



CANADIAN ENGINEERING ACCREDITATION BOARD
Abridged minutes of the 166th meeting

CONFIDENTIAL

3093 DATE AND PLACE

The 166th meeting of the Canadian Engineering Accreditation Board took place at the Ottawa Marriott Hotel, Ottawa, Ontario on February 8, 2020.

3094 ATTENDANCE

The following were in attendance:

Chair: L. (Luigi) Benedicenti, FEC, P.Eng. (Joined via webinar)
Vice-Chair: R. (Robert) Dony, FEC, P.Eng. (Chaired the meeting)
Past-Chair: W. (Wayne) MacQuarrie, FEC, P.Eng.
Members: S. (Suzelle) Barrington, FIC, ing.
D. (Dan) Candido, FEC, P.Eng.
E. (Emily) Cheung, FEC, P.Eng.
P. (Pemberton) Cyrus, FEC, P.Eng.
W. (Waguih) EIMaraghy, FEC, P.Eng.
R. (Ray) Gosine, FEC, P.Eng.
P. (Paula) Klink, P.Eng.
S. (Suzanne) Kresta, FEC, P.Eng.
P. (Pierre) Lafleur, FIC ing.
A.M. (Anne-Marie) Laroche, ing.
J. (Julius) Pataky, P.Eng.
J. (Jeff) Pieper, FEC, P.Eng.
R. (Ramesh) Subramanian, FEC, P.Eng.
A. (Allen) Stewart, P.Eng. (joined via webinar for part of the meeting)
T. (Tara) Zrymiak, FEC, P.Eng.

Secretariat: A. (Aude) Adnot-Serra
J. (Johanne) Lamarche
A. (Alexander) Olivas, FEC (Hon.)
A. (Adam) Rodrigues
M. (Mya) Warken

Engineers Canada Director Appointees:

J. (Jeff) Card, FEC, P.Eng.
L. (Louis) Champagne, FIC, ing.

Observers: (the following were in attendance for all, or part, of the meeting)

A. (Ali) Akgunduz, P.Eng. (Concordia University)
R. (Ranjan) Bhattacharya (Seneca College)

- A. (Annette) Bergeron, FEC, P.Eng. (Past-President, Engineers Canada)
- K. (Kevin) Deluzio (Queens University)
- B. (Brian) Hoessler (Strong Roots Consulting)
- C. (Carolyn) Hoessler (Higher Education and Beyond)
- R. (Ryan) Huckle (Conestoga College)
- C. (Carol) Jaeger, P.Eng. (University of British Columbia)
- H. (Hossam) Kishawy, P.Eng. (University of Ontario Institute of Technology)
- J. (Jim) Landrigan, P.Eng. (Engineers PEI)
- R. (Ron) Leblanc, P.Eng. (Chair, Qualifications Board)
- D. (David) Lynch, FEC, P.Eng. (President, Engineers Canada)
- V. (Vida) Movahedi (Seneca College)
- P. (Patrick) Milot (Higher Education and Beyond)
- C. (Christine) Moresoli, ing. (Waterloo University)
- M. (Matthew) Oliver, P.Eng. (APEGA)
- J. (James) Olson, P.Eng. (McGill University)
- M. (Mélanie) Ouellette, MA, MBA (Engineers Canada staff)
- D. (Dan) Palermo, P.Eng. (York University)
- S. (Salvatore) Paneduro (York University)
- S. (Stephanie) Price, P,Eng. (Engineers Canada Executive vice-president)
- B. (Bruce) Sparling, P.Eng. (University of Saskatchewan)
- E. (Evelyn) Spence, LL.B. (Engineers Canada staff)
- T. (Tony) Thoma, P.Eng. (Conestoga College)
- W. (Wendy) Vasquez (Canadian Federation of Engineering Students)
- M. (Miguel) Watler (Seneca College)
- S. (Steve) Wilton (University of British Columbia)

3095 OPENING

3095.1 CALL TO ORDER AND APPROVAL OF AGENDA

The Chair called the meeting to order and all attendees introduced themselves. The confidentiality of the Accreditation Board proceedings was shared with all present. A copy of the Rules of Confidentiality was included in the agenda book for information.

The meeting's agenda was reviewed and the following motion was carried unanimously:

MOTION:

"That the agenda be accepted as distributed and that the Chair be authorized to revise the order of business as necessary to accommodate the needs of the meeting."

3096 CONSENT AGENDA

3096.1 Approval of the minutes

"That the minutes of the September 14, 2019 Accreditation Board meeting be approved as distributed."

