

Briefing Note – Confirmation

C-536-1.1

CONFIRMATION OF NOTICE AND QUORUM

Purpose: Secretariat to confirm notice and quorum of the meeting.

Prepared by: Dale Power, Secretariat Administrator

Briefing Note - Decision

APPROVAL OF AGENDA

Purpose: To approve the agenda for the meeting.

Motion(s) to consider: (requires a simple majority of votes cast to carry)

That:

- a) the agenda, as presented to the meeting at C-536-1.2, Appendix A be approved; and*
- b) the Chair be authorized to suspend the regular order of business.*

Prepared by: Dale Power – Secretariat Administrator

Appendices:

- Appendix A – 536th Council meeting agenda

Agenda

C-536-1.2
Appendix A

536th Meeting of the Council Professional Engineers Ontario Videoconference

Date: Friday, September 25, 2020

Time: 9:30 a.m. to 4:00 p.m.

Breaks: 10:30 a.m. to 10:50 a.m., 2:15 p.m. to 2:35 p.m.

Lunch: 12:00 to 1:00 p.m.

Friday, September 25 – 9:30 a.m. – 4:00 p.m.				
1. <u>CALL TO ORDER</u>		Spokesperson/ Moved by	Type	Time
1.1	CONFIRMATION OF NOTICE AND QUORUM	Secretariat	Confirmation	9:30 a.m.
1.2	APPROVAL OF AGENDA	Chair	Decision	9:35 a.m.
1.3	CONFLICTS OF INTEREST: Do any Councillors have a conflict to disclose	Chair	Exception	9:45 a.m.
2. <u>PRIORITY REGULATORY AND GOVERNANCE ITEMS</u>		Spokesperson/ Moved by	Type	Time
2.1	PRESIDENT’S REPORT: including updates on reimagining governance and strategic vision	President Sterling	Discussion	9:50 a.m.
2.2	CEO/REGISTRAR’S REPORT: including updates on operations, activity filter and implementing Action Plan	CEO/Registrar Zuccon	Discussion	10:00 a.m.
2.3	TIMED WORKPLAN: The Executive Committee will update Council on progress with the Governance Roadmap and bring motions forward - Timed work plan for information	Chair – Executive Committee	Information	10:20 a.m.
10:30 a.m. – 10:50 a.m.		BREAK		
Regulatory Items				
2.4	BY-LAW CHANGE – NPPE FEE INCREASE	Chair Legislation Committee	Decision	11:20 a.m.
2.5	LICENSURE MODEL FOR SELF-EMPLOYED	Councillor Walker	Decision	11:30

	APPLICANTS WITHOUT P.ENG. SUPERVISION			a.m.
Governance Items				
2.6	2021 OPERATING BUDGET	Chair – Finance Committee	Information	11:40 a.m.
2.7	2021 CAPITAL BUDGET	Chair – Finance Committee	Information	11:50 a.m.
12:00 p.m. – 1:00 p.m.		LUNCH		
2.8	REGISTRAR'S RECOMMENDATIONS ON 2020 AGM SUBMISSIONS <ul style="list-style-type: none"> 2.8a - AGM submission #1 – ISO 9001:2015 Certification 2.8b - AGM submission #4 – Regional Town Hall meetings 2.8c AGM Submission #5 – Digital Seals for PEO Licence Holders 	B. Ennis J. Max Councillor MacCumber	Information Information Decision	1:00 p.m.
2.9	PEO SKILLS AND ATTRIBUTES MATRIX	Past President Hill	Decision	1:30 p.m.
2.10	ANTI-RACISM STRATEGY	Councillor Cushman	Decision	1:40 p.m.
2.11	2020 VITAL SIGNS SURVEY REPORT	V. Aleksandrova	Information	2:00 p.m.
2.12	ENGINEERS CANADA DIRECTORS REPORT: this is a governance item on how we might co-ordinate and collaborate better	Chair	Discussion	2:10 p.m.
2:15 p.m. – 2:35 p.m.		BREAK		
3. <u>CONSENT AGENDA</u>		Spokesperson/ Moved by	Type	Time 2:35 p.m.
3.1	MINUTES – 534 and 535 COUNCIL MEETINGS	Chair	Decision	
Regulatory Items				
3.2	LEGISLATION COMMITTEE 2020-21 WORK PLAN	Councillor MacCumber	Decision	
Governance Items				
3.3	APPROVAL OF CEDC APPLICATIONS	President-elect Bellini	Decision	
3.4	CHANGES TO THE 2020 COMMITTEES AND TASK FORCES MEMBERSHIP ROSTER	President-elect Bellini	Decision	
3.5	REVISED 30 BY 30 TASK FORCE END OF TERM	President-elect Bellini	Decision	

4. <u>NEW BUSINESS ITEMS</u>		Spokesperson/ Moved by	Type	Time
4.1	COUNCILLOR/COMMITTEE ITEMS: this is an opportunity for Councillors and Committee Chairs to raise questions to help Council identify any problems, risks and/or opportunities to address in its strategies and governance in the public interest	Councillors or Committees	Various	2:40 p.m.
Formal Public Meeting Ends				

Please note that in order to streamline the agenda, Committee reports are not included in the agenda package. Committee Chairs are asked to submit their written reports to the Secretariat for posting on the Council SharePoint site prior to each Council meeting. These reports can be discussed at the meeting if a Councillor asks to address a specific item contained within the written report. The reports submitted as of September 8, 2020 are:

- Legislation Committee
- RCC Report
- Stats

The link will take you directly to the reports [536 Reports](#)

Councillors Code of Conduct

Council expects of itself and its members ethical, business-like and lawful conduct. This includes fiduciary responsibility, proper use of authority and appropriate decorum when acting as Council members or as external representatives of the association. Council expects its members to treat one another and staff members with respect, cooperation and a willingness to deal openly on all matters.

PEO is committed that its operations and business will be conducted in an ethical and legal manner. Each participant (volunteer) is expected to be familiar with, and to adhere to, this code as a condition of their involvement in PEO business. Each participant shall conduct PEO business with honesty, integrity and fairness and in accordance with the applicable laws. The Code of Conduct is intended to provide the terms and/or spirit upon which acceptable/unacceptable conduct is determined and addressed.

At its September 2006 meeting, Council determined that PEO volunteers should meet the same obligations and standards regarding conduct when engaged in PEO activities as they are when engaged in business activities as professional engineers.

[s. 2.4 of the Council Manual]

Briefing Note – Exception

C-536-1.3

CONFLICTS OF INTEREST

Purpose: Councillors are requested to identify any potential conflicts of interest related to the open Council agenda.

No motion required

Prepared by: Dale Power, Secretariat Administrator

Briefing Note – Discussion

C-536-2.1

PRESIDENT'S REPORT

Purpose: To inform Council of the recent activities of the President.

Motion(s) to consider:

none required

President Sterling will provide a report on her recent PEO activities, followed by discussion.

Briefing Note – Discussion

C-536-2.2

CEO/REGISTRAR'S REPORT

Purpose: CEO/Registrar Zuccon will present the CEO/Registrar's Report.

No motion required.

Prepared by: Dale Power, Secretariat Administrator

Report to be delivered at Council meeting.

Appendix A – CEO/Registrar's Report



CEO/Registrar Update

Johnny Zuccon, P.Eng., FEC, CEO/Registrar
Prepared for PEO Council, September 25, 2020



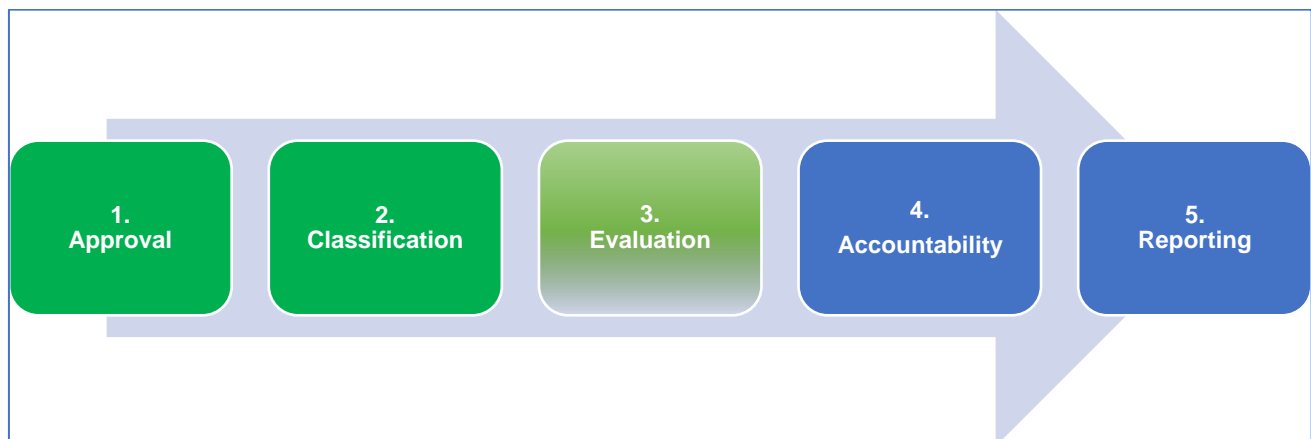
1. Operational Review / Action Plan

Activity Filter

(Recommendation 1, Key Steps 1,2; Recommendation 3, Key Steps 1,2)

Work on the Activity Filter continues. The current phase (phase 3) involves evaluating each of the 90+ committee activities and outputs in the four categories (core regulatory, regulatory policy, governance and neither) to determine if each activity and output is necessary in terms of both the legal basis for it (typically, in the act and/or the regulation) and their current assignment to a particular committee, task force or working group. This question of “necessity” was the original basis for creating the filter, as a key component of the high-level action plan approved by Council in September 2019. This is likely to produce recommendations to Council to ensure that accountability (the next phase of the filter) for each activity in its current or modified form is clear and consistent with the developing governance model and regulatory objectives of Council.

Figure 1. Activity Filter phases



Professional Practice Exam improvements

(Recommendation 4, Key Step 1)

PEO's on-line registration and administration system for the National Professional Practice Exam (NPPE) rolled out on July 1, 2020, for the September sitting of the NPPE, which included approximately 1100 registrants.

The final sitting of PEO's Professional Practice Exam (PPE) will be held via remote proctoring on October 19-21 for applicants who previously failed one or both parts of the exam. This sitting will make use of the examination materials prepared for the cancelled March 28 sitting. Registration closed September 14 with 254 applicants registered.

Of the 1191 applicants who wrote the June 8-10 NPPE sitting, 90% passed.

Digital Strategy

(Recommendation 13, Key Step 2)

PEO has engaged Deloitte to assess our current infrastructure and provide us with expertise as we initiate plans to develop a digital infrastructure. Ultimately, a fully digital infrastructure will increase efficiency and enhance data security, communications and our ability to analyze and report on performance.

Initial work will focus on technology initiatives that help us during the pandemic but still advance our goal of becoming a digital organization, such as converting the paper application into electronic forms that can be emailed to PEO for processing. Subsequent initiatives will help us bridge the current technology gap and the future end-state, such as installing a secure digital document repository linked to Aptify—the applicant and licence holder database that stores electronic files—allowing both staff and external stakeholders to access the required information. Longer-term strategies will involve prioritization of the systems and processes needing transformation, then aligning the business to enable the changes and providing the tools to achieve the desired results.

2. Organizational Review

(Recommendation 2, Key Step 2)

Work to address the recommendations from the final report of the organizational review conducted by Western Management Consultants (WMC) continues, with the current focus on building capacity and transitioning to the new structure. While building her HR team, the HR Director is overseeing the ongoing functional staff assessment, which began with the Licensing department and is moving next to the Corporate Services group.

WMC has since been retained to lead the search for the new position of Vice President, Governance, including creating an outcome-based job profile, conducting an open competition and overseeing recruitment. This role has been prioritized to complement Council's commitment to the multi-year Governance Roadmap. The incumbent will lead the governance strategy behind the organization's cultural change and restructure our Secretariat office to ensure that the structures, processes and practices emanating from the roadmap are properly supported and systematized. WMC has already initiated recruitment for this position, the posting for which is available on PEO's website at: <https://www.peo.on.ca/sites/default/files/2020-09/PEO-VP-Governance-Sept2020.pdf>.

3. Governance

(Recommendation 2, Key Steps 1,2,3)

In March 2020, Council approved a two-year governance roadmap and instructed staff to request proposals for a consultant to facilitate the process, in partnership with Council and with senior management. Governance Solutions Inc. (GSI), which also contracted with PEO in 2019-20, was the successful bidder. Over the summer, a detailed contract and statement of work were negotiated and have been finalized. GSI's initial engagements with staff and with councillors have been constructive, and the management team is looking forward to supporting Council's governance reform efforts in conjunction with GSI. As GSI and others have said, it is vital not just that Council understands its role, it is also important that management and councillors develop a common understanding as to their respective roles in delivering, implementing and sustaining an effective regulatory governance model, with an appropriate delineation between operations and governance functions.

Operations

Adapting to our remote environment

Return to office planning

Further to the City of Toronto entering Stage 3 of the provincial reopening on July 31, which allows for the safe and gradual restart of more businesses and services with appropriate workplace safety and public health measures in place, BGIS (our current property management firm) has been retained to assist with PEO's re-entry to its headquarters at 40 Sheppard Ave. West. Their methodology includes making the building safe, occupying the building, sustaining the environment, delivering projects safely and evolving the program.

As part of the planning process, BGIS has created a graduated return to the workplace (Figure 2).

Figure 2. Return to office stages



Further, PEO has developed a Return to Work Policy to assess and manage risk in order to provide a safe working environment for our employees to return to work along with screening tools.

Committees and chapters

Council, committees and chapters will continue to conduct their meetings virtually for the foreseeable future. The Academic Requirements Committee (ARC), Experience Requirements Committee (ERC) and Consulting Engineer Designation Committee (CEDC) are currently holding only their business meetings virtually.

Processes have been successfully modified to allow the CEDC to consider CED applications and make recommendations for approval to Council. The first Decision Briefing Note with such recommendations is included in the September Council agenda package.

Processes have been modified to facilitate ARC members to have access to files electronically in order to review applications and make academic assessments. Actual ARC assessments are expected to commence in the fall, as committee training on the new process and SharePoint is required.

The ERC is in the process of modifying its interview processes to allow interviews to occur virtually via Zoom. Committee training on the new protocols and dry runs on Zoom are required before this activity can commence.

Finance

Financial update as of July 31, 2020

For the seven months ending July 31, 2020, revenues earned were \$15.56m and expenses incurred were \$12.98m, resulting in an excess of revenues over expenses of \$2.58m as shown in Figure 3. The shortfall of revenues in comparison to budget by \$2.18m is due to lower than expected P.Eng. revenue, application, registration and examination fees. There has been a reduction in building and advertising income as well.

The total spend of \$12.98 versus a budgeted spend of \$16.81m (i.e. lower than budget by \$3.83m) is due to the lower than expected spend on full-time staff salaries, volunteer business expenses, contract staff, chapters and several other activities across the board that have been either delayed or deferred until further notice due to the COVID-19 pandemic.

As can be seen in Figure 4, PEO has cash reserves of \$6.09m and an investment portfolio of \$11.72m as of July 31, 2020. Despite the overall fall in equity markets over the past few months, the value of the portfolio has increased by about \$400k since January due to a well-diversified asset mix with approximately 70% invested in high quality, fixed-income instruments that have helped in insulating the portfolio from the volatility of equity markets.

Figure 3. Revenues and expenses as of July 31, 2020

	2020 Actual	2020 Budget	Variance Actual vs Budget
Revenues	\$15,558,785	\$17,735,273	-\$2,176,488
Expenses	\$12,981,649	\$16,814,382	\$3,832,733
Excess of revenues over expenses	\$2,577,136	\$920,891	\$1,656,245

Figure 4. Assets and liabilities as of July 31, 2020

	2020 Actual	2019 Actual	Variance (Fav / Unfav)
Cash	\$6,090,696	\$4,021,810	\$2,068,886
Other current assets	\$886,780	\$1,027,591	-\$140,811
Marketable securities	\$11,715,667	\$7,205,889	\$4,509,778
Capital assets	\$32,180,417	\$33,883,021	-\$1,702,604
Total assets	\$50,873,560	\$46,138,311	\$4,735,249
Current liabilities	\$13,361,359	\$12,037,202	-\$1,324,157
Long-term debt	\$2,994,161	\$4,082,957	\$1,088,796
Employee future benefits	\$6,925,000	\$11,672,450	\$4,747,450
Net assets	\$27,593,040	\$18,345,702	\$9,247,338
Total liabilities & net assets	\$50,873,560	\$46,138,311	\$4,735,249

Impact of COVID-19 on membership requests for reduced fees

As shown in Figures 5 and 6, there were a total of 1413 fee remission requests received as of July 31, 2020, in comparison to 1508 requests as of July 31, 2019, which suggest that, to date, there has not been any significant increase in the number of members seeking to pay reduced fees in comparison to last year.

