (NAOG). NAOG reported on progress made against their first two-year work plan. When the group last met in November, they identified the initiatives that remained for completion.

Many of the initiatives are ongoing, including involvement on CEQB's Syllabus Committee and Admission Issues Committee, providing feedback on CEQB documents, and supporting the Canadian Engineering Qualifications Board with its admissions-related guidelines and white papers. Initiatives unlisted on the 2018-2019 mandate include the redevelopment of the National Reference Points tool and the work of the International Institutions and Degrees Database (IIDD) task force, both of which were completed last year. NAOG is continuing to examine transitioning the IIDD to a new database whose use is defensible and useful to regulators, which includes examining the feasibility of collecting international academic information.

#### 5.2. National Discipline & Enforcement Officials Group Update

Shawna Argue, chair of the National Discipline and Enforcement Officials Group (NDEOG), presented. NDEOG met by teleconference in October 2018 and March 2019, and will meet in person in June 2019. NDEOG provided feedback on CEQB documents. It is reviewing the National Membership Database to determine if there are opportunities to make better use of it, regarding, for example, discipline decisions. There is indication that discipline and enforcement investigations are increasing, a trend that occurs when the economy has a downtown and people have more time to make complaints. Membership growth is occurring in most jurisdictions.

#### 5.3. National Practice Officials Group Update

No representative of the National Practice Officials Group (NPOG) was able to attend, but a presentation was provided in advance. NPOG provided feedback on CEQB documents. It will also provide feedback on



the 2020 CEQB work plan priorities at its June teleconference. It attended a webinar on digital signature technology, which was also attended by regulator staff and some Practice Committee participants in March 2019. A recording of the webinar is available. NPOG's spring teleconference focused on cross-country continuing professional development issues.

#### 5.4. Comments from the regulators

Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS)

APEGS had an increase in international applicants (2750 compared to the usual 350) because of a provincial government program which encouraged immigration. The academic review team is working to review applications as fast as possible, which allows the applicant to show its eligibility to the government for immigration. The program no longer exists, and application numbers are expected to normalize at 600 per year. APEGS launched competency-based assessment for engineers-in-training, required of new applicants as of January 1, 2019. APEGS began visiting employers to provide law and ethics seminars to employees, which has had great uptake. It launched a new online ethics module based on Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL)'s module. The ethics module will be available to other jurisdictions. It introduced allowing variations for its CPD program, upon application. APEGS is active in the Saskatchewan Self-Regulating Professions Working Group, which recently had a seminar on fitness to practice. Finally, its council approved hiring a consultant for a complete governance review, expected to be completed in 2019.

### Association of Professional Engineers and Geoscientists Alberta (APEGA)

The number of applications has been steady over the past three years, with a decrease in the percentage of international applicants. APEGA launched CBA, and several hundred applicants are using the tool. Changing to CBA has required significant change management. APEGA is recruiting volunteers to act as experience examiners as part of the CBA process. APEGA and the Association of Science & Engineering Technology Professionals of Alberta (ASET) went through a remediation process to address recent issues. A list of recommendations was provided to the government. The upcoming provincial election may impact the profession.

#### Engineers & Geoscientists British Columbia

There are 20 employers in the accredited member-in-training program, in which Engineers & Geoscientists BC trains companies on the assessment system. The employers ensure that the engineers-in-training follow the competencies in the system. An audit program is in place. Employers in the company become assessors, and assessors from another company assess that employer's employees. This program reduces the workload for Engineers & Geoscientists BC in assessing applicants. Engineers & Geoscientists BC is also preparing to launch a geoscience competency pilot, using the same platform as the Pan-Canadian platform for engineering, using different competencies. Bill 49, the Professional Governance Act, is first addressing the composition of and nominations and elections to council. It is unclear whether practice rights for technicians and technologists will come under Engineers &



Geoscientists BC's regulation or whether a separate regulator will be formed.

The administration module of the CBA system was launched in March, so regulators can administer their own applicants. Non-practising members now must indicate their non-practising status in their designations, a controversial policy implemented in conjunction with the end of the life membership category. An indigenous seminar will be held in May, developed as part of the pilot program to address the Truth and Reconciliation Commission's call to action.