3096.2 Follow up on action items from the minutes of the September 14, 2019 Accreditation Board meeting

3096.3 Accreditation Board's observation of the Qualifications Board September 16, 2019 meeting

3096.4 Accreditation Board's attendance at the September 26, 2019 Engineers Nova Scotia Board of Examiners meeting

3096.5 Accreditation Board's attendance at the December 5, 2019 Annual Graduate Attribute & Curriculum Improvement Process (GACIP) Ontario Summit

3096.6 Accreditation Board's attendance at the January 3, 2020 Canadian Federation of Engineering Students, Canadian Engineering Leadership Conference

3096.7 Accreditation Board Fall 2019 and Winter 2020 visits

3096.8 Requests for accreditation visits – Fall 2020 and Winter 2021

3096.9 Anticipated visits 2021 to 2025

Motion 3096

Moved by W. ElMaraghy, seconded by J. Pieper

"That the consent agenda items 3096.1, 3096.2, 3096.3, 3096.4, 3096.5, 3096.6, 3096.7, 3096.8 and 3096.9, be approved."

Carried

ACTION ITEMS:

- Secretariat to look at visit assignment over time more thoroughly and ensure that members are advised of any changes between meetings
- For future meetings, Board members would like to be guided by page number in the agenda book in order to follow the presenters

3097 REPORTS TO THE BOARD

3097.1 Engineering Deans Canada (EDC) (formerly National Council of Deans and Applied Science (NCDEAS))

J. Olson provided a list of new initiatives happening as part of the Education, Policy and Research Committees as well as the Deans Liaison Committee.

The Education Committee continues to support a number of innovation initiatives including:

- The Canadian Engineering Education Challenge led by Stephen Mattucci at McMaster University, which brings together a network of researchers and champions focused on developing the next generation of engineering education. This initiative came out of another initiative as part of the Engineering Change Lab, a network of an accord group of approximately 40 leaders in industry as well as a number of Higher Education Institutions. The Engineering Change Lab's link to the website was provided at the meeting: <https://www.ewb.ca/en/venture/engineering-change-lab/>.
- Supporting the Engineering Graduate Attribute Development program (EGAD). EGAD is establishing a network and tools to support outcomes-based assessment. Their next major initiative will be a workshop at the May 7-8, 2020 EDC meeting in Vancouver.
- Reviewing the Enrolment and Degrees Award survey. There has been some discussion about changing the annual timelines as well as collecting and reporting on new data points.

- The Committee also continues to liaise with the Canadian Federation of Engineering Students.

The Research Committee activities include:

- Drafted a Guelph Declaration which provides the EDC's vision as to the role of engineering in society. An update was presented at the February 2020 Canadian Engineering Accreditation Board
- A new initiative was started with Dean Kresta at the University of Saskatchewan to identify the Canadian grand engineering challenges. The initiative was created in response to the UN Sustainable Development Goals as well as the National Academy of Engineering's grand challenges which have a United States take on engineering challenges. The EDC has developed a set of their own goals to take into account the unique people, landscape, culture, and technology challenges of Canadians. For more information, participants were encouraged to contact Dean Kresta.

The Public Policy Committee has undertaken a project to commemorate the tragic event of École Polytechnique and to promote the outstanding work of female engineers across Canada. Engineering Deans Canada invited each of the Canadian engineering schools that offered an accredited engineering program in 1989 to put forward the story of an engineering alumna who graduated within three years of the massacre (1986-1992), and whose career exemplifies the value that women bring to the engineering profession and into society. The 30 profiles are found on the <https://30yearslater.ca/> website. J. Olson encouraged all participants to help promote the website that was created as part of the Public Policy Committee.

Preoccupations of the deans:

J. Olson noted that if every job in the future is going to be a technology job, then engineering really needs to be the degree of the 21st century. The deans are collectively working to broaden the competencies and the breadth of the engineering degree. He spoke of the barriers to creating the future of an engineering degree as stated in his presentation:

"The EDC reiterates its concern that the current accreditation process entails onerous workloads for higher education institutions (HEI) and accreditation teams, inhibits and overly constrains educational innovations, discourages international student exchange programs, and over-emphasizes the importance of in-classroom instruction..."