Impact of COVID-19 on membership resignations

From Figures 5 and 6, the total number of resignation requests received as of July 31, 2020, has been 364, which works out to an average of 52 resignations per month in comparison to the monthly average of 76 resignations or a total of 915 resignations in 2019. Staff are monitoring the situation to track both fee remission and resignations but, as of now, there does not appear be any significant increase in either remission or resignation requests. To assist with payment options for dealing with the COVID-19 situation, staff are advising members about the various fee remission options currently available. In addition, members are being given an approximately 70-day grace period from the due date for paying their membership dues without incurring any penalties.

Figure 5. Remissions stats as of July 31, 2020

Remission Type	Jan	Feb	March	April	May	June	July	Total	Monthly Average
Parental leave	20	13	8	18	14	15	12	100	14
Post grad	14	7	2	9	6	7	3	48	7
Unemployment	141	111	106	107	104	109	90	768	110
Temporary health	5	4	1	4	2	1	2	19	3
Permanent health	3	4	4	2	2	3	3	21	3
Retired	67	93	87	34	59	68	49	457	65
Total	250	232	208	174	187	203	159	1413	202
Cumulative Total	250	482	690	864	1051	1254	1413		
Resignations								364	52

Figure 6. Remissions stats for 2019

Remission Type	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Monthly Avg
Parental leave	12	11	17	17	15	15	20	8	14	14	17	6	166	14
Post grad	8	5	2	3	4	3	4	5	10	9	13	3	69	6
Unemployment	117	79	144	134	89	115	111	106	126	123	117	92	1353	113
Temporary health	1	2	7	4	1	2	5	1	2	3	3	8	39	3
Permanent health	3	4	1	3	3	1	1	4	13	6	0	3	42	4
Retired	50	79	79	87	64	114	72	73	128	81	74	91	992	83
Total	191	180	250	248	176	250	213	197	293	236	224	203	2661	222
Cumulative Total	191	371	621	869	1045	1295	1508	1705	1998	2234	2458	2661		
Resignations													915	76

Accounts payable

With the exception of printing and mailing cheques, all payments are being processed via online means. Volunteer payments are being processed within eight to 10 business days but payments to vendors are being delayed and rescheduled without incurring any penalties.

Although many businesses are beginning to resume normal operations with the gradual loosening of restrictions, the COVID-19 situation is still fluid and based on current trends—an overall fall in revenues is likely. Staff are continually monitoring the situation on the revenue and expenditure side and an update will be provided to Council at its next meeting.

Licensing & Registration

The volume of licence applications received from January to May 2020 was previously reported as being 58% down from the same period for the previous year, due to the office closure from March 17 to May 31 and not receiving any applications. Since having adjusted processes in mid-June to allow for licence applications to be received by email and stored electronically, approximately 2000 new applications were received between June and the end of August. Based on this influx, the total volume of applications received to-date is now only 27% down from the same period in 2019 and suggests that the decrease in volume may be made up over the balance of the year (Figure 7).

Then number of licences approved has suffered a lag and backlog related to the office shutdown and paper-based nature of files (Figure 8). While process workarounds have been implemented to allow licence approvals to continue remotely (involving communicating with applicants and compiling documents needed for final review from old and new email correspondence), a lag in this work has been experienced in relation to the workaround and the necessary deployment of laptops to staff. As a result, the volume of licences approved is down 36% compared to the same period last year. This figure does, however, represent the backlog shrinking, as compared to the January-June report.

Figure 7. Breakdown of P.Eng. licence applications received, January-August 2019 and 2020

Year	Applications Received 2019					Applications Received 2020					% change
Gender	Female		Male		Totals	Female		Male		Totals	Totals
	(#)	(%)	(#)	(%)	(#)	(#)	(%)	(#)	(%)	(#)	
CEAB	387	19%	1606	81%	1993	271	22%	981	78%	1252	-37%
Non-CEAB	277	13%	1799	87%	2076	327	16%	1696	84%	2023	-3%
Undefined	92	22%	329	78%	421	0	0%	0	0%	0	
Totals	756	17%	3734	83%	4490	598	18%	2677	82%	3275	-27%

Figure 8. Breakdown of P. Eng. licence applications approved, January-August 2019-2020

Year	P.Eng. Licences Approved 2019					P.Eng. Licences Approved 2020					% change
Gender	Female		Male		Totals	Female		Male		Totals	Totals
	(#)	(%)	(#)	(%)	(#)	(#)	(%)	(#)	(%)	(#)	
CEAB	284	18%	1284	82%	1568	195	19%	810	81%	1005	-36%
Non-CEAB	102	14%	644	86%	746	83	17%	401	83%	484	-35%
Totals	386	17%	1928	83%	2314	278	19%	1211	81%	1489	-36%

Tribunals & Regulatory Affairs

Hearings

In-person contested Discipline Committee hearings were cancelled as a result of the COVID-19 shutdown in March, however, Notices of Hearing have now been issued for five contested hearings to occur between October and December, either in-person at PEO's office or virtually through a third-party vendor.

PEAK Program

The fourth annual ethics module went live on August 31, 2020. The content for this module was developed by our new consultant, Redwood, who now also hosts the module on their learning management platform.

Figure 9. PEAK program statistics to July 31, 2020

Year	PEAK participation rate	Practising licence holders (% of PEAK participants)	Completed ethics module (% of PEAK participants)	Reported CPD (% of practising PEAK participants)	Completed PEAK Questionnaire (% of practising PEAK participants)	Completed Non-practising Survey (% of non-practising PEAK participants)
2017 <i>Mar 31, 2017 to Mar 30, 2018</i>	33%	76%	60%	23%	91%	No survey
2018 <i>Mar 31, 2018 to Mar 30, 2019</i>	22%	79%	72%	47%	86%	95%
2019 <i>Mar 31, 2019 to Mar 30, 2020</i>	18%	81%	70%	53%	83%	86%
2020 <i>Mar 31, 2020 to Jul 31, 2020</i>	15%	83%	54%	52%	81%	88%

Regulatory Compliance

Complaints

Since the office shutdown, the Complaints Committee has successfully held two fully electronic and remote meetings by Zoom, during which it considered and made decisions on 30 complaint files, fulfilling its statutory mandate.

Complaint file processing times remain at a five-year low, reflecting a historical backlog being cleared, and adoption of a complaint 'streaming' process (Figure 10). The total number of active complaint files has increased somewhat since 2018, (Figure 11), and the volume of complaints filed to-date in 2020 is just moderately down from previous years, in spite of the COVID pandemic and shutdown.

Figure 10. Complaint file processing times as of Aug.31,2020

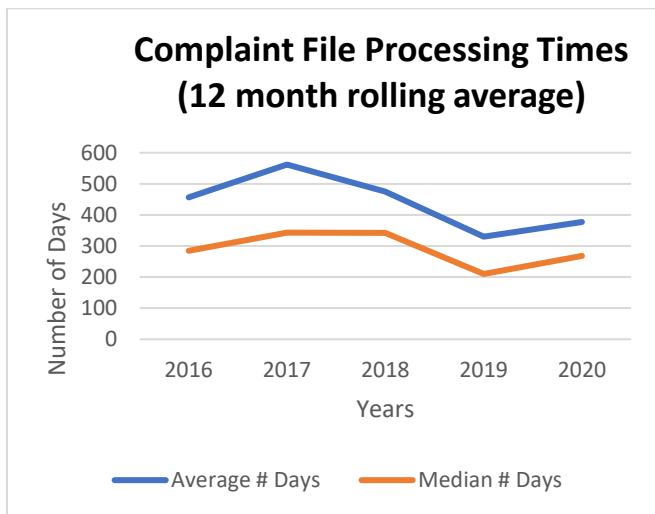
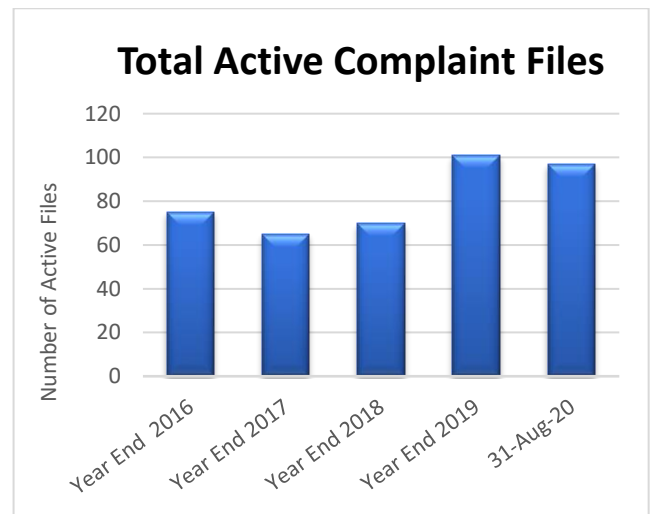


Figure 11. Total active complaint files as of Aug.31,2020



Enforcement

As the enforcement function had previously transitioned to be largely paperless, enforcement staff continue to investigate active matters and respond to new matters submitted by email and voicemail. There are no pending enforcement prosecution matters affected by reduced provincial court services.

The enforcement case load has remained relatively consistent for the first eight months of 2020. The number of reported matters has fluctuated from month to month but is comparable to volumes for the same period in past years. While response times have not been impacted, PEO's temporary office closure and delays from service providers and respondents have affected the ability to close active files. The overall case backlog has therefore increased by 40% since January 1.

Figure 12 shows the change in total case load during the year. The purple bars show the number of files open at month end, while the orange bars show the number of files that were closed during the month.

Figures 13 and 14 show the relative distribution, by type of violation and type of respondent, for all files opened each month. Figure 13 shows that reported title violations continue to be dominant each month, while Figure 14 shows there is no correlation for reported violations by companies vs. violations by individuals each month.

Figure 12. Active Enforcement Files

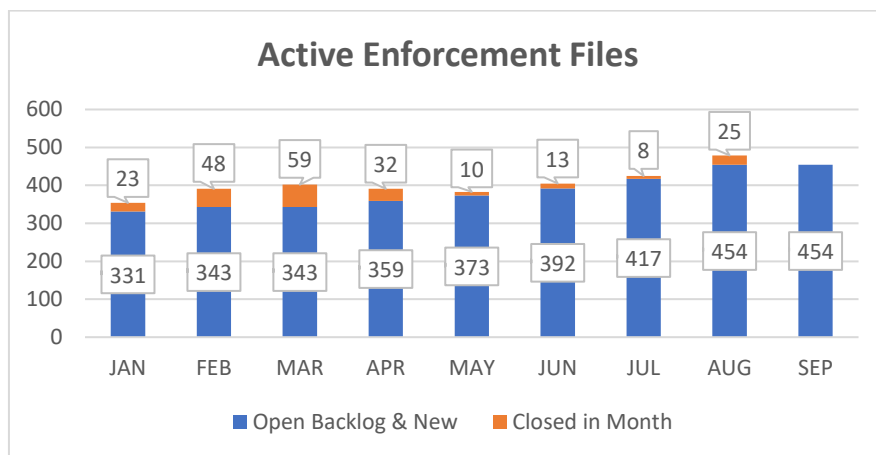


Figure 13. Title vs. Practice Violation

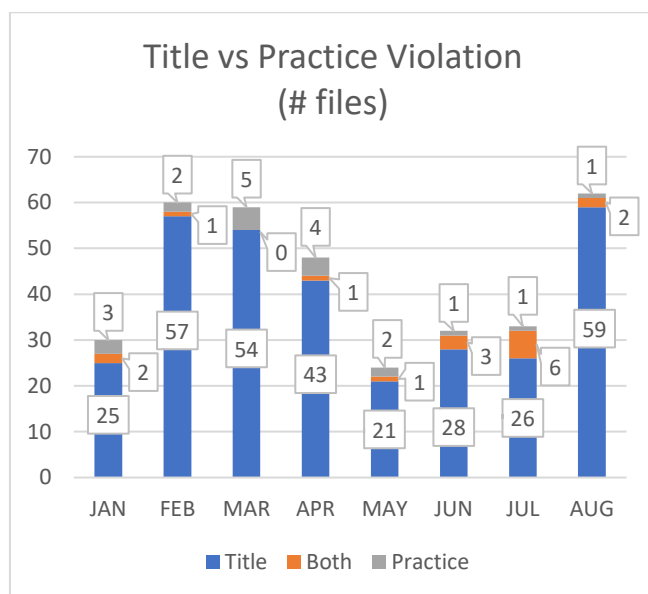
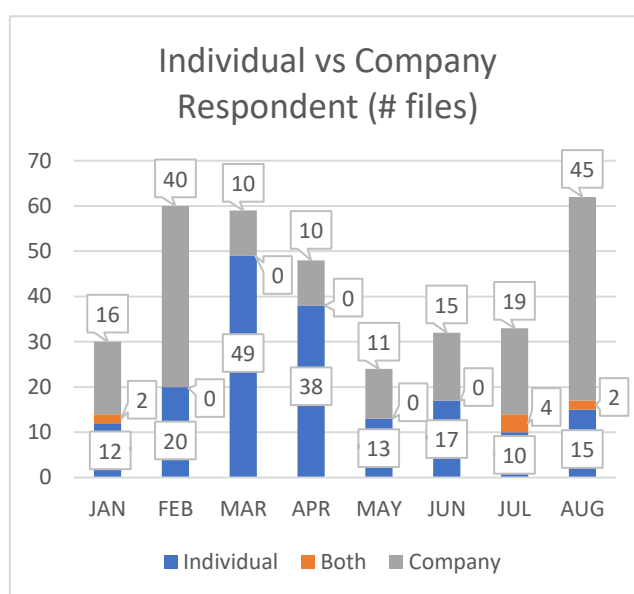


Figure 14. Individual vs. Company Respondent



Information Technology

The IT department has signed contracts to proceed with several large-scale operational initiatives:

- Migrating to a new private cloud hosting provider that offers more value and nimble services for the clients who want to provide online services. The provider will also assist in deploying Microsoft Azure for the IT development systems.
- A vendor has been selected to help the organization in migrating to Office 365. The migration will allow PEO to utilize the most recent tools, technology and security that Microsoft has to offer including, but not limited to, Exchange, Teams, One Drive and SharePoint.

The following projects are currently in flight:

- Certificate of Authorization initial application;
- Diligent Boards for Council; and
- Providing systems for licensing staff so that they can process applications due to COVID-19.

Human Resources

Staff update

The PEO IT team has expanded to include two new contract team members: a project manager with a wealth of experience in Aptify and a Records and an Information Management Specialist. This assistance will position the IT department to deliver on existing projects as well as new projects that will leverage enhanced online capabilities.

Cliff Knox, P.Eng., has been appointed as Division Manager, Licensing, in a temporary capacity until the end of this year. Cliff has been with PEO since 2014 and has worked both as an Investigator in Regulatory Compliance and, more recently, as Manager, Enforcement. He will oversee all functions and staff in the Licensing division, including admissions, registration, licensure (experience review and assessment), document management and exams.

Briefing Note – Discussion

C-536-2.3

EXECUTIVE COMMITTEE’S REPORT

Purpose: The Executive Committee’s update to Council on progress with the Governance Roadmap and recommended motions.

Motions as required.

Prepared by: Dale Power, Secretariat Administrator

The Executive Committee’s report to be discussed at the Council meeting. The draft timed governance roadmap work plan to be discussed as an Information item and brought to the November 20, 2020 Council meeting as a Decision item.