#### **Engineers and Geoscientists NB**

A diversity and inclusion coordinator and a communications director were hired. Engineers and Geoscientists NB is also looking for a new CEO.

# 5.5. Canadian Environment Experience Competencies (attachment 5.4)

Kyle Smith and Gillian Pichler presented. The Canadian Environment Experience Competencies project addresses the recommendation from the Ontario Human Rights Tribunal that the Canadian experience requirement is discriminatory. The tribunal stated that the onus is on the regulator to show that prior experience is a bona fide requirement. The project proposes experience competencies as an alternative to the time-based experience requirement. Additional pathways and guidance on how these competencies can be met are also being proposed.

A history of the project was provided. It has been in development since 2013. Feedback has been collected through extensive consultations with regulators and their boards and committees, governments, employers, immigrant service agencies, the Office on the Ontario Fairness Commissioner, and pilot applicants and assessors, among others. The project resulted in the Working in Canada seminar, an online, self-paced course, and an alternative assessment method that allows flexibility to applicants.

The assessment method was tested retroactively on over 1200 competency-based assessment users in BC, and was found that 99 per cent of applicants demonstrated the eight competencies, so the new method does not increase the standard. The next step is to implement the project in the Pan-Canadian competency-based assessment system. Participating regulators would need approval from their councils to provide an alternative to the time-based requirement. OIQ began implementing the new CBA system in April, as directed by the Office des professions.

A CEQB member was concerned that the assessment system assigns points for competency, arguing that an applicant either has the competency or does not, and that the ratings were subjective. They also thought that some of the competencies outlined should not actually be required. Another CEQB member liked the assessment system but was concerned that the Working in Canada seminar would not demonstrate an applicant's true level of ethics and professionalism. It was responded that the system is only one tool for the registration committee to consider. A third CEQB member pointed out that the aim is to reduce risk, and the one-year Canadian environment experience requirement is an arbitrary metric



for reducing risk. They noted that the applicant can still choose between the new assessment system and the one-year experience requirement. Another CEQB member stated it is important to test robustness of both approaches.

### 6. Information and Discussion Items from Other Engineers Canada Groups

#### 6.1. Report from the Canadian Engineering Accreditation Board

Jeff Pieper presented on behalf of the Canadian Engineering Accreditation Board (CEAB). In the current accreditation cycle, CEAB will visit 67 programs and 14 institutions. Most institutions received the 6V (accredited for six years) or 3R (must submit a report after three years addressing a concern) decision from 2010-2018. CEAB also provided feedback to the Engineers Canada Board on CEAB's new terms of reference. CEAB is unanimously opposed to single renewals for members. Three revised accreditation criteria were approved by the Engineers Canada Board in September 2018, and appendices changes were also made.

At its February 2019 meeting, CEAB discussed proposed definitions for ratings given by visiting teams, particularly what constitutes the "marginal" rating, and whether to eliminate it. Making better use of general visitors was also discussed. A new CEAB Accountability Committee was created. CEAB is in the third year of implementing meetings with higher education institution leaders before their institution is visited, to discuss logistics and expectations of both parties.

The Accreditation Unit (AU) Task Force has been ongoing for two years. The main outcome is the proposal of the learning unit (LU), intended to offer more flexibility. There are complaints about graduate attributes, often due to uncertainty in expectations. CEAB also has a task force on engineering design, which was the subject of CEAB's workshop in September and a summit in February with various stakeholders, including design chairs from the National Sciences and Engineering Research Council of Canada. The task force aims to foster consistency in the assessment of engineering design by determining a definition and interpretation of engineering design. The results of the task force might be brought to CEAB in June.