Some of the Deans Liaison Committee's concerns included:

- Increased scope of accreditation
- Increased AUs required for accreditation
- Streamlining International Exchange for students
- Interpretive statements as shadow regulations

The following EDC responses to the *Curriculum content measurement*:

Beyond the AU white paper recommendations were provided:

- That the EDC recommends a reduction from 1950 AU to 1800 AU, as a first step
- That the EDC encourages allowing programs to count specific AUs for both Engineering Science and Engineering Design for instructors in the first 5 years of their appointment provided they are actively pursuing licensure or have EIT/ingJr status and working under the supervision of a P.Eng./ing.

- That the EDC recommend removing the 25% or 8 AU constraint and removing the maximum 3-category constraint; a workable compromise would see the reduction to 10%.
- That the EDC does not support a move to percentage-based allocation of equivalent AUs.
- The EDC supports that the CEAB perform an analysis with HEIs that use student-learning time in their definition of academic credit to consider establishing a learning time specification as an alternative minimum program total for criterion 3.4.6.
- That EDC endorses the position, as stated by Claude Laguë, to move beyond AUs to Graduate Attributes as highly reflective of the position of the EDC.

The Board commended the EDC and its members for their remembrance of the female engineering students who were killed at École Polytechnique.

3097.2 Accreditation Board's attendance at the November 6 to 8, 2019 Engineering Deans Canada meeting

- B. Dony provided an update on the following items presented at the EDC meeting:
- CEAB activities
 - Ongoing discussions with the Deans Liaison Committee including:
 - International student exchanges
 - AU distributions across curriculum categories
 - Definition of Engineering Design Task Force report
 - An update on this item is provided in section 3100.5 in these minutes
 - Accountability in Accreditation
 - An update on this item is provided in section 3097.8 of these minutes
 - CEAB 2019 white paper *Curriculum content measurement: Beyond the AU*
 - An update on this item is provided in section 3100.6 of these minutes

3097.3 Update on the Canadian Engineering Qualifications Board activities

- R. Leblanc provided an update on the work of the CEQB including:
- CEQB provided feedback on the CEAB's consultations on the 2019 white paper *Curriculum content measurement: Beyond the AU* and the Definition of engineering design report. He thanked the Accreditation Board for the opportunity to provide feedback and noted that the two Boards have a good collaborative relationship.
 - The Regulator Guideline on the Use of Syllabi and on the White Paper on Environmental Engineering was approved by Engineers Canada Board
 - CEQB kicked off the process for new Aerospace/Aeronautical Engineering Syllabus
 - CEAB is finalizing the following syllabi:
 - Basic studies
 - Computer Engineering
 - Software Engineering
 - Biomedical Engineering
 - Other recent activities of the CEQB include:
 - 2020 Workplan was approved by the Engineers Canada Board
 - CEQB was directed to produce the Guideline for Engineering firms on the topic of Indigenous Engagement and Consultation.
 - CEQB was directed to consider for their 2020/2021 workplan an analysis regarding the feasibility of developing and/or managing

national psychometrically-valid Canadian engineering technical exams to be used by regulators for non-CEAB applicants for engineering licensure within their jurisdictions.

- The following items were brought to the March 2020 CEQB teleconference:
 - That the Regulators' Guidelines on assessing engineering work experience using competency-based assessment be sent to the Engineers Canada Board for their approval
 - That the Task Force on Diversity and Inclusion and the Task Force on Software Engineering be struck

In the ensuing discussions, it was noted:

- There is a process for the CEQB to develop a new syllabus which starts with a priority identification informed by regulator consultation. Between the consultation process and the management of feedback from that consultation, it could take approximately one year for a new syllabus to be created.
- Participation statistics for every massive Open Online Courses (MOOC) Sustainability in Practice session can be provided to interested individuals. Requests for information can be forwarded to Mélanie Ouellette, Manager, Qualifications.
- Engineers Canada will strike a working group with participants from the National Admissions Officials group, the National Discipline and Enforcement Officials group, and the National Practice Officials Group to provide direction on the development of the new website content for entrepreneurs.

3097.4 Update on the Canadian Federation of Engineering Students activities

W. Vasquez announced that she was elected as the incoming President of the Canadian Federation of Engineering Students. She noted that the current VP Academic, T. Phillips, was unable to attend this meeting but that she would attend the next CEAB meeting.