Appendix A – Executive Committee Report

Appendix B – Draft timed governance roadmap work plan

Report from the Executive Committee (EXE)

Prepared by Marisa Sterling, P.Eng., FEC, Chair of EXE

The executive committee (EXE) met two times since the PEO AGM, on August 4 and September 8. Minutes of the meetings can be found [here](https://www.peo.on.ca/about-peo/committees-and-task-forces/executive-committee): <https://www.peo.on.ca/about-peo/committees-and-task-forces/executive-committee>

The EXE was tasked by PEO Council in March 2020 (pursuant to section 11 of the *Professional Engineers Act*) to oversee implementation of the governance roadmap, with expert advice from a governance consultant, and bring related recommendations back to Council. Governance Solutions Inc (GSI) were contracted in August 2020 by PEO, through an RFP, to provide expert advice to EXE and Council.

August 4, 2020 EXE meeting summary

On Aug 4th, the same day PEO signed a contract with GSI, the EXE met and the members came to agreement on how they will steward the governance work for Council.

1. The EXE members discussed and confirmed the following:
 - That Council's intention from its March 2020 motion is working towards being a governance type board with oversight, direction and control
 - The excitement to be a part of a major transformation for PEO Council and a reimagined organization, drawing on advice from experts
 - Moving beyond dialogue and towards improving Council documentation, education and structure to embed a better way for Council to do its work
 - The governance roadmap will embed recommendations from the Succession Planning Task Force (SPTF) and the Emerging Disciplines Task Force (EDTF)
2. The EXE members discussed the process of how they will work:
 - To work as a committee of the whole versus divide up into subcommittees; to meet monthly over the next two years to steward the governance roadmap and keep the timeline on track. EXE reviewed a proposed, revised Council 2020-2021 meeting calendar.
 - With the help of GSI holding the pen, to identify for Council the situations when issues are handled in an intervening or operating board approach, and provide revised policy and procedures on how Council can change to a governance board approach.
 - That GSI, the governance experts, will provide inputs to EXE, and EXE will provide feedback to GSI, achieve consensus and then propose motions for Council's consideration
 - To keep accountability at the forefront, prioritizing regulatory activities, governance activities and then other activities
 - To articulate to Council what problems the new governance recommendations are solving with each recommendation, and stay focused on PEO's north star – protecting the public interest
3. The EXE members identified the following issues that need further discussion with Council:
 - What does a governance type board really mean for PEO Council? What are the specific areas of change?
 - What will be success for PEO Council at each phase of the governance roadmap?

- How does Council address whether it is a big tent or small tent regulator, and get clarity of its purpose within the governance roadmap?
 - Since the public need and engineering practice are constantly changing, how will Council embed resiliency in the governance roadmap?
4. The EXE members raised the following challenges for Council's consideration:
 - How to implement the governance roadmap in parallel to enterprise change across PEO, addressing the External Regulatory Review report recommendations and reimagining PEO's long term vision. What will be the implications to the public if any of these steps is stalled when the collective thinking is that none of them can wait?
 - How to rethink how Council meets and works over the next two-years, since the governance roadmap is a huge, ambitious project and Council can't lose momentum along the way. Is there a risk of not having a multi-year president and having elections this year to keeping the project on track and having consistent leadership?
 - How to bring all members of Council along the governance journey and keep them well informed of what discussions are happening at EXE. Can Councillors embrace new ways of meeting and working to bring everyone along, together, based on our shared values and vision?
 5. EXE received the draft LGA Skills and Attributes matrix document and provided any feedback and comments to staff via email after the meeting
 6. EXE next steps:
 - Receive the detailed timed workplan from GSI, incorporating the SPTF and EDTF recommendations and review at next EXE meeting
 - Operate EXE meetings in a less formal committee format to focus on the content
 - Explore ways for ongoing continuous governance conversations with all Councillors

September 8, 2020 meeting summary

On Sep 8th, the EXE met to review three documents prepared by GSI: a draft timed work plan, Council charter and President Terms of Reference.

EXE discussion on the draft timed work plan:

- Of the four phases in the work plan, phase 1 appears to be the most intensive. It will require Council to agree to change into a governance-type board from a hybrid intervening/governance board type
- Council may find helpful a separate implementation timeline for the roadmap. The plan is to implement all Council-approved changes as they occur. However, implementing any changes that require government approval (regulation or Act changes) may likely need to be paused between Fall 2021 to after the Ontario June 2, 2022 election.
- Council may need to engage government in advance to ask for support before bringing forward proposed legislative changes.
- More clarity is needed on who needs to be consulted with and by when at each stage of the work plan. For example, the Council workshop, Committee Chairs workshop, Chapter Leaders

Conference and Volunteer Leaders Conference can all be opportunities to seek buy-in. Are there other helpful perspectives?

- How can Council better use the months of May 2021 to August 2021 that have no planned activity in the draft work plan?
- Advice from GSI is that Council will need to kick-off the roadmap each year, after each AGM, with a new Council composition to get buy-in to the actions and the timeline.
- Advice from GSI is that Strategic Conversation sessions and their monthly frequency are integral to the work plan success
- EXE willing to work through summer 2021, so add in actions to the roadmap during this time
- The planned orientation sessions will include councillors, staff and election candidates
- What will be the evaluation frame for each step in the work plan? What are we measuring against?
- GSI's attendance at each Council meeting and accompanying evaluation will provide ongoing tracking of the roadmap implementation and governance approach changes
- The geographical and regionality of Council's governance will be addressed in phase 3
- Council's appointment of members to external bodies including Engineers Canada, OACETT and others will be addressed in phase 4
- Add in the concept of self-governance to phase 1
- How can PEO's 100th anniversary be a milestone and time to celebrate the roadmap completion at the 2022 AGM?
- Request GSI to provide the timed work plan as a Gantt chart
- Request GSI to add-in deliverables expected after each Strategic Conversation and Council meeting

EXE discussed the role of Strategic Conversation (SC) sessions:

- EXE members are willing to help facilitate at the SCs
- Have open dialogue to gain an appreciation of the decisions Council will need to take within the roadmap
- Recap the EXE Sep 8th discussion to give councillors a sense of how EXE is stewarding the reimagined governance

EXE next steps:

- At next EXE meeting, discuss draft Council Charter, draft President Terms of Reference
- After the September 25th Council meeting, reconsider the date of the monthly EXE meetings to ensure there is sufficient time between EXE meetings and providing materials to the Strategic Conversation sessions

Governance Roadmap Work Plan: The 4 Phases



Phase 1

PEO Council

Enhance effectiveness
through Regulatory and
Governance Mandates
and Policy



Phase 2

PEO Committees

Governance Effectiveness
of Committee Structure
and Mandate



Phase 3

Council Renewal

Review of Council
Composition and
Selection



Phase 4

Chapters, Volunteers and Others

Review and Improve
Governance Effectiveness
of these Structures

← Sep 20 – Jan 21

Jan 21 – June 21

June 21 – Jan 22

Jan 22 – May 22 →



DRAFT TIMED GOVERNANCE WORKPLAN

Professional Engineers of Ontario

September 11, 2020

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PEO TIMED GOVERNANCE WORK PLAN

GSI uses this four-step culture change process to implement the Governance Roadmap: dialogue to reach agreement, structure to embed and formalize, orientation to build awareness, and education to build deep understanding and ongoing commitment.

The two-year plan tackles the key recommendations from the Governance Roadmap in four seasonal phases: first Policies (roles, responsibilities and conduct of Council), then Committees, a refresh at the June 2021 retreat, then Council renewal, and finally Chapters, Volunteers, and others.

So, for each phase, we go through the transformation tool once, so four times in the two years.

This is an ambitious work plan and will call for perseverance to stay on track.

WHO WILL DO WHAT?

- GSI will lead the governance change process, proposing activities, changes and implementation.
- PEO's Executive Committee will oversee the process, directing GSI and staff, and deciding what to take to Council, when and how. The Executive Committee will give GSI direction on which steps to take and when; GSI will be proactive in proposing next steps throughout the project.
- PEO's Council will approve all final decisions on governance, including structure and documentation.
- GSI will "hold the pen" at each step, generally drafting content and documentation: specifics are in this Timed Workplan.
- There are places where PEO has the option to ask GSI to play a greater role – examples are in the CEO evaluation, management succession plan, governance content for website, enhanced orientation and development programs (i.e. production of a series of videos, case studies and interviews is "enhanced"; basic orientation and development one-time sessions are included). Costing quotes include these.
- PEO's senior staff will collaborate with GSI, providing input and comment at each step, and fulfilling any other responsibilities beyond those specifically delegated to GSI or completed by volunteers. Over time, it is the intent for GSI to help to train staff members to take over some of these governance-related responsibilities.
- Staff and the President will liaise with their provincial government counterparts throughout each phase of the project – updating them on the process and facilitating necessary changes to the Act, Regulations, and Bylaws.

PHASE 1: REVIEWING AND IMPROVING THE GOVERNANCE EFFECTIVENESS OF PEO'S COUNCIL THROUGH REGULATORY AND GOVERNANCE POLICIES

Phase 1 Activities and Outputs	Actions	Meeting	Key Date
Dialogue and Structure	Development	(GSI)	Aug 31
A Timed Workplan – incorporating the governance roadmap and the SPTF and EDTF studies – is developed by GSI, discussed at EXE and Council, with input and feedback to GSI, revisions by GSI, and	Dialogue and Review Draft	Executive Committee	Sept 8
	Revisions	(GSI)	Sept 11

Phase 1 Activities and Outputs	Actions	Meeting	Key Date
ultimately ratification by Council. (The Workplan will be reviewed and updated at the end of each Phase of the project).	Dialogue and Review Draft	Strategic Conversation	Sept 12
	Revisions	(GSI)	Sept 17
	Ratification	Council	Sept 25
	Final Revisions	(GSI)	Oct 2
<p>Dialogue</p> <p>GSI will facilitate a dialogue and ultimately a decision on what good governance looks like when it comes to Council's roles and responsibilities, vs. those of staff and others. One "non-negotiable" throughout is the principle of PEO being a self-governing body, with the profession retaining responsibility for regulating the profession ("self-regulation") and deciding on the best governance choices.</p> <p>The dialogue for all 4 phases begins in phase 1 (fall 2020) due to the inter-related aspects of all 4 areas.</p> <p>Primarily, what we are seeking here, is Council's agreement in principle that it aspires to be a "governing" type body, not an "operating" or "intervening" type body. This direction affects every major decision in governance over the next two years:</p> <ul style="list-style-type: none"> • A "governing" type Council would arrange its agendas and meetings (and its terms of reference and work plan) to focus on governance: setting PEO's direction and gaining reasonable assurance that PEO is headed in that direction (regulatory and corporate governance) • Operational matters would largely be delegated to a Committee and/or responsible staff for their diligence review and subsequently brought to Council for final approval once the relevant Committee or staff recommend that • Policies (phase 1) would reflect this: the President's Terms of Reference would focus on their role in leading Council in effective governance; the CEO/Registrar's Terms of Reference and Delegation of Authority would reflect a delegation of operational authority to the CEO from Council 	Development	(GSI)	Aug 31
	Dialogue and Review Draft	Executive Committee	Sept 8
	Revisions	(GSI)	Sept 11
	Dialogue and Review Draft	Strategic Conversation	Sept 12
	Revisions	(GSI)	Sept 17
	Agreement in Principle	Council	Sept 25
	Final Revisions	(GSI)	Oct 2

Phase 1 Activities and Outputs	Actions	Meeting	Key Date
<ul style="list-style-type: none"> Committees would reflect this (phase 2): Council would use a small number of “governance” type committees to undertake delegated diligence in oversight matters; PEO would use core Regulatory Committees to fulfill its regulatory mandate and function; other committees would align with mandate and function Council’s renewal, composition and selection would reflect this (phase 3): a Competencies and Attributes Matrix would identify sought after qualities in Council members and a process would be put in place to meet these aspirations Chapters, Committee volunteers and other organs of PEO would reflect this (phase 4): the role of Chapters and Committee volunteers would align with the new governance model and in terms of supporting PEO’s vision and strategy 			
<p>Structure</p> <p>Council Charter (Council’s description of its scope and responsibilities – Governing vs. Operating Board) is developed by GSI, discussed at EXE and Council, with input and feedback to GSI, revisions by GSI, and ultimately ratification by Council.</p> <p>GSI will use these as inputs:</p> <ul style="list-style-type: none"> The Professional Engineers Act Relevant Regulations and Bylaws Best practices in Council/board charters Current practices EXE and Council’s input and feedback 	Development	(GSI)	Aug 31
	Dialogue and Review Draft	Executive Committee	Oct 6
	Revisions	(GSI)	Oct 15
	Dialogue and Review Draft	Strategic Conversation	Oct 17
	Revisions	(GSI)	Oct 23
	Decision	Council	Nov 13
	Final Revisions	(GSI)	Nov 18
<p>Structure</p> <p>President’s Terms of Reference (description of their role and responsibilities) is developed by GSI, discussed at EXE and Council, with input and feedback to GSI, revisions by GSI, and ultimately ratification by Council.</p> <p>GSI will begin with relevant references in the Act and Bylaws (not many) and its own experience and understanding of best practices.</p>	Development	(GSI)	Aug 31
	Dialogue and Review Draft	Executive Committee	Oct 6
	Revisions	(GSI)	Oct 15
	Dialogue and Review Draft	Strategic Conversation	Oct 17
	Revisions	(GSI)	Oct 23

Phase 1 Activities and Outputs	Actions	Meeting	Key Date
EXE and Council will want to consider any roles for the President beyond Chairing and leading Council and PEO's governance, e.g. external roles, with the profession, government, the public, other organizations (regulators and associations).	Decision	Council	Nov 13
	Final Revisions	(GSI)	Nov 18
<p>Structure</p> <p>Effective Parliamentary Rules of Order for PEO Council are researched, discussed, and approved.</p> <p>GSI's Parliamentarian will provide expert advice on which rules of order would work best for PEO, and how Council meetings can best be conducted.</p> <p>GSI will develop an approach and alternatives, and a recommended path forward, for EXE and Council to consider, provide input and feedback.</p> <p>GSI will work with the President, on an ongoing basis, to revise the agenda management process.</p> <p>As a result of this, GSI will revise (or develop new) Policies related to conducting meetings at PEO, including:</p> <ul style="list-style-type: none"> • Electronic Meetings Protocol • In camera sessions Protocol <p>[There is a placeholder for an additional cycle of Strategic Conversations and EXE in October-November which may be necessary due to the sheer quantity of governance changes being considered in these months.]</p>	Development	(GSI)	Sept 28
	Dialogue and Review Draft	Executive Committee	Oct 6
	Revisions	(GSI)	Oct 15
	Dialogue and Review Draft	Strategic Conversation	Nov 7
	Revisions	(GSI)	Nov 10
	Decision	Council	Nov 13
	Final Revisions	(GSI)	Nov 18
<p>Structure</p> <p>A Code of Conduct (including core aspects of culture including anti-racism) is developed by GSI, discussed at EXE and Council, with input and feedback to GSI, revisions by GSI, and ultimately approval by Council.</p> <p>This will include integrating recent changes to <i>the Ontario Not-for-Profit Corporations Act</i> related to conflicts of interest.</p> <p>This step is intended to clarify conduct expectations of Councillors, and to embed these in relevant policies and documentation.</p>	Development	(GSI)	Sept 28
	Dialogue and Review Draft	Executive Committee	Oct 6
	Revisions	(GSI)	Oct 15
	Dialogue and Review Draft	Strategic Conversation	Nov 7
	Revisions	(GSI)	Nov 10
	Decision	Council	Nov 13