#### 6.2. Report on Engineers Canada Board Activities and Decisions

David Lynch, an Engineers Canada Board representative on CEQB, presented. The Engineers Canada Board has focused on rebuilding its governance systems and processes. It approved CEQB documents and approved the CEQB's Executive Committee's extended terms. Under the 2019-2021 strategic plan, new strategies will be developed about diversity and inclusion, advocacy with the federal government, changes impacting regulation, mobility, and sparking interest in the next generation of engineers. A funding task force is studying how Engineers Canada should be funded going forward; there is currently no consensus among regulators. The Engineers Canada Board discussed the possible adoption of an expense claim policy, which it will discuss again in May.

CEQB discussed its new terms of reference. This topic was previously discussed at the September



meeting. Changes since then are that the two Engineers Canada Board directors will have full voting rights on CEQB. Other changes to the terms of reference, which CEQB previously discussed, include new responsibilities and competencies for the CEQB chair, a new section on electing the CEQB vice-chair, a change to the Nominating Committee composition, changes to how regulators are consulted about the reappointment of a CEQB member. Guaranteed Northern representation was an additional recommendation made by a CEQB member. Both regulators and the Nominating Committee must approve new nominations to CEQB. The CEQB chair provided feedback on the terms of reference at the September Engineers Canada Board meeting. The Engineers Canada Board acknowledged the feedback and incorporated some, like that the CEQB Executive Committee can extend beyond six years.

A CEQB member commented that 6.10.1.4 is offensive because it implies that those employed at higher education institutions are not practicing engineering. Another CEQB member commented that CEQB could be comprised entirely of retired individuals, although this is possible now too. A third CEQB member stated the terms of reference are overly bureaucratic. Another CEQB member thought that it is unclear how the terms of reference serve the public interest. In terms of Engineers Canada Board representatives having a vote, it was noted that rarely does a single vote make a difference on CEQB. It was noted that Engineers Canada Board representatives may now attend CEQB committee meetings to help with direction-setting.

The CEQB voted on two elements of the terms of reference. Regarding voting rights for Engineers Canada Board representatives, most were in favour and one was opposed. Regarding guaranteed Northern representation, all were in favour.

# 7. Qualifications Board Business

#### 7.1. Update on website metrics

Ron LeBlanc, chair of CEQB, presented metrics of unique page views for CEQB's web pages. The data is available in the PowerPoint presentation on the collaboration space. It was noted that unique page views of the Guideline on Returning to Active Practice decreased when parental leave increased. A CEQB member questioned why the examinations syllabi are public, given that they are used by regulators.

# 7.2. Current 2019-21 Work Plan Status Update (attachment 7.2)

Ron LeBlanc, chair of CEQB, outlined the CEQB's work plan consultation process. Even though CEQB has a three-year work plan (2019-2021), it consults annually on priorities. The priorities are expected to be voted on at the December 2019 Engineers Canada Board meeting.



# 7.3. 2020 CEQB Work Plan Priorities and Process (attachments 7.3 A-H)

CEQB members proposed priorities for the 2020 CEQB work plan with a rationale for the proposal.

Margaret Anne Hodges proposed revising the Guideline on Engineer-in-Training Programs. It needs to be updated. Some regulators are following the approach outlined in the guideline. Relevant issues include women's licensure, entrepreneurship, and the proportion of graduates who become licensed.

Ian Sloman proposed revising the Step-by-Step Guideline for the Preparation and Implementation of an Individual Continuing Professional Development Plan. Most regulators have mandatory CPD programs. This guide is over ten years old and is very long, and should be more user-friendly. It would provide guidance to regulators and engineers.

Nikeetta Marshal proposed a new Public Guideline for Engineers on Use of New Technology and Automation. Technology and automation are increasing in engineering. In some engineering disciplines, all work is being automated. The guideline will help engineers understand the relevant legal, professional, and ethical obligations. It will benefit the public, engineers, and regulators.

Nikeetta Marshal proposed a Public Guideline for Engineers on Canadian Engineers Working Internationally. Due to the current economic situation, many engineers are pursuing work outside Canada. Many do not know the legal and ethical requirements for international practice.

Mahmoud Mahmoud proposed revising the Public Guideline on Good Character. It is important to provide information on law, ethics, and professionalism. The guideline would be in the interest of public trust and the public good. It could help to replace the Model Guide on Concepts of Professionalism that the CEQB rescinded.