She provided a brief overview of CFES' general updates including:

- The Diversity in Engineering conference was held in November 2019 featuring sessions on mental health literacy, a panel on building communities after graduation, and the importance of inclusive environments for underrepresented groups.
- The Canadian Engineering Leadership Conference was held in January 2020 featuring a keynote by D. Lynch, President, Engineers Canada, a workshop on Engineering Design facilitated by S. Kresta, and an Engineers Canada update from J. Southwood. Other workshop topics included the role of engineers in climate change and the inclusion of Indigenous communities.
- CFES's National Student survey will be conducted in the fall of 2020 across all undergraduate engineering students across Canada. The survey will look at sexual harassment and violence on and off campus, inclusivity at engineering events, and diversity in engineering (specifically, LGBTQ+, minorities, ability, etc.). The overall goal of the survey is to have a better understanding of the culture of the engineering student community.
- The CFES is motivated to increase the diversity of the engineering student body to meet current and future challenges in society. Engineers need to be well-rounded individuals who can communicate and collaborate with others to solve complex problems. Having a more diverse cohort of students and future engineers will improve the quality of solutions.

3097.5 Update on the October 4, 2019 Engineers Canada Board meeting

L. Benedicenti provided a list of topics that were presented at the Engineers Canada Board meeting on behalf of the Accreditation Board.

- The following CEAB recommended criteria were approved:

3.4.4.1 A minimum of 600 Accreditation Units (AU) of a combination of engineering science and engineering design curriculum content in an engineering program shall be delivered by faculty members holding, or progressing toward, professional engineering licensure as specified in the Interpretive statement on licensure expectations and requirements.

3.4.4.4 A minimum of 225 AU of engineering design curriculum content in an engineering program shall be delivered by faculty members holding professional engineering licensure as specified in the Interpretive statement on licensure expectations and requirements.

- The Engineers Canada Board passed a motion directing the CEAB to develop appropriate ways within the accreditation process to incorporate the goals of the 30 by 30 initiative.

3097.6 Update on the December 9, 2019 Engineers Canada Board meeting

- B. Dony noted that the following CEAB-related decisions at the December 9, 2020 meeting of the Engineers Canada Board:
- Leadership appointments for the following roles, effective July 1, 2020:

Pierre Lafleur as vice-chair
Bob Dony as chair
Luigi Benedicenti as past-chair

- The CEAB 2020 workplan was approved
- J. Card noted that the motion related to Operational imperative 9: Sub-strategy on Indigenous access to engineering was deferred to the February 26, 2020 meeting of the Board:

“Direct the CEAB to develop appropriate ways within the accreditation process to incorporate truth and reconciliation efforts.”

3097.7 Engineers Canada Board and Canadian Engineering Accreditation Board Chair evaluations

S. Price advised the CEAB that a new process to evaluate the Engineers Canada Board and the CEAB Chair will be implemented in March. The assessment provides Chairs with an opportunity to reflect on their work and impact, gives Chairs feedback from multiple perspectives, supports the development of volunteer leaders, and, informs the President-elect of the strengths, weaknesses, abilities, and desires of Chairs all with the ultimate goal of greater efficiency in the use of volunteer time.

3097.8 Update on the Accreditation Improvement Program (AIP)

The AIP is a multiyear initiative that is led by staff to improve accreditation. There are four pillars including: communication and consultation; training (of visiting teams, of the Accreditation Board members and of Higher Education Institutions); data management system; and continual improvement.

Communications and consultation is something that the AIP continues to work on through a number of initiatives. The items that are being developed by the Accountability in Accreditation Committee will interface closely with the work being done in terms of communication and consultation. AIP is also interfacing closely with the Engineers Canada organizational initiative to develop a streamlined annual consultation plan and process.

Training is an ongoing initiative that includes working within the bounds of our vast geography. The Secretariat is working on updating the current online training program and investigating the options to move the program to a new and dynamic platform.

The data management system (Tandem) was launched last year to support the Enrolment and Degrees Award Survey. Engineers Canada is collaborating with EDC to make improvements identified by end-users. Planning is underway to configure the system for accreditation. Resources issues on the vendor end have slowed progress but the team is making headway.

Continual improvement includes monthly updates on the program through the AIP site at: <https://engineerscanada.ca/accreditation/accreditation-improvement-program>. Interested individuals are encouraged to subscribe to the monthly AIP update.

3097.9 Update on the Accountability in Accreditation Committee

The Accountability in Accreditation Committee is routed in Engineers Canada's strategic priority #2 which is to establish an annual assessment process to assess transparency and effectiveness of accreditation system to be designed collaboratively with stakeholders.