Phase 1 Activities and Outputs	Actions	Meeting	Key Date
<p>There are potentially a suite of policies affected by this, including:</p> <ul style="list-style-type: none"> • Conflict of Interest Policy • Volunteers Code of Conduct / Conflict of Interest • Confidentiality • Attendance • Remedies 	Final Revisions	(GSI)	Nov 18
<p>Structure</p> <p>A policy to deal with member-initiated and Councillor submissions both at the AGM and throughout the year is developed by GSI, discussed at EXE and Council, with input and feedback to GSI, revisions by GSI, and ultimately approval by Council.</p> <p>While Council adopted a revised practice last year, the old written Protocol is still in place, that essentially gives a direct path onto Council agendas.</p> <p>In a governing Council, operational matters would largely be delegated to a Committee and/or responsible staff for their diligence review and subsequently brought to Council for final approval once the relevant Committee or staff recommend that.</p> <p>This policy would be aligned with PEO's Activity Filter, which allows the Council to focus on its regulatory and membership duties.</p>	Development	(GSI)	Sept 28
	Dialogue and Review Draft	Executive Committee	Oct 6
	Revisions	(GSI)	Oct 15
	Dialogue and Review Draft	Strategic Conversation	Nov 7
	Revisions	(GSI)	Nov 10
	Decision	Council	Nov 13
	Final Revisions	(GSI)	Nov 18
<p>Structure</p> <p>GSI would review all other Council-approved governance related policies, benchmarking these to best practices and to what PEO aspires to be in governance.</p> <p>Revised policies would be presented and discussed at EXE and Council, with input and feedback to GSI, and ultimately approval by Council.</p> <p>This will include integrating recent changes to <i>the Ontario Not-for-Profit Corporations Act</i> related to any of these policies.</p> <p>Examples of these remaining policies include:</p> <ul style="list-style-type: none"> • CEO/Registrar's Terms of Reference and 	Development	(GSI)	Dec 20
	Dialogue and Review Draft	Executive Committee	Jan 5
	Revisions	(GSI)	Jan 7
	Dialogue and Review Draft	Strategic Conversation	Jan 9
	Revisions	(GSI)	Jan 13
	Decision	Council	Jan 22
	Final Revisions	(GSI)	Jan 29

Phase 1 Activities and Outputs	Actions	Meeting	Key Date
<p>Delegation of Authorities to CEO from Council (this will include a review of signing authorities on contracts, process and controls)</p> <ul style="list-style-type: none"> • Procurement Policy • Investment Policy • Communications Protocol, including public and media relations, social media • Implications of the Emerging Disciplines Task Force to “enlarge” PEO’s tent to emerging and non-traditional disciplines • Appointment process to and relationships with external bodies (e.g. Engineers Canada, etc.) <p>[There is a placeholder for an additional cycle of Strategic Conversations and EXE in December-January, which may be necessary due to the sheer quantity of governance changes being considered in these months.]</p>			
<p>Orientation</p> <p>GSI will update PEO’s orientation program for Councillors and staff, including individuals interested in serving on Council, to integrate a clear understanding of updated Terms of Reference and other policy changes.</p>	Development	(GSI)	Sept 28
	Dialogue and Review Draft	Executive Committee	Oct 6
	Revisions	(GSI)	Oct 15
	Information and Dialogue	Committee Chairs Workshop	Oct 30
	Dialogue and Review Draft	Strategic Conversation	Nov 7
	Revisions	(GSI)	Nov 10
	Decision	Council	Nov 13
	Final Revisions	(GSI)	Nov 18
	Information and Dialogue	Chapter Leaders Conference	Nov 21
Education	Development	(GSI)	Dec 20

Phase 1 Activities and Outputs	Actions	Meeting	Key Date
<p>GSI will define a Councillor Training & Development Program and create & deliver the content - to include a cheat sheet on governance questions to ask, and to include live guidance during Council meetings to direct conversations towards governance.</p> <p>GSI will develop the outline of an education program for Council, senior staff and other relevant individuals is to imbed awareness and implementation of new and revised Terms of Reference and Policies across the organization, including meeting and agenda management.</p> <p>This will go beyond the “rules” (new documents, policies) to “tools” to help Councillors and staff optimize Council meetings and deliberations. For example, a guide for Councillors on asking great questions, on a “governing” vs. an “operating” Council, on strategic vs. operational matters, on the “line” between Council and staff, on the process for raising ideas and suggestions, on what is appropriate communication between meetings, and what belongs in the Council meeting itself.</p> <p>This phase will include refining the measures of success of the governance change process (including interim milestones as applicable).</p>	Dialogue and Review Draft	Executive Committee	Jan 5
	Revisions	(GSI)	Jan 7
	Dialogue and Review Draft	Strategic Conversation	Jan 9
	Revisions	(GSI)	Jan 13
	Decision	Council	Jan 22
	Final Revisions	(GSI)	Jan 29

PHASE 2: REVIEW AND IMPROVEMENT OF THE GOVERNANCE EFFECTIVENESS OF PEO'S COMMITTEES

Phase 2 Activities and Outputs	Actions	Meeting	Key Date
<p>Dialogue</p> <p>GSI will facilitate a dialogue and ultimately a decision on what good governance looks like for PEO's Committees.</p> <p>The dialogue for all 4 phases begins in phase 1 (fall 2020) due to the inter-related aspects of all 4 areas.</p> <p>GSI will conduct a review of current Committee structure, mandates, scopes, roles, authorities, responsibilities, accountabilities and governance, comparing these to best practices, and provide alternatives, pros and cons to EXE and Council.</p> <p>GSI will conduct a triage of Committees (staff is already working on this) using the Activity Filter, to create an initial sort of Governance, Regulatory and Other Committees.</p> <p>In this step, EXE and Council will discuss and agree in principle on a governance model for PEO's Committees, including criteria for Governance, Regulatory and Other Committees, and how committees are established in the future.</p> <p>While final structure decisions are the next steps, EXE and Council may be asked to agree on which committees support PEO's vision, and on criteria or an approach to determining which committees to keep, add, disband or merge.</p>	Development	(GSI)	Jan 25
	Dialogue and Review Draft	Executive Committee	Feb 2
	Revisions	(GSI)	Feb 4
	Dialogue and Review Draft	Strategic Conversation	Feb 6
	Revisions	(GSI)	Feb 17
	Decision	Council	Feb 26
	Final Revisions	(GSI)	Mar 5
<p>Formalize Governance Committees' structure:</p> <p>We will begin with those Committees designated as "Governance". These are committees that directly support Council's corporate governance role, by undertaking delegated diligence activities on behalf of Council. Therefore, these are usually standing committees of Council, populated wholly or largely by Councillors.</p> <p>Usually, these include committees responsible for Audit & Finance, Governance, Nominations & Elections, and sometimes Human Resources.</p>	Development	(GSI)	Jan 25
	Dialogue and Review Draft	Executive Committee	Feb 2
	Revisions	(GSI)	Feb 4
	Dialogue and Review Draft	Strategic Conversation	Feb 6
	Revisions	(GSI)	Feb 17
	Decision	Council	Feb 26

Phase 2 Activities and Outputs	Actions	Meeting	Key Date
<p>Currently, PEO committees in this category would likely include (note, GSI has not yet completed a formal triage):</p> <ul style="list-style-type: none"> • Audit Committee • Central Election and Search Committee (CESC) • Executive Committee • Finance Committee • Human Resources Committee • Legislation Committee <p>GSI would develop recommendations for EXE and Council discussion, input and feedback, and ultimately decisions, including on:</p> <ul style="list-style-type: none"> • Clarity is reached on who should serve on PEO Governance Committees and what competencies are needed (Council and/or non-Council members; competencies and/or elections/appointments). • Determination of whether Governance Committee members should be appointed and/or elected. • Governance Committee Terms of Reference and workplans • Transition plans are developed for Committees which are to be exited. 	Final Revisions	(GSI)	Mar 5
<p>Formalize Regulatory Committees' structure:</p> <p>We will look next at those Committees designated as "Regulatory". These are committees that fulfill regulatory and legislated mandates for PEO to regulate the profession. As such, they may be composed of individuals who are not Councillors, or they may include some Councillors (question of independence of the regulatory function).</p> <p>Typically, these would include committees responsible for Standards, Complaints, Investigations and Discipline.</p> <p>Currently, PEO committees in this category would likely include (note, GSI has not yet completed a formal triage):</p> <ul style="list-style-type: none"> • Academic Requirements Committee (ARC) • Consulting Engineer Designation Committee 	Development	(GSI)	Feb 25
	Dialogue and Review Draft	Executive Committee	Mar 2
	Revisions	(GSI)	Mar 4
	Dialogue and Review Draft	Strategic Conversation	Mar 6
	Revisions	(GSI)	Mar 17
	Decision	Council	Mar 26
	Final Revisions	(GSI)	Mar 31

Phase 2 Activities and Outputs	Actions	Meeting	Key Date
<p>(CEDC)</p> <ul style="list-style-type: none"> • Complaints Committee • Complaints Review Councillor • Discipline Committee • Enforcement Committee • Experience Requirements Committee • Licensing Committee • Professional Standards Committee • Registration Committee <p>GSI would develop recommendations for EXE and Council discussion, input and feedback, and ultimately decisions, including on:</p> <ul style="list-style-type: none"> • Clarity is reached on who should serve on PEO Regulatory Committees and what competencies are needed (Council and/or non-Council members; competencies and/or elections/appointments). • Determination of whether Regulatory Committee members should be appointed and/or elected. • Regulatory Committee Terms of Reference and workplans • Transition plans are developed for Committees which are to be exited. 			
<p>Formalize Other Committees' structure:</p> <p>We will look finally at those Committees designated as "Other". GSI will identify the current mandate and purpose of each, and recommend the "best fit" in PEO's new committee governance model.</p> <p>Often, these are ad hoc committees, task forces and working groups, with specified mandates and timelines. As such, their composition and reporting varies significantly. Often these are committees of the organization itself, accountable to the CEO, rather than being organs of Council. Often they are composed by volunteers, and less so by Councillors.</p> <p>Currently, PEO committees in this category would likely include (note, GSI has not yet completed a formal triage):</p> <ul style="list-style-type: none"> • 30 by 30 Task Force • Advisory Committee on Volunteers (ACV) 	Development	(GSI)	Mar 29
	Dialogue and Review Draft	Executive Committee	Apr 6
	Revisions	(GSI)	Apr 8
	Dialogue and Review Draft	Strategic Conversation	Apr 10
	Revisions	(GSI)	Apr 19
	Decision	Council	Apr 30
	Final Revisions	(GSI)	May 6

Phase 2 Activities and Outputs	Actions	Meeting	Key Date
<ul style="list-style-type: none"> Equity and Diversity Committee Education Committee Fees Mediation Committee Government Liaison Committee OSPE – PEO Joint Relations Committee PEO – OAA Joint Liaison Committee Regional Councillors Committee [like a Chapters advisory committee] Volunteer Leadership Conference Planning Committee (VLCPC) <p>GSI would develop recommendations for EXE and Council discussion, input and feedback, and ultimately decisions, including on:</p> <ul style="list-style-type: none"> Clarity is reached on who should serve on PEO Other Committees and what competencies are needed (Council and/or non-Council members; competencies and/or elections/appointments). Determination of whether Other Committee members should be appointed and/or elected. Other Committee Terms of Reference and workplans Transition plans are developed for Committees which are to be exited. 			
<p>Orientation</p> <p>An orientation program is developed for all those serving or seeking to serve on a PEO Committee.</p> <p>As with each phase, governance changes here may call for updates to the overall Council orientation program itself, which GSI will complete before the end of this phase.</p> <p>The June 2021 Council retreat provides the opportunity for us to orient new Councillors on the governance change journey and next steps, and for the full Council and senior staff to refresh, review and make any necessary revisions to the workplan. It is a time to validate, confirm and course correct.</p>	Development	(GSI)	Mar 29
	Dialogue and Review Draft	Executive Committee	Apr 6
	Revisions	(GSI)	Apr 8
	Dialogue and Review Draft	Strategic Conversation	Apr 10
	Revisions	(GSI)	Apr 19
	Decision	Council	Apr 30
	Final Revisions	(GSI)	May 6
	Information and Dialogue	Volunteer Leaders Conference &	May 13-14

Phase 2 Activities and Outputs	Actions	Meeting	Key Date
		AGM	
	Information and Dialogue	Council Workshop	June 24-26
<p>Education</p> <p>An education program is developed and implemented for Committee members to embed the new Committee structure and associated changes across the organization.</p> <p>As with each phase, governance changes here may call for updates to the overall Council education program, which GSI will complete before the end of this phase.</p>	Development	(GSI)	Mar 29
	Dialogue and Review Draft	Executive Committee	Apr 6
	Revisions	(GSI)	Apr 8
	Dialogue and Review Draft	Strategic Conversation	Apr 10
	Revisions	(GSI)	Apr 19
	Decision	Council	Apr 30
	Final Revisions	(GSI)	May 6

PHASE 3: REVIEWING AND IMPROVING THE GOVERNANCE EFFECTIVENESS OF THE PEO COUNCIL THROUGH A RENEWAL PROCESS (COMPOSITION AND SELECTION OF COUNCIL MEMBERS)

Phase 3 Activities and Outputs	Actions	Meeting	Key Date
<p>Dialogue</p> <p>GSI will facilitate a dialogue and ultimately a decision on what good governance looks like for PEO's Council's renewal (including composition and selection). One "non-negotiable" throughout is the principle of PEO being a self-governing body, with the profession retaining responsibility for regulating the profession ("self-regulation") and deciding on the best governance choices.</p> <p>The dialogue for all 4 phases begins in phase 1 (fall 2020) due to the inter-related aspects of all 4 areas.</p> <p>GSI will conduct a review of current practices, comparing these to best practices, and provide alternatives, pros and cons to EXE and Council.</p> <p>GSI will integrate the results and recommendations of the Succession Planning Task Force in this phase.</p> <p>This will focus on optimal composition and therefore selection of Council members, including (but not limited to) the following areas:</p> <ul style="list-style-type: none"> • review the size of Council • a review of the right balance of engineer and government-appointed members • review the desired level of diversity on Council, including gender, age, geography/region, race, Indigenous, ethnic/heritage and other identity considerations • review the terms/tenure for Council members and the President to determine if change is warranted • review how President is chosen, who is eligible, and how Committee Chairs are chosen 	Development	(GSI)	Aug 1, 2021
	Dialogue and Review Draft	Executive Committee	Sep 7
	Revisions	(GSI)	Sep 9
	Dialogue and Review Draft	Strategic Conversation	Sep 11
	Revisions	(GSI)	Sep 16
	Decision	Council	Sep 24
	Final Revisions	(GSI)	Oct 4
<p>Structure</p> <p>Once an agreement in principle has been reached in September, GSI will prepare the new governance structure and documents for Council renewal.</p> <p>These may require a Bylaw Amendment, not just</p>	Development	(GSI)	Sep 1
	Dialogue and Review Draft	Executive Committee	Oct 5
	Revisions	(GSI)	Oct 7

Phase 3 Activities and Outputs	Actions	Meeting	Key Date
<p>Council-level Policy changes. There may also be changes to Procedures, e.g. Voting Procedures and Election Publicity Procedures.</p> <p>GSI will develop a Council Member Competencies and Attributes Matrix, for both the short and long term, which will be discussed, input and feedback sought and incorporated, and ultimately approved.</p> <p>The appropriate PEO Committee will put in place steps to enable and govern the new selection process for Council members, the President and Committee Chairs, with GSI's assistance.</p> <p>Concurrent with this step:</p> <ul style="list-style-type: none"> • PEO's HR Committee will work on an enhanced CEO evaluation and succession plan, and PEO's CEO will work on an enhanced management succession plan • GSI will research and present CEO/Registrar evaluation methodologies to the HR Committee • GSI will provide input to HRC on CEO/Management Succession Plan. • The HR Committee will adopt enhanced CEO/Registrar evaluation and succession plan, and review the CEO's succession plan for staff beyond the CEO. 	Dialogue and Review Draft	Strategic Conversation	Oct 9
	Revisions	(GSI)	Nov 1
	Decision	Council	Nov 19
	Final Revisions	(GSI)	Nov 25
<p>Orientation</p> <p>There will be significant changes to PEO's Councillor Orientation program as a result of governance changes to Council renewal, potentially including composition and selection changes.</p> <p>GSI will develop revisions to PEO's Councillor Orientation program including a pre-nomination Orientation item/session for individuals interested in becoming Council members. This will incorporate the agreed governance model from the first three phases, so that individuals understand the roles, responsibilities, accountabilities and governance of Council prior to seeking nomination.</p>	Development	(GSI)	Sep 1
	Dialogue and Review Draft	Executive Committee	Oct 5
	Revisions	(GSI)	Oct 7
	Dialogue and Review Draft	Strategic Conversation	Oct 9
	Information and Dialogue	Committee Chairs Workshop	Oct
	Revisions	(GSI)	Nov 1
	Decision	Council	Nov 19

Phase 3 Activities and Outputs	Actions	Meeting	Key Date
	Information and Dialogue	Chapter Leaders Conference	Nov 20
	Final Revisions	(GSI)	Nov 25
Education The Education program for Council and senior staff to embed the Council structure and renewal changes across the organization is ongoing. As with each phase, governance changes here may call for updates to the overall Council education program, which GSI will complete before the end of this phase.	Development	(GSI)	December 2021
	Dialogue and Review Draft	Executive Committee	Jan 2022
	Revisions	(GSI)	Jan 2022
	Dialogue and Review Draft	Strategic Conversation	Jan 2022
	Revisions	(GSI)	Jan 2022
	Decision	Council	Jan 2022
	Final Revisions	(GSI)	Jan 2022

PHASE 4: REVIEWING AND IMPROVING THE GOVERNANCE EFFECTIVENESS OF PEO'S CHAPTERS, COMMITTEE VOLUNTEERS AND OTHER COMPONENTS OF PEO.

