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102nd MEETING OF THE QUALIFICATIONS BOARD

June 14, 2018
From 1:00–2:30 p.m. EDT

AGENDA

	Agenda Item	Presenter
1	Opening of the meeting	
1.1	Call to order and introduction of attendees	D. Peters
1.2	Approval of the agenda	D. Peters
2	Approval of minutes of the previous meeting (attachment 2)	
	<i>Motion: That the minutes from the 101st meeting of the Qualifications Board held on April 7th, 2018, be approved as distributed.</i>	D. Peters
3	Review of action items from previous meetings	M. Ouellette
4	Discussion on QB work plan (attachment 4)	D. Peters
4.1	Overview of the consultation process (attachment 4.1)	D. Peters
4.2	Top three priorities for new documents	D. Peters
4.3	Top three documents for review	D. Peters
4.4	Guideline on Enabling Entrepreneurship	D. Peters
5	Items added to the agenda	D. Peters
	Future meetings	
6	<i>The next QB teleconference will be held on July 17, 2018 from 1:30-3:00 p.m. EDT. The next QB meeting will be held Québec City, Québec, on September 14-15, 2018. A QB teleconference call will be held on January 29th, 2019.</i>	D. Peters
7	Review of action items of 102 ND Qualifications Board meeting	M. Ouellette
8	Conclusion	D. Peters



1. Opening of the meeting

The Chair welcomed everyone. Appointments for new QB members had been approved at the May Engineers Canada Board meeting. On July 1, 2018, the following appointments will be made:

- Ron LeBlanc, Chair
- Dennis Peters, Past Chair
- Mahmoud Mahmoud, Vice-Chair
- Amy Hsiao, Atlantic Provinces Representative
- Samer Inchasi, Member-at-Large
- Karen Savage, British Columbia, Yukon Territory Representative
- Qing Zhao, Member-at-Large

Jerry Helfrich, Usha Kuruganti, Paul Blanchard, and Sandra Gwozdz will complete their terms on June 30, 2018.

1.1. Call to order and introduction of attendees

Qualifications Board Members	Dennis Peters	Chair
	Ron LeBlanc	Vice-Chair
	Paul Blanchard	Past Chair
	Frank Collins	Atlantic Provinces Representative
	Frank George	Alberta, Northwest Territories and Nunavut Representative
	Margaret Anne Hodges	Member-at-Large
	Amy Hsiao	Atlantic Provinces Representative
	Roydon Fraser	Ontario Representative
	Nikeetta Marshal	Member-at-Large
	Diane Rlopel	Québec Representative
	Karen Savage	British Columbia, Yukon Territory Representative
Ian Sloman	Saskatchewan, Manitoba Representative	
Regrets: Jerry Helfrich, Samer Inchasi, Usha Kuruganti, Mahmoud Mahmoud		
Engineers Canada Board Representative	David Lynch	
Engineers Canada Staff	Catherine Christoffersen	Administrator, Regulatory Excellence
	David Lapp	Manager, Globalization and Sustainable Development
	Mélanie Ouellette	Manager, Qualifications
	Stephanie Price	Executive Vice President, Regulatory Affairs

1.2. Approval of the agenda

No changes or additions were proposed.

The motion to approve the agenda was moved by Ian and seconded by Ron. None were opposed. The agenda was approved.

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

Corrections were made to the report from the Engineer-in-Training Committee: the Guideline on Enabling Entrepreneurship would not seek consultation approval in September 2019 and “route to being an EIT” would be changed to “route to being a P.Eng” (action item 102.1).

Motion: That the minutes from the 101st meeting of the Qualifications Board held on April 7th, 2018, be approved as corrected. The motion was moved by Paul Blanchard and seconded by Ron LeBlanc. None were opposed. The minutes were approved.

3. Review of action items from previous meetings

All the action items had been completed.

4. Discussion on QB work plan (attachment 4)

4.1. Overview of the consultation process (attachment 4.1)

The Chair explained the background behind the development of a new work plan. QB will create a new work plan to align with the strategic plan and Engineers Canada’s budgeting timeline. The new Engineers Canada strategic plan had been approved in May 2018. Engineers Canada had consulted extensively with regulators in 2017 and 2018, during which regulators expressed that Engineers Canada must work on only what the regulators approve, and nothing else. Therefore, it will be important for QB to address regulators’ needs, and avoid producing work that regulators would not consider valuable. QB is an Engineers Canada Board committee, reporting directly to the Board, and QB’s work plan must be approved by the Board. The timelines for developing QB’s new work plan are short, as the new plan needed to be developed by January 2019 to align with the Engineers Canada strategic plan.