R. Gosine provided an update on the Accountability in Accreditation Committee whose members include:

- Ray Gosine, Chair
- Suzelle Barrington, member, industry
- Jeff Card, member CEAB, Engineers Canada Board representative
- Suzanne Kresta, member, academia
- Pierre Lafleur, member, P&P representative
- Matthew Oliver, regulator representative

Since September 2019 the Committee has been working with consultants Higher Education and Beyond to develop the measurement framework. A survey of accreditation stakeholders was carried out in November 2019 to gather input on the benefits and purposes of accreditation, the quality of a well functioning accreditation system, and the perspectives that should be used by the committee to assess the accreditation system. The survey data was analyzed during a full-day Committee working meeting to draft a measurement framework, including the qualities to be measured, indicators, and the measurement tools. The committee's next meeting will concentrate on the data collection timelines, dashboarding and the reporting templates that will be used. It is anticipated the measurement framework will be finalized by the end of March 2020.

It was noted that the Accountability in Accreditation Committee Terms of Reference which limit Committee membership to 2 years but state that only one member will be replaced each year is mathematically problematic. It was clarified that the Terms of

Reference were written to help with succession planning and will be updated once the Committee's work has been operationalized.

3098 ACCREDITATION ACTIVITIES

3098.1 Member Assignments for the June 2020 Accreditation Board Meeting

L. Benedicenti presented the members' assignments for the June 2020 meeting for information. No concerns or comments were noted. Board members are to contact the Secretariat should any concerns arise.

3098.2 Programs under development

L. Benedicenti presented the list of programs under development. Meeting participants were encouraged to report anything of interest related to this issue.

C. Jaeger added the following changes:

- 1) Environmental Engineering: This is a new Vancouver only program that received ministry approval about 3 weeks ago. We predict a second year intake from our common first year in September 2020, so the first possible graduating class would be May 2023.
- 2) Manufacturing Engineering: you already know about this program, with first possible graduating class in May 2022, but I will put on your radar that although this is two programs, one on each campus, there are some linkages with shared courses offered to students in both programs simultaneously via videolink. Therefore, the structure of the visit might require some careful strategizing.

ACTION ITEM:

Secretariat to remove Chemical Engineering at York University from the list of Programs under development.

3099 ACCREDITATION DECISIONS - ABRIDGED

3100 POLICIES AND PROCEDURES

3100.1 Update on the December 20, 2019 and February 7, 2020 Policies and Procedures Committee meetings

B. Dony noted that there have been two meetings of the P&P since the CEAB last met: December 20, 2019 (teleconference) and February 7, 2020.

The December teleconference's single focus was to discuss stakeholder feedback on the white paper titled *Curriculum content measurement: Beyond the AU* to determine a way forward. Recommendations resulting from the discussion is provided in section 3100.6 of these minutes.

The February 7 meeting included the following discussions/approvals:

- The Terms of Reference for the CEAB working group on instructions for onsite materials was approved

- EDC's position statement on paper on limitations on AUs claimed within a single category (Appendix 3) was discussed. The P&P will recommend to the CEAB an amendment to Appendix 3 of the Criteria and Procedures book at the June 2020 meeting.
- The next steps for the 2019 Consultation on *Curriculum content measurement: Beyond the AU* was discussed
- Some updates were made to the interview questions asked of faculty regarding Graduate Attributes.
- During the EDC meeting in Sherbrooke there was discussion about the variety of accreditation systems of the Washington Accord signatories. The EDC requested access to Engineers Canada's 2017 report on the systems' approach to inputs and outcomes-based accreditation methods. The P&P will update and share the report with the EDC at their May 2020 meeting.
- There was discussion regarding a memorandum of understanding between Engineers Canada and some regulators on sharing decision information.
- The EDC's position paper on international exchanges was discussed. The committee continues to examine CEAB accreditation criteria and procedures in relation to the concerns expressed by the EDC.
- CEAB succession planning was discussed in relationship to the new six-year term limits and the importance of building a pool of diverse and experienced program visitors.

In subsequent discussions, it was noted that Engineers Canada's signatory status to the International Professional Engineers Agreement (IPEA) and to Asia Pacific Economic Cooperation Engineers Agreement was reviewed in June 2019 and was granted a two-year status with a request for a report at the end of the two-year period. Engineers Canada's submitted report will be considered at the June 2020 International Engineering Alliance meeting. The concern raised was that the system for professional engineers is based upon a competency evaluation and in Canada only six of twelve regulators use competencies for licensure.

3100.2 Update on the Policies and Procedures Committee action items

M. Warken explained that the P&P action items were provided for information. It was clarified that the keyboard shortcuts for checkmarks and asterisks for the visiting team report would be provided in the 2020/2021 visit cycle documentation.