Roydon Fraser proposed a new Public Guideline for Engineers on Whistleblowing, a new White Paper on Natural Scientists, a New Public/Regulator Guideline or White Paper on Globalization, and a new Guideline on Decreasing Experience Requirements. The Guideline on Natural Scientists could fall under the Guideline on Entrepreneurship. There is no other place for these issues to be addressed, but these issues are important for the profession. They fall under other issues of national importance in CEQB's mandate. Research is also in CEQB's mandate, but is not done.

CEQB decided that it would conduct a vote of whether CEQB members would support each proposed item, and the top ones would be put forward as priorities. The results of the vote were:

Proposed work plan item	Number of votes
Revised Guideline on Engineer-in-Training Programs	11
Revised Step-by-Step Guideline for the Preparation and Implementation of an Individual Continuing Professional Development Plan	4
New Public Guideline for Engineers on Use of New Technology and Automation	8



Proposed work plan item	Number of votes
New Public Guideline for Engineers on Canadian Engineers Working Internationally	8
Revised Public Guideline on Good Character	12
Public Guideline for Engineers on Whistleblowing	6
New Public/Regulator Guideline or White Paper on Globalization	7
New Guideline on Decreasing Experience Requirements	2
New Guideline on Demand-Side Legislation	1

The Guideline on Natural Scientists was not voted on because it was noted it could fall under entrepreneurship. A CEQB member proposed that a registry of proposed ideas be created and put on the collaboration space (action item 106.6). Another CEQB member stated that next year, they would put forward a White Paper on Fitness to Practice. It was decided that the four items with the most votes be put forward for consultation. It was noted planning will begin in 2019 for Engineers Canada's next strategic plan.

#### 8. Items added to the agenda

Additional items were discussed. It was proposed that an Engineers Canada banner be brought to future meetings for group photos (action item 106.7). A CEQB member appreciated that the proposal template included a section on value-added.

Other business was discussed. The possibility of having CEQB members attend CEAB visits was discussed, to promote continuity between the two boards. CEAB is asked to keep the CEQB Syllabus Committee informed of the definition of engineering design.

A CEQB member commented that it is important to document reasons for decisions, in general. This information may be found in minutes. Minutes prior to 2000 are unavailable online. The Engineers Canada Board passed a motion at its previous meeting that meeting minutes of the Engineers Canada Board and its committees, including CEQB, will be available publicly online.

#### 9. Future meetings

The next fall CEQB meeting will be held in St. John's, Newfoundland and Labrador, on September 15-16, 2019. The workshop will be held first, followed by the meeting the next day.

Travel arrangements for next meeting. Will probably have teleconference in July, on the work plan. No date for it yet, depends on board.

The next CEQB Teleconference call will be held on January 23, 2020.



# 10. Review of action items of 106th Qualifications Board meeting

	Action item	Assigned to
104.2	Consider a Guideline on Professionalism prior to the next round of	QB-Completed
	the process for determining the next year's work plan.	
106.1	Revise the draft White Paper on Environmental Engineering with the	Secretariat
	changes discussed prior to consultation.	
106.2	Provide a status update on the MOOC "Sustainability in Practice" to	Chair
	the Engineers Canada Board in May.	
106.3	Add a note to the archived Model Guide: Concepts of	Secretariat
	Professionalism explaining why CEQB rescinded it.	
106.4	Revise the Syllabus Creation Protocol with the change discussed.	Secretariat
106.5	Revise the draft Guideline on the Assessment of Engineering Work	Secretariat and Frank
	Experience Using Competency-Based Assessment with the changes	George
	discussed prior to consultation.	
106.6	Create repository of work plan ideas and upload it to the	Secretariat
	collaboration space before the September CEQB meeting.	
106.7	Find an Engineers Canada banner for future CEQB meetings.	Secretariat

#### 11. Conclusion

The meeting concluded.

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Ron LeBlanc, FEC, P.Eng. Chair, Canadian Engineering

**Qualifications Board** 

Mélanie Ouellette, MA, MBA Secretary, Canadian Engineering

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