During Engineers Canada’s recent consultations with regulators, some regulators commented that there was a lack of traceability on why QB was working on certain items and on who had requested these work plan items. Even though the Engineers Canada Board approved QB’s work plan, going forward, it will be important for regulators to understand why QB was performing its work. It will also be important for regulators, overall, to agree with the work QB was performing, even if not every regulator agrees with each work plan item. Regulators had also commented that QB was working on too many items. QB’s work load impacts regulators because they are consulted multiple times on every QB document.

It was commented that when QB developed its previous work plan, it didn’t receive a clear message from Officials Groups on their priorities for QB’s work. It was expressed that the Engineers Canada Board approved the QB work plan without careful consideration, and as a result, it was later difficult to get the

Engineers Canada Board to take ownership of the work plan. Therefore, for the development of the new QB work plan, QB is in the process of consulting Officials Groups on the work plan, and asking them to take an official stance on the work plan, as a group. Officials Groups were asked to identify which items were high priority, which were low priority and which new items should be worked on. These same questions were being posed to QB members for their input. The feedback from Officials Groups and QB members will be shared with the CEOs' Group. QB will ask the CEOs Group for guidance on what QB should and should not include in the work plan. The proposed work plan will then go to the Engineers Canada Board for initial review in September 2018, and final approval in December 2018.

A QB member wanted to know whether Officials Groups had been asked whether any QB publications should be rescinded. They had not been, but it was commented that if Officials Groups indicate documents are low priority, that could help identify documents to be deleted. It was noted that there is also an opportunity, when QB comes to review each document, for regulators to request that the document be rescinded. Another QB member pointed out that in the past, regulators have told QB not to work on certain documents, although the challenge arises sometimes where some regulators give low priority to a document that other regulators say is valuable to them. For this work plan consultation process, QB was not consulting each regulator individually, due to the short timeline. Officials Groups will be required to work out their differences and present a common stance. The Chair noted that QB was still perfecting its work plan development process, and hoped that more time would be available to develop the next work plan, which could allow for QB to consult each regulator individually.

The work plan will be a three-year plan with an annual review, which will give regulators the opportunity for additional input. The Engineers Canada strategic plan is a 100 per cent plan prescribing everything that Engineers Canada should work on. A QB member commented that QB is a service organization for Engineers Canada and the regulators, in various consultations, the member had heard that QB should conduct only work of which regulators approve.

Once the QB work plan is approved, QB will be in sync with Engineers Canada and all its other groups. A QB member commented that feedback on the work plan should be collected in writing so that people can be reminded what they requested.

QB members' feedback on the work plan would be collected in this teleconference. QB members would have the opportunity to suggest and discuss work plan items. Ultimately, the CEOs will have significant power in determining what will be on the work plan.

A QB member was concerned that the CEOs Group and Officials Groups will have too much influence on the QB work plan, and believed that the Councils should have more influence over it. It was clarified that the Officials Groups report to the CEOs Group, which will receive their feedback. Then, the CEOs Group will identify its top three priorities for QB's work plan, and provide its recommendations to QB. QB will hold another teleconference on July 17, 2018 to decide what to include in the work plan. Afterwards, QB will submit its work plan to the Engineers Canada Board in September 2018. Engineers Canada Board members will then have several months to consult their councils on the work plan. Finally, the Engineers Canada Board will decide at its December 2018 meeting whether to approve the QB work plan. The QB

member was satisfied with this process. A QB member asked whether the CEOs represent and speak through their Councils, which would be discussed further offline.

Another QB member commented that QB, as a national body, is supposed to be unbiased, and as a result, sometimes produces work that some regulators disagree with. They commented that this work plan process insists that all regulators must be kept happy. The Chair commented that QB seeks to produce work that all regulators can live with, even if they don't agree, and that in this process, the Officials Groups and CEOs Group would need to work out their differences among themselves.

4.2. Top three priorities for new documents

The group discussed the top three priorities for new documents. By email before the meeting, QB members had made two proposals for new work plan items. It was explained that after discussion of each of the proposals, QB would vote on each proposal. It was stated that strong support from QB was desirable before an item would be put forward on the draft work plan. The Chair invited the two QB members who proposed the two items to present each of them. They were asked to state the goal of the guideline.