3100.3 Update on the Engineering Deans Canada activities and the Policies and Procedures activities

A document mapping the EDC's pre-occupations to P&P/CEAB workplan items was presented for information. Several items on the EDC's list of pre-occupations are now considered closed:

- The CEGEP issue has been resolved.
- The issue of how to manage AU counts for unexpected delays/cancellations has been added to the visiting team chair training presentation template.
- Statistical Analysis on the Time-Variance of Accreditation Units (2001-2017) has been published.

3100.4 Update on the Policies and Procedures Committee 2020 workplan

A summary of the draft 2020 workplan was provided.

3100.5 Update from the Definition of Design task group

J. Pieper noted that the Definition of Design task group report was approved by the Accreditation Board and stakeholder consultation will begin by the end of March 2020. Feedback has already been received from several stakeholders, including workshop participants at the Canadian Engineering Leadership Conference. Higher Education Institutions will receive a call for comment via the EDC. CEAB members are also encouraged to send any feedback to J. Pieper.

3100.6 2019 Consultation on the Curriculum content measurement: Beyond the AU white paper recommendations

B. Dony provided a summary of the results of the 2019 Consultation on the Curriculum content measurement: Beyond the AU white paper recommendations:

- Stakeholders who provided feedback on the white paper recommendations included regulators, various councils such as the Board of Examiners, the Academic Review Committee, National Admissions Officials group, higher education institutions, the Engineering Deans Canada, the Deans Liaison Committee, the Accreditation Board, the Qualifications Board, the Canadian Engineering Federation of Students, and former CEAB chairs.
- Feedback was asked on two of the recommendations.
 - Based on a model curriculum schedule, the appropriate number of total program AUs would be 1850. Most of the feedback identified no significant concerns with this recommendation. The EDC did not agree with the reduction to 1850 but proposed further reduction to 1800 instead.
 - The P&P has recommended that the minimum number of AUs be changed from 1,950 to 1,850. Though the mandate for this work was to resolve the issue to the satisfaction of *all* stakeholders, the messaging to Engineers Canada's Board will be that the proposed resolution is the best achievable within the current context.
 - The AU definition for minimum curriculum elements in criteria 3.4.2-3.4.5 would be replaced with percentages.
 - There was a wide range of feedback received on this recommendation and the consensus from those who submitted feedback is to not move forward on this item at this time.
- Feedback on the third recommendation to perform an analysis with HEIs that use student-learning time in their definition of academic credit was not explicitly sought but was received. The P&P will continue discussions on this recommendation.

As a result of the feedback received from the above-mentioned stakeholders, the Accreditation Board put forth the following motions:

MOTIONS:

"THAT accreditation criterion 3.4.6 be revised to:

3.4.6 The program must have a minimum of ~~1,950~~ 1,850 Accreditation units that are at a university level.

3.4.6 *Le programme doit avoir un minimum de ~~1 950~~ 1 850 unités d'agrément de niveau universitaire.*

*and **THAT** the Interpretive Statement on Accreditation Unit Categories (Appendix 7) be amended to change reference to 1,950 minimum AUs and 405 AUs beyond the minimum sub-total of 1,545 AUs to 1,850 minimum AUs and 305 AUs beyond the minimum sub-total of 1,545 AUs."*

The revised interpretive statement will be effective starting the 2021/2022 accreditation visit cycle.

The motion passed with 19 votes in favor and one abstention.

It was noted that Strategic Priority #2 of Engineers Canada's 2019-2020 Strategic Plan requires "the issue of the required number of AUs is addressed to the satisfaction of all stakeholders, based on data and collaboration with all stakeholders." In the recommendation to the Engineers Canada Board, it will be noted that while the issue may not be resolved to the satisfaction of *all* stakeholders, the proposed solution is the best achievable within the current context.

ACTION ITEM: The recommended criteria change will be presented to the Engineers Canada Board for decision at their May 2020 meeting.

3101 INTERNATIONAL RELATIONS

3101.1 Washington Accord general information

L. Benedicenti provided a brief description of the role of the Washington Accord of which Engineers Canada is a signatory. He noted that the next International Engineering Alliance meeting will be held in Cape Town, South Africa in June 2020. A list of Washington Accord members was included in the meeting package.