Phase 4 Activities and Outputs	Actions	Meeting	Key Date
<p>Dialogue</p> <p>GSI will facilitate a dialogue and ultimately a decision on what good governance looks like for PEO's Chapters, Committee volunteers and other organs of PEO.</p> <p>The dialogue for all 4 phases begins in phase 1 (fall 2020) due to the inter-related aspects of all 4 areas.</p> <p>GSI will review the roles and scope, mandates, membership, etc. of the Chapters, Committee volunteers and other organs.</p> <p>GSI will consult throughout the project with key Chapter and volunteer leaders to gain a clear understanding of current practices, alternatives, pros and cons.</p> <p>GSI will develop recommendations for EXE and Council to consider, based on best practices and enhancements.</p>	Development	(GSI)	Jan 2022
	Dialogue and Review Draft	Executive Committee	Feb 2022
	Revisions	(GSI)	Feb 2022
	Dialogue and Review Draft	Strategic Conversation	Feb 2022
	Revisions	(GSI)	Feb 2022
	Decision	Council	Feb 2022
	Final Revisions	(GSI)	Mar 2022
<p>Evaluation</p> <p>Evaluation of Council's governance effectiveness (replicating the January/February 2020 baseline diagnostic)</p> <p>At this point, prior to the end of the two-year engagement, GSI will conduct the same diagnostic instrument as PEO used in January/February 2020, to evaluate the effectiveness of governance changes to date.</p> <p>Here is what the approved (August 2020) Governance Change document calls for:</p> <p>By the end of this initial two-year change period, the measurable milestone is for PEO to have more effective governance, measured by conducting an identical Diagnostic self-assessment survey, resulting in an updated Governance Scorecard. The objective would be to achieve better than satisfactory ratings (3.5/5 or higher) in every area of governance (by end of two years), and ultimately to meet or achieve the</p>	Development	(GSI)	Jan 2022
	Dialogue and Review Draft	Executive Committee	Feb 2022
	Revisions	(GSI)	Feb 2022
	Dialogue and Review Draft	Strategic Conversation	Feb 2022
	Revisions	(GSI)	Feb 2022
	Decision	Council	Mar 2022
	Final Revisions	(GSI)	Apr 2022

Phase 4 Activities and Outputs	Actions	Meeting	Key Date
<p>Comparator Organizations' benchmarks (final column in Scorecard; may take further iterations to reach these.)</p> <p>In addition to this, GSI will be conducting post-meeting evaluation feedback surveys among participants after every regular Council meeting. GSI will be tracking and reporting on progress with these core criteria of effectiveness too.</p> <p>Other diagnostics may be added to measure the success of the governance change project to this point.</p> <p>Findings will be used to inform next steps beyond this two-year work plan, for example, to what extent would Council and PEO benefit from external professional governance expertise after May 2022?</p>			
Structure	Development	(GSI)	Feb 2022
Structural changes to PEO's Chapters and Volunteers are formalized	Dialogue and Review Draft	Executive Committee	Mar 2022
Once an agreement in principle has been reached in February, GSI will prepare the new governance structure and documents to enable the agreed role of Chapters, Committee volunteers and other organs in PEO's governance.	Revisions	(GSI)	Mar 2022
	Dialogue and Review Draft	Strategic Conversation	Mar 2022
For example, Chapters and Volunteers may have new Terms of Reference (charter documents) dealing with their mandates, scope, composition, authority, responsibilities, accountabilities, reporting and governance.	Revisions	(GSI)	Mar 2022
	Decision	Council	Mar 2022
The Volunteer Code of Conduct/Conflict of Interest may need to be revised, as may other governance documents.	Final Revisions	(GSI)	Apr 2022
Orientation	Development	(GSI)	Mar 2022
An orientation program with respect to the roles and responsibilities of PEO's Chapters and committee volunteers is developed and implemented.	Dialogue and Review Draft	Executive Committee	Apr 2022
Once the structure and documentation changes are in place, GSI will develop a brief orientation program for Chapter members and volunteers to introduce their roles, responsibilities, accountabilities and	Revisions	(GSI)	Apr 2022
	Dialogue and Review Draft	Strategic Conversation	Apr 2022

Phase 4 Activities and Outputs	Actions	Meeting	Key Date
<p>governance.</p> <p>EXE and Council will have the opportunity to review and discuss this orientation program, providing their input and feedback to GSI, prior to its Decision by Council and implementation by PEO.</p> <p>As with each phase, governance changes here may call for updates to the overall Council orientation program itself, which GSI will complete before the end of this phase.</p>	Revisions	(GSI)	Apr 2022
	Decision	Council	Apr 2022
	Information and Dialogue	Volunteer Leaders Conference	May 2022
	Final Revisions	(GSI)	May 2022
	Celebration	AGM	May 2022
	Information and Dialogue	Council Workshop	June 2022
<p>Education</p> <p>An education program for Council, senior staff and other relevant individuals is developed by GSI and implemented by PEO to imbed the Chapter and Committee volunteer changes across the organization.</p> <p>As with each phase, governance changes here may call for updates to the overall Council education program, which GSI will complete before the end of this phase.</p>	Development	(GSI)	Mar 2022
	Dialogue and Review Draft	Executive Committee	Apr 2022
	Revisions	(GSI)	Apr 2022
	Dialogue and Review Draft	Strategic Conversation	Apr 2022
	Revisions	(GSI)	Apr 2022
	Decision	Council	Apr 2022
	Final Revisions	(GSI)	May 2022

Note: the PEO Visioning process, any updates to the Strategic Plan, and the honing of Risk and Performance Metrics (Scorecard) need to be integrated into this timeline but are not included here because they lie outside the scope of GSI's governance change mandate.

ABOUT GOVERNANCE SOLUTIONS

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Briefing Note–Decision– By-Law Change

C-536-2.4

BY-LAW CHANGE – NATIONAL PROFESSIONAL PRACTICE EXAMINATION - FEE INCREASES

Purpose: To approve a renaming of the Professional Practice Examination in by-Law No. 1, and to increase the fee by \$25.50 to \$225.50 in 2020 and by 2.5% in future years until 2024.

Motion(s) to consider: (requires a 2/3 majority of votes cast to carry)

To amend s.39(22)a. of By-Law No. 1 as follows, effective as per the listed dates below:

- a. **For each writing of the National Professional Practice Examination or equivalent examination that is approved for this purpose,**
\$225.50 as of November 1, 2020;
\$231.14 as of November 1, 2021,
\$236.92 as of November 1, 2022, and
\$242.84 as of November 1, 2023.

[Professional Engineers Act, s. 8(1)16.]

Prepared by: J. Max/B.Ennis, Tribunals & Regulatory Affairs Department

Moved by: L.MacCumber, P.Eng., Chair, Legislation Committee

1. Need for PEO Action

- In March 2020, PEO Council agreed that PEO should become a partner in the National Professional Practice Examination (NPPE) program. The NPPE is administered by the Association of Professional Engineers and Geoscientists of Alberta (APEGA) and operated by Yardstick (see C-532-2.3.) Accordingly, PEO has transferred responsibility for the administration of the NPPE for Ontario applicants to APEGA effective June 1 2020, following PEO's signing of the Memorandum of Understanding and Service Level Agreement on April 1, 2020.
- Because we are now using the NPPE, and to give us flexibility in the future, we need to revise the by-law so that it refers to "National Professional Practice Examination or equivalent examination" instead of our proprietary "Professional Practice Examination".
- In its current form the by-law also specifies a PPE fee of \$200 per sitting. The fee charged to NPPE member associations for each applicant sitting the examination is fixed by a schedule in the NPPE agreement. The fee for 2021 for a 3-hour NPPE computer-based testing at a Yardstick testing centre is \$225.50. Hence, PEO must increase the fee charged to applicants to \$225.50. This fee will increase annually by 2.5% as set out in the schedule until the end of 2024 (\$231.14 in 2022, \$236.92 in 2023 and \$242.84 in 2024).
- The fee change must be made before the November 1st registration opening for the January 2021 NPPE sitting. If approved, fee increases will take effect on November 1, 2020 and on each subsequent November 1 up to and including November 1, 2023. In

2023 or 2024, assuming the NPPE remains in place, we anticipate that Council will again be asked to approve fees for subsequent years.

2. Proposed Action / Recommendation

- These changes will authorize PEO to charge the NPPE fee at a rate that covers PEO's costs charged to it by APEGA.
- The proposed fee for the NPPE is revenue neutral in relation to the examination itself. That is, we will charge the same \$225.50 for the exam that we are charged by APEGA in 2021.
- While the new fee will be revenue neutral, it is also important to again note that the previous PPE fee significantly exceeded the cost for PEO to administer it. In 2019 the total cost for the PPE (including salaries and benefits for 2 FT) was \$385,554 but the revenue was \$994,655. This discrepancy was understood when Council approved the change to the NPPE in March 2020. The fee increase does not address the difference in lost revenue, but does reflect a principled approach to the charging of fees for examinations.
- Under s.8(1) of the Act, Council has the authority to pass by-laws within the specified powers, in particular, paragraph 16, which states
 - 16. specifying the amount and requiring the payment of,...
 - ii. fees for registration, designations, examinations and continuing education

3. Next Steps (if motion approved)

- PEO will amend the By-Law to reflect the intended changes and publish the revised version of the By-Law on its website.
- PEO will increase the NPPE fee to \$225.50 as of November 1st (the first date to register for the first 2021 NPPE sitting) and applicants will pay the new fee from that point on. Each November following, the fee will increase to the amounts specified in the amended By-Law.

4. Policy or Program contribution to the Strategic Plan

- This program will contribute to the furtherance of Strategic Objective 6:
 - Augment the applicant and licence holder experience—PEO will remove any perceived barriers and friction points between itself and its applicants and licence holders, and build “customer satisfaction” into all its regulatory processes and initiatives.

5. Financial Impact on PEO Budgets (for five years)

	Operating	Capital	Explanation
Current to Year End	\$0	\$0	
2 nd	\$0	\$0	The increased fee is a “pass through”, since the increased revenue (\$25.50 per applicant attempt) is forwarded to APEGA

3 rd	\$0	\$0	
4 th	\$0	\$0	
5 th	\$0	\$0	

6. Peer Review & Process Followed

Process Followed	<p>Outline the Policy Development Process followed.</p> <ul style="list-style-type: none"> At its March 20, 2020 meeting, Council passed the following motion: That Council approve the proposal to use the National Professional Practice Examination in place of the current PEO administered Professional Practice Examination and direct the Registrar to implement the operational changes needed to join the National Professional Practice Examination program. The NPPE Fee Schedule signed with APEGA on April 1, 2020 includes an increase to the NPPE sitting fee to \$225.50 as of January 1, 2021 and similar 2.5% increases each subsequent year until 2024. Using the By-Law Change Protocol, the By-Law change was drafted by staff and reviewed and approved by the Legislation Committee at its August 28, 2020 meeting. As a further draft of the by-law was required to address future increases, as per the NPPE Fee schedule, through 2024. LEC was consulted for the revision on September 2, 2020 and did not oppose the revision.
Council Identified Review	<p>Identify who is to be consulted; how they will be consulted and what kind of response is expected.</p> <ul style="list-style-type: none"> This is an operational matter within the purview of the CEO/Registrar, and hence no consultation is required
Actual Motion Review	<p>Detail peer review and relevant stakeholder review undertaken</p> <ul style="list-style-type: none"> The motion was reviewed and approved by the Chair of the Legislation Committee

7. Appendices

- Appendix A – Draft By-Law No. 1 Amendment to Paragraph 39(22)a.

C-536-2.4 Appendix A

Proposed New Wording of By-Law No. 1, Paragraph 39(22)a.

39(22) A person shall pay the following fees in relation to examinations, which are non-refundable except for the fee set out in Section e.:

- a. For each writing of the National Professional Practice Examination or equivalent examination that is approved for this purpose,
 - \$225.50 as of November 1, 2020;
 - \$231.14 as of November 1, 2021,
 - \$236.92 as of November 1, 2022, and
 - \$242.84 as of November 1, 2023.

Briefing Note – Decision

Proposal: Update the Licensure model to be inclusive and accommodating for self-employed engineering graduates and PEO applicants including innovators and entrepreneurs.

Purpose: This proposal is to resolve the issue and enable self-employed innovative and entrepreneurial engineering graduates and PEO applicants to demonstrate their suitability for the P.Eng. licence and Certificate of Authorization so that they may practice professional engineering and/or sell their engineering services.

Motion(s) to consider: (requires majority of votes cast to carry)

PEO staff to investigate and report back to Council by January 2021 on the extent of engineering graduates who become entrepreneurs or self-employed in Ontario and alternative pathways to the experience requirements that do not require a minimum of one year supervision by a P.Eng.

Prepared by: Tapan Das, Ph.D., P.Eng., FEC; Joe Podrebarac, P.Eng., PMP, FEC; Ray Barton, Ph.D.

Moved by: Mr. Randy Walker, P.Eng., FEC, Eastern Region Senior Councillor.

Need for PEO Action

PEO needs to change the current requirement of an applicant to work under a P.Eng. supervisor for minimum one year to qualify for licensure since self-employed engineers have no P.Eng. supervisors. As PEO enters its 100th year of existence to protect the public through self-regulation and licensure of engineering graduates, there is a need to update the licensure model to be inclusive of the coming reality of the increase in self-employed/entrepreneur engineering graduates and PEO applicants for licensure. The construct of an employee engineering intern working under the supervision of a licensed Professional Engineer for a minimum of one year in order for the P.Eng. to attest to that intern's practice experience over a four year term is fading to the detriment of the public. PEO needs to undertake an update and amendment to how applicants meet the experience requirements for licence in order to be relevant today and in the future to how applicants are obtaining their work experience.

Currently only 30% of engineering graduates are able to find employment in their field of study. Others are either emigrating out of Ontario or starting their own business by innovation and entrepreneurship. However, they have a problem as they cannot do engineering work, and selling their engineering services without being licensed by PEO.

For further perspective, the attached paper entitled, *Licensure for innovators*, defines the problem and has been shared with the PEO licensing committee.

PEO currently has a Monitor as Referee program to provide an alternative for an engineering intern or provisional licence holder who does not have direct supervision of a P.Eng. licence holder (see Guide to the required experience for licensing, section 2.5.2). However, this program does not support the work situation of a self-employed, entrepreneur applicant for the following

reasons. The Monitor as Referee requires the Monitor to assume responsibility for the engineering work of the EIT or provisional licence holder and,

- to commit to at least 30 hours a month to be onsite at the EIT's or provisional licence holder's work location
- to develop a monitoring agreement on liability and confidentiality with the work supervisor and senior officer of the EIT's or provisional licence holder's workplace

However, these expectations cannot be met when the entrepreneur cannot risk the confidentiality exposure to have an external P.Eng. monitor be on their worksite and with access to their unique work product, their proprietary information and/or patentable ideas, and if they are self-employed will not have a work supervisor or senior corporate officer of their workplace.

1. Proposed Action / Recommendation

The proposed action is to find alternatives to the current P.Eng. licence experience requirement to work under a P.Eng. supervisor for a minimum of one year. One alternative could model the PEO Ottawa Chapter program that currently arranges individuals who have their P.Eng. licence to volunteer as referees to self-employed engineering graduates. These referees are experienced licensed engineers who advise the graduates on the PEO regulatory requirements for the practice of professional engineering, including the protection of public welfare and ethics, evaluate the engineering graduate's work and provide mentorship as might be experienced in an employee-employer relationship. This program would benefit from PEO guidelines for the P.Eng. referees.