Guideline on healthy workplaces for engineers

The first proposed item was to help regulators develop guidelines on healthy workplaces for engineers. It was explained that research identifies common factors that impact the retention of engineers—both men and women— in a workplace. These factors include having a work plan for the engineer, having a training plan for the engineer, and providing the engineer with feedback. A CSA standard on health and safety in the workplace already existed and could be leveraged to produce this guideline. It was stated that this guideline could be beneficial since many engineers work for small practices without sophisticated human resources. It was commented that engineers can be choosy about their careers, and employers are financially impacted when retention is low, and it would be beneficial to ensure that engineering graduates are pursuing careers in engineering.

The goal of the guideline would be to propose workplace standards for employers for the attraction and retention of professional members in the engineering profession. The main audience would be practitioners. The guideline would provide standard characteristics of a professional work environment to help the practitioner know whether they were working in a good environment. The document would also provide a target for employers to work towards, and for managing engineers to understand what formed a healthy environment. It was noted this concept is called “workplace ecology”. The guideline would focus on practitioners with a technological or engineering background, although the standards were general.

A comment was made that the guideline seemed like a best practice guideline for engineers-in-training and the continuing professional development of engineers, which would fit with Qualifications. The QB member who made the proposal stated that the guideline would address all stages of the career. It was noted that if the proposal was selected, it would go through the QB guideline development process

which would determine the scope and audience.

White paper on national system of technical examinations

The second work plan item proposed by email was the development of a white paper on the pros and cons of a system of national technical examinations for both CEAB and non-CEAB graduates. The Engineers Canada strategic plan endorsed assessment—meaning accreditation and qualifications—as major issues. The white paper would describe a national system of technical examinations and how it could be implemented and offered. The white paper would not dictate a direction for Engineers Canada or the profession, but would fulfill the need to offer proactive risk management and contingency planning in case the current system was challenged again, as with the Mihaly case. Furthermore, the white paper would address the concerns of some Deans about Accreditation Units (AUs). The white paper would not imply that the CEAB system would be eliminated, but that AUs would no longer be part of accreditation. Accreditation, instead, would look at the outcomes of assessment, continuous improvement, innovation, etc., while the technical component would be examined by examinations.

One QB member expressed support for the proposal, having made the case before that there were already examinations for all applicants, but whether applicants passed or failed those examinations were confirmed with different methods.

Emerging issues

Another QB member put forward proposals for six items:

- entrepreneurship and engineers-in-training, which the member stated was already being addressed in part;
- globalization, meaning addressing the responsibility for design that takes place offshore, which they stated is currently a large loophole in the system;
- whistleblowing, which the member expressed is discussed but never addressed;
- natural scientists, which they stated are neglected in the transition from graduation to the profession, resulting in a shrinking of the engineering profession;
- privacy and security, which they commented are currently being addressed by computer scientists who are interested in how to maintain security, but not being addressed by the engineering profession, which should consider the processes that should be implemented;
- how society is moving faster than the engineering profession, for example how at least some, or most, regulators are not considering issues relating artificial intelligence, autonomous vehicles and their implications. For example, it should be discussed whether engineering work in artificial intelligence should be regulated, or whether the profession would allow others to take ownership of these areas.

One QB member expressed that these were excellent proposals. They commented that the last two items were about enforcement, but the member who made the proposal disagreed—although enforcement was a component of these issues, they thought, the key issue would be first recognizing

that the work done was engineering. The proposer believed that the profession should not lead by enforcement, and that the profession did not understand changes in society, overall. On the other hand, another member commented that if the regulators recognize work as engineering, they must then enforce it. It was commented that the common purpose of all six proposals was that they were big issues seriously impacting the viability of the future of the profession, that were currently not being addressed. Another QB member commented that all the issues related to protection of the public, except for natural scientists. The proposer agreed that they related strongly to the objective of the regulators, including for natural scientists. They expressed that they would be very pleased if QB addressed just one of the issues.

The QB member who proposed six items suggested that the issue would not be to work on any one of the issues, but to look further into each of the issues, and then prioritize them. It was expressed that it might be difficult to have that approach approved by the CEO Group. It was commented that the CEO of Engineers Canada was tasked to identify emerging areas of practice. The secretariat would share these six issues with the Engineers Canada staff person who would work on that file (**action item 102.2**). The proposer agreed with that approach, but would still like to put forward these items for the work plan. There was discussion of which areas would fall under the emerging areas file, with privacy and security, globalization, artificial intelligence, and autonomous vehicles, all suggested as emerging areas. It was suggested that privacy and security and artificial intelligence/autonomous vehicles could be removed from consideration and put under emerging areas. It was noted that the engineering entrepreneurship issue was already under consideration for inclusion in the work plan as was being consulted on as a separate question, under agenda item 4.4.