3101.2 Update on the Washington Accord monitoring visit

M. Warken presented this item.

Engineers Canada will receive a Washington Accord monitoring visit in 2020. A monitoring team comprised of one Chair and two members and will be drawn from the following Signatories:

- Turkey – MUDEK
- Japan – JABEE
- United Kingdom - ECUK

The review team will receive a presentation on Engineers Canada's accreditation processes and policies and will accompany CEAB visit teams to their visits at the University of Ottawa and l' Université de Moncton. While the schedule for the monitoring visit was being negotiated at the time of the meeting, it was anticipated that the monitoring visit will unfold as follows:

- presentation at Engineers Canada's offices on a Friday
- meeting with the University of Ottawa visiting team Saturday night
- University of Ottawa visit Sunday-Tuesday

- travel to Moncton Tuesday afternoon
- meeting with l' Université de Moncton visiting team Wednesday night
- l' Université de Moncton visit Thursday- Saturday

The CEAB Secretary will accompany the teams and staff support will be provided as required. Efforts have been made to include one member of the Executive Committee on both visits. At least one member of the monitoring team will observe a meeting of the CEAB before the Washington Accord team presents their report at the IEA meeting in Ireland, June 2021.

3102 NEW BUSINESS

3102.1 Assessing the accountability and transparency of the Canadian Engineering Accreditation Board accreditation system

C. Hoessler, B. Hoessler, and P. Milot, consultants from Higher Education and Beyond, provided a presentation on the fundamentals of program evaluation that have underpinned the development of the measurement framework. This presentation supported the knowledge transfer strategies to ensure that the Accreditation Board, the Accountability in Accreditation Committee, and Engineers Canada Staff are prepared to operationalize the measurement plan this coming year.

The presentation included an overview of:

1. Accountability and evaluation including:
 - a. Purposes of evaluation
 - Accountability
 - Development
 - Knowledge
 - b. Standards of evaluation
 - To be considered a good evaluation, an evaluation must address five components:
 - Utility
 - Feasibility
 - Propriety
 - Accuracy
 - Evaluation accountability
 - c. Types of evaluation
 - Outcome evaluation
 - Process evaluation
 - d. What is an evaluation plan
 - Defines:
 - What is collected
 - Who and when the data is collected
 - How the data is analyzed and reported
 - e. Process of developing an evaluation plan
 - Define outcomes & process qualities
 - Define program logic model
 - Conduct surveys & interviews to engage stakeholders
 - Develop evaluation measures

- Develop evaluation plan with key stakeholders

2. CEAB accreditation system evaluation process

a. Deliverable:

- To create an evaluation plan for CEAB to assess and inform the effectiveness, trustworthiness, transparency and efficiency of the accreditation process

The following is a list of the seven key outcomes that defines a “good” accreditation system:

- identifies to engineering regulators the programs that prepare academically qualified individuals
- confirms academic qualification for licensure across Canada
- promotes high quality and ensures a minimum program standard across Canada
- facilitates graduates' international mobility
- is transparent
- is trusted
- is efficient

In subsequent discussions, it was noted:

- The team referenced some of the strongest, most established contributors to the evaluation field in their work.
- To evaluate how a quality is *experienced*, specific questions are asked of individuals (for example, is the Questionnaire efficient for you to complete?). Very specific experience questions are asked in this case.
- Once the framework is developed, the Accountability in Accreditation Committee will be responsible for reviewing, analyzing, and making recommendations based on data. Refinements to the framework will likely be needed after the first annual measurement so the Committee will need to work on this.
- The evaluation is designed with utility in mind in terms of who will collect the data, who will be asked to provide specific feedback, who will analyze the data, etc.
- The evaluation strategy seeks to collect data from a representative sample of the stakeholders of the accreditation system. The questions of each stakeholder group are targeted and in the analysis, we will be looking for transferrable and generalizable responses.
- The self-assessment approach to some of the evaluation framework is anchored in standards of evaluation (specifically, #5). There are some measures that will be self-assessed by Engineers Canada/CEAB.

3102.2 February 9, 2020 meet-and-greet

M. Warken gave a brief description on the purpose of the annual Accreditation Board meet-and-greet. In this session, upcoming accreditation visit cycle HEI representatives meet with their assigned visiting team Chairs to have a face-to-face conversation and ask questions regarding their upcoming accreditation visits.

3102.3 September 2020 workshop topics

L. Benedicenti facilitated a discussion on possible topics for the Accreditation Board workshop in September 2020.

Board members provided the following feedback:

- Unconscious Bias would be an interesting and relevant topic.
- A workshop for new CEAB member on How to Chair a visit and how to build your team would be helpful.
- How to prepare program visitors for their role on the visiting team (a train-the-trainer model) would be a useful topic. One area of focus could be how to manage visiting team members' expectations in terms of Graduate Attribute assessment data.