This approach and potentially others would enable entrepreneurial engineering graduates to have a pathway to meet the experience requirements for the P.Eng. licence, and if successful, to eventually sell their products and services for the employment and economic benefit of Ontario (assuming they also meet the regulatory requirements for a Certificate of Authorization to provide engineering services). Engineering graduate entrepreneurs today are many of the brightest and talented young professionals in Ontario. They are self-employed, have started their own companies and are innovating products and services in the public interest.

2. Next Steps (if motion approved)

If the motion is approved, the motion would be put through PEO's activity filter. Since this is a licensing motion, it would likely be determined to fall into Group A as it relates to PEO's professional regulation category.

PEO staff would then be requested to investigate the problem statement, investigate policy alternatives and report back to PEO Council on their analysis at the January 2021 meeting.

It is anticipated that PEO staff would collect information from PEO's licensing committee and PEO's experience requirements committee who have already been discussing this problem.

It is anticipated that PEO staff would also include in their problem investigation and analysis the scenario of engineering graduates who are employed in organizations without any P.Eng. staff to provide them supervision.

PEO Council has the regulatory authority to recommend to the Ontario government amendments to its regulations. The experience requirements for applicants are prescribed by Regulation 941 for the issuance of the licence.

4. Policy or Program contribution to the Strategic Plan

The proposed policy work will help advance the following components of PEO's 2018-2020 strategic plan, to both advance PEO's mission and engage stakeholders:

- 4.2.3. Create a seamless transition from student member to EIT to license holder
- 4.1.2. Increase influence in matters regarding the regulation of the profession, by advancing the economic interests of Ontario and Ontarians with licensed engineering entrepreneurs to create new products and services for Ontario
- 4.2.1 Augment the applicant and licence holder experience, by addresses the current barriers for engineering graduates who have the academic requirements for licence (qualified by PEO's CEAB accreditation system) but cannot meet the experience requirements for license since they are self-employed

5. Financial Impact on PEO Budgets (for five years)

	Operating	Capital	Explanation
Current to Year End	\$0	\$00.00	The policy analysis and development work would be undertaken by PEO staff possibly in collaboration with PEO committees, so no additional costs would be incurred.
2 nd	\$0	\$00.00	
3 rd	\$0	\$00.00	
4 th	\$00.00	\$00.00	
5 th	\$00.00	\$00.00	

6. Peer Review & Process Followed

As this motion identifies a problem and requests policy development work from PEO staff, the information requested below is premature to this motion.

Process Followed	<p>Outline the Policy Development Process followed.</p> <p>The Licensing Committee has conducted significant consultation over the past few years. This work can be used as input to the motion for staff to conduct the policy development work.</p>
Council Identified Review	<p>Identify who is to be consulted; how they will be consulted and what kind of response is expected.</p> <p>The problem statement has been identified by the Ottawa Chapter of PEO, which is the largest chapter in Ontario with over 8500 members. The chapter's insights to the problem could be included in the consultation along with Engineering Deans Ontario.</p>
Actual Motion Review	<p>Detail peer review and relevant stakeholder review undertaken</p> <p>Motion reviewed by the PEO licensing committee and the Ottawa Chapter.</p>

7. Appendices

- Appendix A – Licensure for Innovators whitepaper

References:

1. Ottawa Chapter launches Entrepreneurship Program, Michael Mastromatteo, Engineering Dimensions, Nov., Dec. 2015.
2. Inspiring innovation and entrepreneurship within PEO's Ottawa Chapter, Tapan Das, Engineering Dimensions, Sept./Oct. 2016.
3. Innovative solutions, Tapan Das, Letters Engineering Dimensions, Sept./Oct. 2017.

Licensure for Innovators

Abstract:

This article describes the process by which an innovator with an engineering degree from a Canadian University pursuing to create a product or service can qualify to be a licensed engineer by receiving P.Eng.

Introduction:

Innovation and entrepreneurship are tightly linked to each other. Entrepreneurship is characterized by innovation and risk-taking, and is an essential part of a nation's ability to succeed in an ever-changing and increasingly competitive global marketplace. Invention can be defined as the creation of a product or introduction of a process for the first time. Whereas innovation occurs if someone improves on *or* makes a significant contribution to an existing product, process or service.

Canada remains near the bottom of its peer group in innovation, ranking 15th among 20 developed countries. The report says countries with the highest overall scores have successfully developed national strategies around innovation, giving them a substantial lead over their peers in one or more areas. Ireland has seen enormous success as a host for leading innovative companies; the U.S. fosters a combination of top science and engineering faculties, broad and deep capital markets, and an entrepreneurial culture; and Switzerland, the top-ranked country, is a leader in the pharmaceuticals industry.

Innovation and entrepreneurship are absolutely essential for the economic survival of any country. Innovations are growing at an exponential rate. They must be properly regulated, otherwise they would cause enormous damage to the society. PEO must play its regulatory role to monitor these innovations and guide the innovators and entrepreneurs to meet the engineering regulations for safety and security of the society. If the product of an innovator creates some danger to the society then PEO as regulator will be blamed. As a professional engineering organization, PEO must actively get involved with innovation for its own validity and survival.

Ottawa Chapter Innovation/Entrepreneurship Program:

Ottawa PEO chapter launched an innovation/entrepreneurship program to encourage and support engineers in Ottawa chapter and engineering students in Ottawa universities to innovate and create businesses for economic and job growth in Ottawa area. A pilot program was launched in June 23, 2015 with the approval of the chapter board to check the feasibility of

the program. Initial work was to find out what resources are available in Ottawa to support the program. Our current resources to support the program are:

- Carleton University with Lead to Win program
- University of Ottawa with Startup Garage to provide space, computer lab, equipment including 3D printer, entrepreneurship and mentoring.
- Invest Ottawa with business seminars and workshops, business and financing advice, and mentorship.
- L-Spark with late stage VC support for enterprise software that is cloud and SaaS based.
- Futurpreneur Canada with finance and mentoring.
- Vitesse providing facilities for networking of innovators, successful entrepreneurs, facilitators from the resources.
- Dunn Engineering helping development of electrical/electronic products and systems.

Following a successful three-month pilot run, the program was officially launched as PEO's Ottawa Chapter Entrepreneurship Program in a meeting on September 30, 2015. The chapter welcomed PEO President Thomas Chong, PEO Registrar Gerard McDonald, Ontario Society of Professional Engineers (OSPE) CEO Sandra Perruzza, OSPE Vice Chair Michael Monette, and Ottawa Councilor Marianne Wilkinson at the meeting. President Chong hailed the program as one that will help shift our economy into high gear again by restoring growth, boosting employment, bringing back Ontario's leadership in high technology, and moving the country away from resource dependency. Councilor Wilkinson praised it as "lead to win" entrepreneurship program.

We currently have 23 entrepreneurs and 3 mentors enrolled in the program. Nine of them have successfully launched their start up businesses. To encourage innovation among the engineers and engineering students, the program is now giving innovation challenges to engineers and engineering students in Ottawa. In 2017 we challenged local engineers and engineering students to innovate and come up with a solution to remove carbon dioxide from the atmosphere, which is very high, greater than 400 parts per million and increasing. Six competitors including engineers, graduate students and aspiring entrepreneurs pitched their product ideas and solutions to a panel of six judges consisting of university professors and industry experts. The second challenge in 2018 was to innovate an economic, portable and standalone water purifier to convert rain and dirty water into drinkable water. There is disastrous shortage of drinkable water in Africa and South Asia. This solution will be a life saver for the people there. There was tremendous response from the students and engineers. Seven teams were selected to present their solutions to a panel of judges and large audience. The third challenge in 2019 was to innovate solutions for tailings and mine waste management. The fourth challenge is on pedestrian safety in road intersection on May 11, 2020. Nine engineers

and students have been accepted to present their innovative solutions to a panel of judges and audience.

Engineering Jobs in Canada:

The current employment situation of engineers is abysmal.

- Only 30% of engineers are working in their applicable field of study.
- 35% of engineers are working outside their applicable field of study in jobs requiring degree.
- 35% engineers working in jobs not requiring degree.

Internationally trained engineers face much bigger problem. Recent engineering graduates are having difficulty in acquiring experience and becoming licensed engineers because of scarcity of entry level engineering positions. Students will be studying in other areas instead of engineering that will hurt Canada's economy and PEO licensure.

Licensing Process for Innovative Engineers:

Now let us see how an innovative engineer can qualify for P.Eng. license.

Section 2.1 of the *Guide to the Required Experience for Licensing* published by PEO should include the following paragraph.

"In case of engineering experience from innovative work, the innovator must be an engineering graduate from a Canadian university. The innovator works to prove the innovative engineering idea to make it a successful product or process. Once the innovator has proven the idea, the innovator will start marketing the product or process by founding a company. Three monitors will check the innovator's work for safety, progress and quality. These monitors can start at any stage of innovation but must be before the innovator has founded the company. The monitors can be professors from the innovator's graduating university and/or any other engineering professionals who are willing to spend time as monitors. But they must be P.Eng. and familiar with the innovator's line of work. They can be arranged by the innovator and/or by PEO and PEO chapters."

Monitors of the innovator should check the criteria for acceptable experience mentioned in Section 2.2 of the PEO Guide. In case of innovator, all the criteria – Application of Theory (Sec. 2.2.1), Practical Experience (Sec. 2.2.2), Management of Engineering (Sec. 2.2.3), Communication Skills (Sec. 2.2.4), and Social Implications of Engineering (Sec. 2.2.4) are the sole responsibility of the innovator. Monitors can advise the innovator how and where the innovator can obtain these skills by undertaking courses and training.

C-536-2.5
Appendix A

Length of experience as mentioned in the Section 2.3 of the Guide could be reduced to less than 4 years if the innovator has managed to design, prove and market the innovated product in that time.

The monitors should carry out the responsibilities as mentioned in Sec. 2.5.2 of the Guide as follows.

1. Meet with the applicant as agreed.
2. Ensure the projects assigned to the intern are within a level that provides the innovator with engineering experience sufficient for licensing.
3. Provide guidance to the innovator as necessary.
4. Become familiar with the five quality-based criteria for licensing.

At the end of the monitoring period, the monitors should be able to answer with assurance any questions about the applicant's suitability for licensure.

The monitors will provide the following to support the innovator:

1. Guidance, encouragement and support to the applicant as required by the innovator;
2. Meet with the innovator periodically as agreed;
3. Be sufficiently familiar with the details of the innovator's work, either through ongoing direct contact, to be able to attest that each portion of the work experience qualifies within the context of the Experience Requirements Guide.

The monitors of the innovator will provide the following for licensure of the innovator per Sec 2.2 of the Guide after getting inputs from the innovator.

1. Skilful application of theory including analysis, design, testing and implantation per Sec. 2.2.1.
2. Practical experience including function, time, cost, reliability, reparability safety and environmental impact in their work per Sec 2.2.2.
3. Management of engineering including planning, scheduling, budgeting, project control, risk assessment and supervision of other people if working with the innovator per Sec 2.2.3.
4. Communication skill including preparing reports and presentation to clients and authorities per Sec 2.2.4.
5. Social implications of the innovator's product including benefit and risk to the public, and safeguards to protect the public per Sec 2.2.5.

The applicant innovator for licensure should provide the following to the PEO license committee.

1. Academic certificate acceptable by PEO.

2. Description of the innovative work and successful launch of the product.
3. Certificates of recommendation of the monitors.

PEO's involvement in the innovation and entrepreneurship of the engineering graduates will not only help PEO's licensure but significantly boost PEO's image in helping Canada's employment and economic growth.

Conclusion:

This article presents a process by which an innovative engineering graduate can qualify to receive professional engineering licensure (P.Eng.) helping Canada's economy and PEO's image as a regulatory body.

Tapan Das, Ph.D., P.Eng., FEC

Director PEO Ottawa Chapter Innovation/Entrepreneurship Program

Reference:

1. Guide to the Required Experience for Licensing: Professional Engineers Ontario.

Note:

This guide is for the innovator to get P.Eng. license and has nothing to do with any advocacy role.

Reviewers:

- (1) Ray Barton, Ph.D., CEO Vitesse; (2) Ishwar Bhatia, P.Eng., FEC, Director Ottawa PEO Chapter; (3) Guy Boone, P.Eng., PEO Eastern Regional Councillor (4) Joe Podrebarac, P.Eng., FEC, Past chair Ottawa PEO Chapter.

Briefing Note – Information

C-536-2.6

2021 DRAFT OPERATING BUDGET

Purpose: To review the draft 2021 operating budget

No motion required

Prepared by: Chetan Mehta – Director, Finance

1. Need for PEO Action

In accordance with the Council approved PEO business planning cycle, the draft operating budget (Appendix A) is being presented to Council for its inputs and review. Council's feedback at this meeting will be incorporated into the final 2021 operating budget which will be presented at the November 2020 meeting to Council for approval. The key highlights of the 2021 draft operating budget are summarized below in Table 1.

Total revenues in 2021 are budgeted at \$32m and total expenses for sustaining regular day to day or core operations are budgeted at \$30.6m, resulting in an excess of revenues over expenses of \$1.4m. In addition to these expenses, an additional spend of \$1.3m is budgeted for various projects and Council initiatives the details of which can be seen in Appendix A.

Table 1 – Summary of key financials

	2021 Budget	2020 Forecast	2020 Budget
Revenue	\$32,020,538	\$30,402,007	\$31,404,712
Expenses - core operations	\$30,584,423	\$24,627,541	\$28,778,531
Excess of revenue over expenses	\$1,436,115	\$5,774,466	\$2,626,181
Spend on projects and Council initiatives	\$1,319,173	\$714,141	\$170,000
Excess of revenue over expenses	\$116,942	\$5,060,325	\$2,456,181
Cash Reserve	\$21,071,772	\$20,137,666	\$14,331,020

Revenue

The 2021 budgeted revenue is planned to be \$32m representing an increase of \$1.6m or 5.3% over the 2020 forecasted revenue. The main factors contributing to the increase are:

- An increase in P. Eng. revenues of \$213k or 1.1% due to the relatively flat growth in P. Eng membership in 2021. This flat growth is due to the continued uncertainty of the impact of the ongoing pandemic. P. Eng revenues for 2020 are expected to be lower than budget by \$572k or 2.9% again, due to the impact of the pandemic.

- An increase in registration, exam and other fees of \$1.2m or 14.4% largely due to the collection of revenues for the NPPE exam which has been outsourced to APEGA. These monies are directly passed on to APEGA and show up as an expense in Purchased Services.
- An increase in 40 Sheppard revenues of \$134k or 5.5% due to the recovery of higher operating costs and slightly higher parking revenue.
- An increase of \$50k or 10% in investment revenue due to the expected performance of the investment portfolio.

Expenses

The 2021 budgeted expenses for regular operations are planned to be \$30.6m which represents an increase of \$6m or 24% over 2020 forecasted expenses. Some of the reasons contributing to this increase are:

- An increase in employee salaries and benefits and retiree and future benefits of \$3m over the 2020 forecast due to an increase in headcount; a 3.5% increase in staff salary for merit increases / CPI adjustments and pension top-up contributions. After the increase, the FT headcount in 2021 will be 127 in comparison to the budgeted headcount of 112.
- An increase of \$1.4m for purchased services which is largely due to the monies paid to APEGA for the NPPE and to a lesser extent due to higher costs for catering, event meals and related expenses for hosting the AGM, OOH and VLC in Ottawa; costs for producing videos for the OPEA gala; higher costs for scanning licensing records, etc.
- An increase of \$577k for Chapters due to higher allotments in 2021; higher spend for the NEM (National Engineering Month); reinstatement of Chapter scholarships; and expenses for various events such as CLC, RCC meetings., etc.
- An increase of \$413k in Volunteer Business Expenses due to higher costs for meals, mileage, accommodation and travel related expenses for attending various events, committee meetings and conferences., etc.

The above are partially offset by:

- Reduction of \$324k in Amortization largely due to fewer capital projects in 2021 and the full amortization of some old equipment.
- Reduction of \$79k in 40 Sheppard expenses largely due to a decrease in depreciation, amortization of leasing costs and mortgage interest expense.

2. Background

The FIC at its meeting on July 16, 2020 approved the budget assumptions for the 2021 operating and capital budgets (Appendix B) after which the senior management team and staff began work on the budgets. A draft copy of the 2021 operating budget and the 2020 forecast was completed in Sept and distributed to the Finance Committee prior to its meeting on Sep 10, 2020.