Other discussion

A QB member commented that an online ethics course would be valuable. This item had already been discussed among regulators and Engineers Canada, which had collected information on the topic from Engineers and Geoscientists BC. Another QB member commented more work needed to be done on ethics. A third QB member commented that a framework of themes relating to ethics, such as disclosure and conflict of interest, should be developed, and could be included in the Guideline on the Code of Ethics.

Next steps

The Chair remarked that although the original plan was for QB members to prioritize during the call, since there were eight proposals before QB, they would instead prioritize by email. The Chair asked each of the QB members who proposed items to email a description of their proposal. The description should include the issue, target audience, scope, and how it would benefit the regulators and should be received by June 15 (**action item 102.3**).

4.3. Top three documents for review

The Chair requested QB members' input on documents to prioritize for review. A QB member recommended prioritizing 2008 Step-by-Step Guide for the Preparation and Implementation of an Individual Continuing Professional Development Plan and the 2009 Guideline for Assessment of Engineering Work Experience. It was asked how the competency-based assessment project, being developed by Engineers and Geoscientists BC, might affect the Guideline for Assessment of Engineering Work Experience. It was noted that the one of the Engineers Canada strategic plan objectives would be to support competency-based assessment in Canada, while recognizing other models.

Another QB member commented that the 2008 Step-by-Step Guide for the Preparation and Implementation of an Individual Continuing Professional Development Plan and the 2009 Guideline for Assessment of Engineering Work Experience should be prioritized. Another QB member suggested the 2016 Guideline on Returning to Active Practice, the 2016 Guideline on the Code of Ethics, and the 2016 Guideline on Assuming Responsibility for the Work of Engineers-in-Training could be eliminated from consideration, since they were the most recent. Another QB member stated that the Guideline on the Authentication of Engineering Documents would be important. It was noted that this committee had recently attempted a review of the document, which had not been achieved.

It was noted that each syllabus was always reviewed every three years, so they would all be reviewed within QB's three-year work plan.

4.4. Guideline on Enabling Entrepreneurship

The Chair explained that development of a new Guideline on Enabling Entrepreneurship had been underway, but the guideline had not been well-defined and had not been well-understood by regulators. The guideline was originally intended to address how engineers-in-training in emerging disciplines could start a business while complying with regulations and progressing towards licensure. Later, the committee had discussed that the guideline could address traditional disciplines as well as emerging disciplines. Some CEOs had been concerned about the guideline, since regulators' mandate was public protection, and could not change the rules for one group. An environmental scan had found no existing information on the topic. The committee was also unable to find a contractor to work on the guideline. However, the Practice Officials Group had recently posed questions about the guideline.

One QB member stated the guideline was still useful, as they had known an engineer who had become licensed while working as an entrepreneur. Another QB member remarked that QB might already be taking on a heavy workload, and that since the committee previously was unable to develop the guideline, it should not be a priority. Another QB member stated that the guideline was very important—in fact, more important than it would appear, since non-licensed individuals practicing engineering would be unlikely to come forward. The member commented that if emerging disciplines developed a culture of non-licensure from the beginning, then they could be lost to the profession forever. This item would be included in QB members' vote of items to put forward.

The secretariat would send a vote on June 18 of new items to adopt and which items to review (**action item 102.4**).

It was suggested that the Guideline on the Authentication of Engineering documents be added to the globalization issue to be addressed within the emerging issues file. It was also expressed, on the other hand, that these were two separate issues.

5. Items added to the agenda

No items were added to the agenda.

6. Future meetings

The next QB teleconference will be held on July 17, 2018 from 1:30-3:00 p.m. EDT.

The next QB meeting will be held Québec City, Québec, on September 14-15, 2018.

A QB teleconference call will be held on January 29th, 2019.

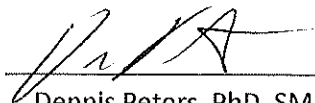
7. Review of action items of 102nd Qualifications Board meeting

	Action item	Assigned to
102.1	Correct the minutes from the 101 st Qualifications Board meeting	Secretariat
102.2	Forward emerging issues to the Engineers Canada staff responsible.	Secretariat
102.3	Send description of proposed work plan item to secretariat by June 15.	QB members who proposed work plan items
102.4	Send survey to QB members on work plan prioritization on June 18, to be completed by June 20.	Secretariat

8. Conclusion

The meeting was concluded at 2:43 p.m. EDT.

Prepared by: Catherine Christoffersen, Administrator, Regulatory Excellence on behalf of:



Dennis Peters, PhD, SMIEEE, FEC, P.Eng.
Chair, Qualifications Board



Mélanie Ouellette, MA, MBA
Secretary, Qualifications Board