ACTION ITEM:

Accreditation Board members are encouraged to submit suggestions for workshop topics to the Secretariat.

3102.4 Update on the Canadian Engineering Accreditation Board membership

J. Card, Chair of the CEAB Nominating Committee provided an update on CEAB membership.

In 2019, the 2020 CEAB recruitment plan was launched.

Re-Appointments

All current CEAB members eligible for re- appointment have received support from the CEAB Nominating Committee and their regulators.

Re-appointments will be submitted to the Engineers Canada Board for approval at their May 2020 meeting.

New members

The CEAB is currently recruiting for two new members who will start their terms on July 1, 2020:

- One member-at-large
- One Alberta/Northwest Territories and Nunavut representative

The call for nominations for one member-at-large closed on January 15 and the Nominating Committee met to discuss potential nominees. The call for one regional representative will close on March 1, 2020.

As per Engineers Canada's Board Policy 6.9, Section 6.9.3.3, support of the regulator will be sought for any individual nominated as member-at-large.

All new appointments will be submitted to the Engineers Canada Board for approval at their May 2020 meeting.

ACTION ITEM:

Secretariat to amend the volunteer plan to accurately reflect R. Gosine's term dates.

3102.5 Comments from Observers

D. Lynch, President, Engineers Canada, expressed his thanks on behalf of the Engineers Canada Board for the work of the Accreditation Board.

A. Bergeron, Past-president, Engineers Canada, echoed D. Lynch's comment and added she continues to learn new things and acquires great value at the face-to-face CEAB meetings.

W. Vasquez, Vice-president, Academic, CFES thanked the Accreditation Board for their work. She is looking forward to the process improvements that the Board is looking to implement. She also thanked the Board for always trying to improve the quality of education that engineering students get.

3103 FUTURE MEETINGS

Proposed future dates and locations for the Accreditation Board meetings were presented.

2020 meetings:

- Spring meeting: June 5 to 7 in Ottawa, ON (Note: The meeting dates for the Spring meeting was changed after the meeting due to availability and timing. The new meeting dates are June 6 & 7, 2020 – the meeting will be held virtually using GoToWebinar due to COVID-19 restrictions.)
- Fall meeting and workshop: September 19 & 20 in Vancouver, BC.

2021 meetings:

- Winter meeting and workshop: February 13 & 14 in Ottawa, ON.
- Spring meeting: June 4 to 6 in Ottawa, ON.
- Fall meeting and workshop: September 18 & 19 in Charlottetown, PEI (tentative)

3104 SUMMARY OF ACTION ITEMS

M. Warken listed the summary of action items, which are included in these minutes as appendix "A".

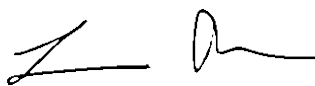
3105 MEETING EVALUATION BY ACCREDITATION BOARD MEMBERS

3105.1 Meeting Evaluations Report

Members were reminded to use the link to the electronic survey provided on the agenda item template to submit their evaluation.

3106 ADJOURNMENT

The 166th meeting of the Canadian Engineering Accreditation Board adjourned at 17:45 on Saturday, February 8, 2020.



Luigi Benedicenti, FEC, P.Eng.
Chair



Mya Warken
Secretary

APPENDIX “A”

Minute number and title	Action item	Status
3096.8 - Requests for accreditation visits	<ul style="list-style-type: none"> • Secretariat to look at visit assignment over time more thoroughly and ensure that members are advised of any changes between meetings • For future meetings, Board members would like to be guided by page number in the agenda book in order to follow the presenters 	Complete
3098.2 – Programs under development	<ul style="list-style-type: none"> • Secretariat to remove Chemical Engineering at York University from the list of Programs under development. 	Complete
3100.6 - 2019 Consultation on the Curriculum content measurement: Beyond the AU white paper recommendations	<ul style="list-style-type: none"> • The recommended criteria change will be presented to the Engineers Canada Board for decision at their May 2020 meeting. 	Complete
3102.3 – September 2020 workshop topics	<ul style="list-style-type: none"> • Anyone wishing to add any suggestions for topics for the September 2020 Accreditation Board workshop are to contact the Accreditation Board Secretariat. 	Complete
3102.4 - Update on the Canadian Engineering Accreditation Board membership	<ul style="list-style-type: none"> • Secretariat to amend the volunteer plan to accurately reflect R. Gosine’s term dates. 	Complete