During this meeting, the Finance committee met with the CEO/Registrar and the Director of Finance to review the first draft of the 2021 operating and capital budgets. Key highlights of the operating budget were presented and questions by the Finance Committee members were answered by staff. After extensive discussion, the Finance Committee concurred that the draft

version of the 2021 operating and capital budgets be presented to Council for information and feedback.

3. Appendices

- **Appendix A**
 - 2021 Draft Operating Budget & Projected Financial Statements from 2022 to 2025
- **Appendix B**
 - 2021 Budget Assumptions

Professional Engineers Ontario - DRAFT 2021 OPERATING BUDGET

Variance Analysis - 2021 Budget Vs 2020 Forecast

C-536-2.6
Appendix A

03-Sep-20

DRAFT - Reviewed by FIC on Sept 10, 2020 - Rev 0

REF. NO	DESCRIPTION	2021 Bud	2020 Fcst	2020 Bud	2019 Act	Favourable (Unfavorable) / Variances			
						2021 Bud Vs 2020 Fcst		2020 Fcst Vs 2020 Bud	
						\$	%	\$	%
REVENUE		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
1	P. Eng Revenue	19,168,601	18,955,725	19,527,320	16,617,881	212,876	1.1%	-571,595	(2.9)%
2	Appln, regn, exam and other fees	9,608,885	8,402,398	8,998,902	8,507,693	1,206,487	14.4%	-596,504	(6.6)%
3	40 Sheppard Revenue	2,568,052	2,433,884	2,423,490	2,063,933	134,168	5.5%	10,394	0.4%
4	Investment income	550,000	500,000	205,000	572,499	50,000	10.0%	295,000	143.9%
5	Advertising income	125,000	110,000	250,000	214,087	15,000	13.6%	-140,000	(56.0)%
6	TOTAL REVENUE	32,020,538	30,402,007	31,404,712	27,976,093	1,618,531	5.3%	-1,002,705	(3.2)%
7	EXPENSES - CORE OPERATIONS								
8	Salaries and benefits / Retiree and staff future benefits	16,170,157	13,167,903	14,250,018	11,948,676	-3,002,254	(22.8)%	1,082,115	7.6%
9	Purchased services	2,513,274	1,151,528	1,431,320	1,295,698	-1,361,746	(118.3)%	279,792	19.5%
10	40 Sheppard expenses	2,157,387	2,236,245	2,384,486	2,497,508	78,858	3.5%	148,241	6.2%
11	Computers and telephone	1,235,155	1,261,382	1,274,925	1,001,350	26,227	2.1%	13,543	1.1%
12	Occupancy costs	1,119,882	1,020,313	939,455	845,733	-99,569	(9.8)%	-80,858	(8.6)%
13	Engineers Canada	1,034,747	1,024,502	1,029,610	1,009,422	-10,245	(1.0)%	5,108	0.5%
14	Consultants	289,120	297,376	436,100	255,675	8,256	2.8%	138,724	31.8%
15	Legal (Corporate, Prosecution & Tribunal)	917,130	845,749	944,555	720,790	-71,381	(8.4)%	98,806	10.5%
16	Chapters	901,641	324,320	937,210	942,292	-577,321	(178.0)%	612,890	65.4%
17	Contract staff	563,658	392,378	1,001,397	551,099	-171,279	(43.7)%	609,019	60.8%
18	Amortization	828,932	1,153,077	1,099,223	1,182,780	324,145	28.1%	-53,854	(4.9)%
19	Transaction fees	752,602	689,415	706,185	650,829	-63,187	(9.2)%	16,770	2.4%
20	Volunteer expenses	595,785	182,783	820,025	614,032	-413,002	(226.0)%	637,242	77.7%
21	Postage and courier	352,398	287,422	501,140	417,773	-64,976	(22.6)%	213,718	42.6%
22	Professional development	278,700	144,500	220,100	143,358	-134,200	(92.9)%	75,600	34.3%
23	Recognition, grants and awards	234,525	40,706	184,420	152,623	-193,819	(476.1)%	143,714	77.9%
24	Staff expenses	147,220	29,579	162,795	89,783	-117,641	(397.7)%	133,216	81.8%
25	Insurance	143,710	139,365	127,917	128,505	-4,345	(3.1)%	-11,448	(8.9)%
26	Advertising	130,250	75,100	100,250	74,808	-55,150	(73.4)%	25,150	25.1%
27	Office supplies	129,150	84,898	117,400	129,224	-44,252	(52.1)%	32,502	27.7%
28	Printing & photocopying	89,000	79,000	110,000	97,200	-10,000	(12.7)%	31,000	28.2%
29	TOTAL EXPENSES - CORE OPERATIONS	30,584,423	24,627,541	28,778,531	24,749,158	-5,956,882	(24.2)%	4,150,990	14.4%
30	EXCESS OF REVENUE OVER EXPENSES BEFORE UNDERNOTED	1,436,115	5,774,466	2,626,181	3,226,935	-4,338,351	(75.1)%	3,148,285	119.9%
31	EXPENSES - NON CORE OPERATIONS								
32	Projects and Council initiatives (1)	1,319,173	714,141	170,000	298,827	-605,032	(84.7)%	-544,141	(320.1)%
	EXCESS OF REVENUE OVER EXPENSES	116,942	5,060,325	2,456,181	2,928,108	-4,943,383	(97.7)%	2,604,144	106.0%

(1) Note: Refer to attached schedule for spend on projects and other non-core operational initiatives

Professional Engineers Ontario - DRAFT 2021 OPERATING BUDGET**Variance Analysis - 2021 Budget Vs 2020 Forecast****DRAFT - Reviewed by FIC on Sept 10, 2020 - Rev 0**

Ref. No.	Variance Explanation
1	Increase due to growth in membership which is expected to pick up slightly in comparison to 2020.
2	Increase due to expected increase in registrations, examination and monies from other licences.
3	Increase in 40 Sheppard revenues due to recovery of higher operating costs and slightly higher parking revenue.
4	Investment revenue expected to increase although fluctuations in market conditions could lead to lower yields.
5	An increase in advertising revenue is expected due to adverse market conditions.
8	Increase in salaries and benefits due to hiring for new positions; filling current vacancies and COLA (Cost Of living Adjustments) and merit increases in 2021.
9	Purchased Services spend is higher in 2021 primarily due to higher costs for outsourcing the PPE (Professional Practice Exams) to APEGA; higher costs for technical exams; higher costs for meals, catering and hosting various events such as the AGM, VLC, OOH, etc.
10	Lower 40 Sheppard expenses due to decrease in depreciation, amortization of leasing costs and mortgage interest expense. This decrease is offset partially by an increase in janitorial costs; costs for and repairs and maintenance and non-recoverable expenses.
11	Lower computers and telephone costs for service maintenance contracts, mobile telephones and general IT services. These costs are partially offset by higher spend on software support contracts; costs for teleconferencing and internet connectivity.
12	Higher occupancy costs to reflect the increase in operating expenses.
13	This amount represents the allocation to Engineers Canada. The rate of \$10.21 paid per member remains unchanged.
14	Spend on consultants for PEAK program, Govt. liaison program, auditor, fund manager, etc. for regular operations is expected to be largely in line with prior years.
15	Legal (corporate, prosecution and tribunal) expenses are expected to increase due to higher spend on corporate legal matters and regulatory compliance investigations. These are partially offset by lower spend on prosecution and discipline hearings.
16	Increase in spend for Chapters costs due to higher allotments in 2021 and increase in spend on various chapter events such as CLC, National Engineering Month, scholarships and Regional Congress activities.
17	Higher spend on contract staff in the Licensing department to deal with current backlog of files.
18	There is a decrease in amortization costs due to fewer capital projects being initiated and completion of amortization for a historical major IT project in Q1 of 2020.
19	Transaction fees are expected to be higher in 2021 largely due to an expected increase in online payments resulting in higher transaction costs.
20	Increase in volunteer expenses for travel, accommodation, mileage, and air/train fare, registrations etc. for attendance at various committee meetings and events.
21	Increase in postage and courier costs in 2021 for mailing licences and licensing related correspondence.
22	Increase in training and professional development costs due to higher outlay for staff and volunteer training and development.
23	Higher spend in 2021 due to the sponsorship of OPEA gala; spend on staff service awards which are held once every two years and spend on PR items for volunteers.
24	Expected spend on staff business expenses for travel and accommodation for various events, meetings, including 2021 AGM.
25	Slight increase in insurance costs due to higher property and D&O premiums.
26	Advertising costs are expected to increase in 2021 due to spend on advertising for staff recruitment and general corporate communications.
27	Expected spend on files, folders, binders and other office and meeting supplies.
28	Printing and photocopying costs in 2021 are expected to increase marginally once normal operations are resumed.

Professional Engineers Ontario
2021- 2025 Spend on projects and Council initiatives
DRAFT - for FIC Review on Sept 10, 2020 - Rev 1

S. No	Projects and Council initiatives	2019 Actuals	2020 Budget	2020 Forecast	2021	2022	2023	2024	2025
1	HR and governance related expenses	\$275,969	\$160,000	\$491,200	\$650,000	-	-	-	-
2	30 by 30 TF and other Council Initiatives	\$22,858	\$10,000	\$1,610	-	-	-	-	-
3	IT Discovery Document	-	-	\$15,000	\$15,000	-	-	-	-
4	IT Strategic Framework	-	-	\$5,000	\$5,000	-	-	-	-
5	Digitization of the application process	-	-	\$10,000	\$10,000	-	-	-	-
6	O365 migration	-	-	\$78,000	\$234,000	-	-	-	-
7	Aptify Enhancements	-	-	-	\$100,000	-	-	-	-
8	Contractors for IT initiatives	-	-	\$113,331	\$305,173	-	-	-	-
9	Various other initiatives (TBD)	-	-	-	-	\$500,000	\$500,000	\$500,000	\$500,000
Total		\$298,827	\$170,000	\$714,141	\$1,319,173	\$500,000	\$500,000	\$500,000	\$500,000

Professional Engineers Ontario
Statement of Projected revenues and expenses
for the years ending December 31 - DRAFT

DRAFT - Reviewed by FIC on Sept 10, 2020 - Rev 0

	2019 ACTUAL	2020 FORECAST	2021 BUDGET	2022 PROJECTION	2023 PROJECTION	2024 PROJECTION	2025 PROJECTION
REVENUE							
P. Eng Revenue	\$16,617,881	\$18,955,725	\$19,168,601	\$19,551,973	\$19,943,012	\$20,341,873	\$20,748,710
Appln, regn, exam and other fees	8,507,693	8,402,398	9,608,885	10,089,329	10,593,796	11,123,485	11,679,660
40 Sheppard Revenue	2,063,933	2,433,884	2,568,052	2,440,071	2,440,655	2,507,797	2,570,206
Investment income	572,499	500,000	550,000	561,000	572,220	583,664	595,338
Advertising income	214,087	110,000	125,000	125,938	126,882	127,834	128,792
	\$27,976,093	\$30,402,007	\$32,020,538	\$32,768,311	\$33,676,565	\$34,684,653	\$35,722,706
EXPENSES							
Salaries and benefits / Retiree and staff future benefits	11,948,676	13,167,903	16,170,157	16,493,560	16,823,431	17,159,900	17,503,098
40 Sheppard expenses	2,497,508	2,236,245	2,157,387	1,902,038	1,910,660	1,946,626	1,984,709
Purchased services	1,295,698	1,151,528	2,513,274	2,588,672	2,666,332	2,746,322	2,828,712
Amortization	1,182,780	1,153,077	828,932	853,800	879,414	905,796	932,970
Engineers Canada	1,009,422	1,024,502	1,034,747	1,065,789	1,097,763	1,130,696	1,164,617
Computers and telephone	1,001,350	1,261,382	1,235,155	1,272,210	1,310,376	1,349,687	1,390,178
Chapters	942,292	324,320	901,641	928,690	956,551	985,247	1,014,805
Occupancy costs	845,733	1,020,313	1,119,882	1,142,280	1,165,125	1,188,428	1,212,196
Legal (Corporate, Prosecution & Tribunal)	720,790	845,749	917,130	935,473	954,182	973,266	992,731
Transaction fees	650,829	689,415	752,602	775,180	798,435	822,389	847,060
Volunteer expenses	614,032	182,783	595,785	607,701	619,855	632,252	644,897
Contract staff	551,099	392,378	563,658	580,567	597,985	615,924	634,402
Postage and courier	417,773	287,422	352,398	362,970	373,859	385,075	396,627
Consultants	255,675	297,376	289,120	297,794	306,727	315,929	325,407
Recognition, grants and awards	152,623	40,706	234,525	241,561	248,808	256,272	263,960
Professional development	143,358	144,500	278,700	287,061	295,673	304,543	313,679
Office supplies	129,224	84,898	129,150	133,025	137,015	141,126	145,359
Insurance	128,505	139,365	143,710	148,021	152,462	157,036	161,747
Printing & photocopying	97,200	79,000	89,000	91,670	94,420	97,253	100,170
Staff expenses	89,783	29,579	147,220	151,637	156,186	160,871	165,697
Advertising	74,808	75,100	130,250	134,158	138,182	142,328	146,598
	24,749,158	24,627,541	30,584,423	30,993,855	31,683,441	32,416,965	33,169,620
EXCESS OF REVENUE OVER EXPENDITURE before undernoted	\$3,226,935	\$5,774,466	\$1,436,115	\$1,774,456	\$1,993,123	\$2,267,688	\$2,553,087
EXPENSES - NON CORE OPERATIONS	298,827	714,141	1,319,173	500,000	500,000	500,000	500,000
EXCESS OF REVENUE OVER EXPENDITURE	\$2,928,108	\$5,060,325	\$116,942	\$1,274,456	\$1,493,123	\$1,767,688	\$2,053,087

Professional Engineers Ontario
Statement of financial position projection
for the years ending December 31 - DRAFT

DRAFT - Reviewed by FIC on Sept 10, 2020 - Rev 0

	2019 ACTUAL	2020 FORECAST	2021 BUDGET	2022 PROJECTION	2023 PROJECTION	2024 PROJECTION	2025 PROJECTION
ASSETS							
CURRENT							
Cash	3,031,510	8,834,563	8,834,563	8,834,563	8,834,563	8,834,563	8,834,563
Marketable securities at fair value	11,303,103	11,303,103	12,237,209	12,976,917	13,596,562	15,005,369	17,131,031
Cash & marketable securities	14,334,613	20,137,666	21,071,772	21,811,480	22,431,125	23,839,932	25,965,594
Accounts receivable	767,025	767,025	767,025	767,025	767,025	767,025	767,025
Prepaid expenses, deposits & other assets	691,349	614,316	538,783	463,250	387,717	312,212	236,679
	15,792,987	21,519,007	22,377,580	23,041,755	23,585,867	24,919,169	26,969,297
Capital assets	33,301,183	31,546,692	29,716,265	29,237,750	29,097,966	29,169,449	29,172,407
	49,094,170	53,065,699	52,093,845	52,279,506	52,683,833	54,088,617	56,141,704
LIABILITIES							
CURRENT							
Accounts payable and accrued liabilities	2,024,830	2,024,830	2,024,830	2,024,830	2,024,830	2,024,830	2,024,830
Fees in advance and deposits	11,048,555	11,048,555	11,048,555	11,048,555	11,048,555	11,048,555	11,048,555
Current portion of long term debt	1,088,796	1,088,796	1,088,796	1,088,796	362,904	-	-
	14,162,181	14,162,181	14,162,181	14,162,181	13,436,289	13,073,385	13,073,385
LONG TERM							
Long term debt	3,629,292	2,540,496	1,451,700	362,904	-	-	-
Employee future benefits	6,575,000	6,575,000	6,575,000	6,575,000	6,575,000	6,575,000	6,575,000
	10,204,292	9,115,496	8,026,700	6,937,904	6,575,000	6,575,000	6,575,000
Net Assets	24,727,697	29,788,022	29,904,964	31,179,421	32,672,544	34,440,232	36,493,319
	49,094,170	53,065,699	52,093,845	52,279,506	52,683,833	54,088,617	56,141,704

Professional Engineers Ontario
Statement of projected cash flows
for the years ending December 31 - DRAFT

DRAFT - Reviewed by FIC on Sept 10, 2020 - Rev 0

	2020	2021	2022	2023	2024	2025
<u>Operating</u>	FORECAST	BUDGET	PROJECTION	PROJECTION	PROJECTION	PROJECTION
Excess of revenue over expenses - operations	5,060,325	116,942	1,274,456	1,493,123	1,767,688	2,053,087
Add (deduct) items not affecting cash						
Amortization	2,143,982	2,070,351	1,928,440	1,979,184	2,031,827	2,086,442
Amortization - other assets (leasing)	77,033	75,533	75,533	75,533	75,533	75,533
Total Operating	7,281,340	2,262,826	3,278,429	3,547,841	3,875,048	4,215,062
<u>Financing</u>						
Repayment of mortgage	-1,088,796	-1,088,796	-1,088,796	-1,088,796	-362,932	-
Total Financing	-1,088,796	-1,088,796	-1,088,796	-1,088,796	-362,932	-
<u>Investing</u>						
<u>Additions to Capital Assets:</u>						
Additions to Building (Recoverable)	-319,491	-219,924	-199,925	-89,400	-103,309	-89,400
Additions to other Capital Assets (F&F, IT, Phone, AV, etc.)	-70,000	-20,000	-1,250,000	-1,750,000	-2,000,000	-2,000,000
Total Investing	-389,491	-239,924	-1,449,925	-1,839,400	-2,103,309	-2,089,400
Net Cash Increase/(Decrease) during the year	5,803,053	934,106	739,708	619,645	1,408,807	2,125,662
Cash, beginning of year	3,031,510	8,834,563	9,768,669	8,834,563	9,454,208	10,863,015
Cash, end of year	8,834,563	9,768,669	10,508,377	9,454,208	10,863,015	12,988,677
Cash/Investments, end of year	20,137,666	21,071,772	21,811,480	22,431,125	23,839,932	25,965,594
Comprised of:						
Cash	8,834,563	8,834,563	8,834,563	8,834,563	8,834,563	8,834,563
Investments	11,303,103	12,237,209	12,976,917	13,596,562	15,005,369	17,131,031
	20,137,666	21,071,772	21,811,480	22,431,125	23,839,932	25,965,594

Professional Engineers Ontario
40 Sheppard Ave. - Statement of projected revenues and expenses

for the years ending December 31 - DRAFT

DRAFT - Reviewed by FIC on Sept 10, 2020 - Rev 0

Description	2020 FORECAST	2021 BUDGET	2022 PROJECTION	2023 PROJECTION	2024 PROJECTION	2025 PROJECTION
Rental income	866,751	850,656	845,718	828,152	863,080	891,101
Operating cost	1,716,567	1,917,777	1,810,990	1,843,208	1,886,242	1,930,474
Property tax	382,473	447,690	447,409	453,217	462,282	471,527
Parking income	141,025	144,000	143,100	141,570	140,400	140,400
Other space rent	111,213	107,310	110,224	110,224	110,224	110,224
TOTAL REVENUE	3,218,028	3,467,434	3,357,441	3,376,372	3,462,229	3,543,727
Less PEO Share of CAM & Tax	784,145	899,382	917,370	935,717	954,432	973,520
TOTAL REVENUE excluding PEO share of CAM & Tax	2,433,884	2,568,052	2,440,071	2,440,655	2,507,797	2,570,206
Utilities	486,686	544,351	555,238	566,343	577,670	589,223
Property taxes	438,912	447,690	456,644	465,777	475,092	484,594
Amortization	632,492	548,371	375,417	394,188	413,898	434,592
Payroll	258,166	263,329	268,596	273,968	279,447	285,036
Janitorial	212,922	226,125	230,648	235,261	239,966	244,765
Repairs and maintenance	148,137	157,034	150,693	153,707	156,781	159,917
Property management and advisory fees	50,000	50,000	50,000	50,000	50,000	50,000
Road and ground	21,883	28,243	14,604	14,896	15,194	15,497
Administration	25,867	26,418	26,946	27,485	28,035	28,596
Security	20,128	21,685	22,118	22,561	23,012	23,472
Insurance	24,961	27,004	27,544	28,095	28,657	29,230
TOTAL RECOVERABLE EXPENSES	2,320,153	2,340,250	2,178,449	2,232,280	2,287,751	2,344,923
Interest expense on note and loan payable	117,721	103,213	27,653	791	-	-
Amortization of building	388,293	388,293	388,293	388,293	388,293	388,293
Amortization of leasing costs	77,033	75,533	75,533	75,533	75,533	75,533
Amortization of non-recov cap	98,695	98,940	98,940	98,940	98,940	98,940
Other non-recoverable expenses	18,495	50,540	50,540	50,540	50,540	50,540
TOTAL OTHER EXPENSES	700,237	716,519	640,959	614,097	613,306	613,306
TOTAL EXPENSES	3,020,390	3,056,769	2,819,408	2,846,377	2,901,057	2,958,229
Less PEO Share of CAM & Tax	784,145	899,382	917,370	935,717	954,432	973,520
TOTAL EXPENSES excluding PEO share of CAM	2,236,245	2,157,387	1,902,038	1,910,660	1,946,626	1,984,709
NET INCOME	197,639	410,665	538,034	529,995	561,171	585,497



Professional Engineers
Ontario

Professional Engineers Ontario

2021 Operating and Capital Budget Assumptions

For review by FIC – July 16, 2020

2021 Budget Assumptions

For Review by FIC – July 16, 2020

This document presents key assumptions for revenues, operating expenses and capital expenses related to PEO's 2021 operating and capital budgets.

A. General Assumptions

In line with previous years, Council-directed projects will be funded from the operating reserve. It is assumed that in 2021, PEO will be able resume normal operations regardless of whether staff return to office; continue to work from home or work in a hybrid mode that allows for both working from home and the office.

B. Capital Expenditure Assumptions

PEO's capital expenditures in 2021 are expected mainly to be for the fitting out of the 5th floor space to accommodate additional staff. In addition, expenditures may also be undertaken to refit a meeting area for staff on the 8th floor.

Technology Projects

PEO expects traditional IT capex costs to shift to operating expenditures with the move to a digital/cloud first subscription-based model for applications. In addition, a majority of hardware will no longer be purchased, instead a leasing model will be used. For a more proactive model of budgeting, it will be assumed that a 5% technology contingency will be added to the yearly technology budget to cover unexpected costs.

Building improvements – recoverable

Critical and key repairs and upgrades to common areas of the building per the recommendations by BGIS shall be undertaken in 2021. Some of these projects are Parking Garage Repairs, Exterior wall repairs, Roofing replacement; Fire Protection Equipment, etc.

Facilities

Funding will be made available for additional furniture or equipment necessary.

C. Revenue Assumptions

Based on prior member statistics and current trends, the budget assumptions for the 2021 budget are:

1. Membership levels, fees and dues

- All fees, including P.Eng. fees, EIT fees, application fees, registration fees, limited license fees and provisional license fees will continue to be billed per the current fee schedule in place.
- Net growth rate in the number of full-fee P.Eng. members is expected to be in the range of 1 to 2 per cent assuming the resumption of normal licensing operations.
- Net growth rate in the number of retirees and partial fee members is expected to be in the range of 2 per cent to 3 per cent.
- Miscellaneous revenue from enforcement-related activities, regulatory recoveries, and administrative fees will be factored in the 2021 budget.

2. Investment income

PEO's fund manager does not predict returns over a twelve-month cycle. Given the expected volatility in global markets in light of the uncertainties associated with Covid-19 pandemic, returns of under 3 per cent can be expected.

2021 Budget Assumptions

For Review by FIC – July 16, 2020

3. Advertising income

Advertising revenue is expected to fall in 2021 to under \$100,000. Revenue for the first three issues in 2019 is expected to be around \$21,821. Ad revenue for the year ended December 31, 2019 was \$214,087.

4. Rental income from 40 Sheppard

As things stand, recovery income should remain in line with total recoverable expenses. However, depending on the situation with the Covid-19 pandemic, some tenants may claim distress and seek rent deferrals or waivers. Appropriate adjustments shall be made once additional information is available.

D. Expense Assumptions

1. Salaries

Salaries in 2021 to be budgeted to increase by 3.5 per cent supported by salary market research data. This increase is comprised of:

- 2.5 per cent for a Consumer Price Index (CPI) adjustment; and
- 1 per cent for a merit/equalization pool.

2. Benefits

Benefits include health, vision and dental benefits. For the budget, a premium increase of 4.5 per cent has been assumed based on the information received from the benefits provider.

3. PEO pension plan

The pension plan contribution for 2021 will be based on the three - year mandatory funding valuation conducted by PEO's actuary, Buck Consultants. Based on the inputs provided by Buck Consultants, employer costs are projected to be no more 24% per cent of gross salary in comparison.

4. Statutory deductions

These include Canada Pension Plan (CPP), Employer Health Tax (EHT) and Employment Insurance (EI). For 2021, it is anticipated that CPP increases to 5.45% per cent. EHT remains at 1.95% per cent and EI is expected to remain unchanged at 2.5% per cent.

5. Other assumptions

- The non-labor / programs spending increase is assumed to be at the forecast inflation of 2.5 per cent and all programs will be subject to evaluation.
- Chapter spending may vary outside of the range of the forecasted inflation rate, depending on a review of chapter business plans for 2021, chapter bank balances and regional business demands.
- The Engineers Canada assessment rate is expected to remain unchanged.
- It is expected that the nature and volume of complaint, discipline, and enforcement files, as well as claims against PEO will remain consistent with previous years.
- These assumptions may be revised as more information on the Covid-19 pandemic and data on various projects and spend items become available.

6. 40 Sheppard Expenses

Expenses include operating expenses (recoverable and non-recoverable) and financing expenses. Total recoverable tenant expenses are expected to increase by approximately 3 per cent.

Briefing Note – Information

C-536-2.7

2021 DRAFT CAPITAL BUDGET

Purpose: To review the 2021 draft capital budget.

No motion required

Prepared by: Chetan Mehta, Director - Finance

1. Status Update

In accordance with the Council approved PEO business planning cycle, the draft capital budget (Appendix A) is provided to Council for review and feedback.

Council's feedback will be incorporated into the final 2021 capital budget to be presented at the November 2020 meeting.

The key highlights of the 2021 draft capital budget are summarized below. The total capital budget for 2021 is \$240k and is comprised of the following parts:

- 1) Capital improvements to 40 Sheppard - \$220k
- 2) Facilities - \$20k

1) Capital improvements to 40 Sheppard

An amount \$220k has been budgeted for capital improvements that are part of Common Area Maintenance (CAM) costs which are recoverable from tenants and recommended by BGIS, PEO's property manager. Some of these planned improvements in 2021 include:

- \$66k for replacing defective exterior windows;
- \$47k for exterior wall survey and water drainage related work;
- \$30k for the assessment of the parking garage structure;
- \$25k for sprinkler assessment study for fire protection;
- \$23k for heat pump replacement; etc.

2) Facilities

The expenditures for 2021 are:

- \$20k for replacing office furniture and equipment

2. Background

The FIC at its meeting on July 16, 2020 approved the budget assumptions for the 2021 operating and capital budgets after which the senior management team and staff began work on the budgets. A draft copy of the 2021 operating budget and the 2020 forecast was completed in Sept and distributed to the Finance Committee prior to its meeting on Sep 10, 2020. During this meeting, the Finance committee met with the CEO/Registrar and the Director of Finance to review the first draft of the 2021 operating and capital budgets. Key highlights of the capital budget were presented and questions by the Finance Committee members were answered by staff. After extensive discussion,

the Finance Committee concurred that the draft version of the 2021 operating and capital budgets be presented to Council for information and feedback.

2. Appendices

- **Appendix A – 2021 Draft Capital Budget**

C-536-2.7
Appendix A

3-Sep-20

Professional Engineers Ontario 2021 Capital Budget - DRAFT

Reviewed by FIC on Sept 10, 2020 - Rev 0

S.No	Project	2020		2021
		Budget	Forecast	Budget
1	Leasehold Improvements			
	PEO Leasehold 4th floor (Inducements)	351,800	-	-
2	PEO Leasehold 5th floor (Inducements)	69,750	-	-
3	PEO Leasehold 8th floor (Inducements)	148,350	-	-
4	HCRA Office Design - 4th Floor	-	234,748	-
	TOTAL Leasehold Improvements	569,900	234,748	-
	40 Sheppard Ave - Recoverable			
5	2019-02 Exterior Windows	66,296	-	-
6	2020 - Fire System Updates and Repairs	32,543	32,543	-
7	2020 - Structural Study for Main Building Roof	30,146	30,146	-
8	2020 - HVAC Chiller Touch Screen replacement	24,370	-	-
9	2019-01 Heat Pump Replacement	22,054	22,054	-
10	2020 - Structural Study	15,000	-	-
11	2020 - East Side Paver	10,672	-	-
12	2021 - Parking Garage Structure Assessment	-	-	30,000
13	2021 - Exterior Windows	-	-	66,958
14	2021 - Exterior Wall Survey	-	-	25,000
15	2021 - Exterior Water Drainage	-	-	22,385
16	2021 - Domestic Water Equipment	-	-	15,246
17	2021 - Terminal Packing Units - Heat Pumps 3	-	-	23,335
18	2021 - Fire Protection - Sprinkler Assessment	-	-	25,000
19	2021 - Software upgrade for Building Directory	-	-	12,000
	TOTAL 40 Sheppard- Common Area	201,081	84,743	219,924
	TOTAL 40 Sheppard	770,981	319,491	219,924
	Software			
20	Upgrade portal	50,000	50,000	-
	Total Software	50,000	50,000	-
	Total Computer	50,000	50,000	-
	Facilities			
21	Replacement of Office furniture	20,000	20,000	20,000
	Total Facilities	20,000	20,000	20,000
	TOTAL Spend on Capital Assets	\$ 840,981	\$389,491	\$239,924

Briefing Note – Information

AGM Submission #1 - ISO 9001:2015 Certification

Purpose: To deal with AGM Submission #1 – ISO 9001:2015 Certification

No motion required

Prepared by: Bernard Ennis, P. Eng., Director, Policy and Professional Affairs

1. Status Update

Attendees at the 2020 AGM approved the submission “ISO 9001:2015 Certification” (see Appendix B) by a margin of 78% in favour.

Council has a policy of addressing all approved member submissions to the AGM. Staff was asked to provide an analysis of the member submission and provide a recommendation to Council.

Staff has reviewed the submission in accordance with the “Guide for Member Submissions at the Annual General Meeting” approved by Council at its March 2020 meeting. This submission was reviewed to determine whether the proposed action is lawful under the current legislative scheme. The activity outlined in the submission was also passed through the Activity Filter to determine whether the activity and its output fall into the Regulatory, Governance or Neither categories.

Using the filter, the activity outlined in the submission was determined to fall into the Neither category. Specifically, this activity is operational since it deals with the way in which processes are implemented, monitored and administered. The activity is not addressed by the Professional Engineers Act but would be permitted as nothing in the Act prohibits the association from making decisions regarding the way its statutory requirements are operationalized.

As this is an operational issue, staff recommend that Council leave the decision regarding ISO certification to the CEO/Registrar. Staff have determined that the best course of action is to establish a corporate policy stating PEO will eventually obtain ISO 9001 certification but not fix a date for doing so. Instead, all changes to PEO governance, operations, legislation, and corporate policies being considered as part of the transformation strategy will be assessed to ensure that they are ISO 9001 compliant.

2. Background

PEO is already engaged in a thorough transformation program that will change many of its operational processes. Consequently, it is not currently appropriate to seek certification of those processes.

3. Appendices

- Appendix A – ISO 9001 Certification Policy Paper.
- Appendix B – AGM Submission #1 – ISO 9001:2015 Certification

ISO 9001:2015 Certification

EXECUTIVE SUMMARY

At the 2020 Annual General Meeting, PEO Members approved a submission requesting that PEO Council establish a policy that it will become ISO 9001:2015 certified by 2022 on its 100 Anniversary.

This paper examines the requirements that PEO must meet in order to achieve ISO Certification and whether meeting these requirements is compatible with PEO's current three major transformation projects: 1) the action plan to deal with the Cayton report recommendations; 2) organizational restructuring; and 3) the governance roadmap.

Quality management is the act of managing all activities and functions needed to maintain a consistent level of excellence within an organization. The ISO 9001:2015 is not a quality management system itself. That is, an organization does not become ISO compliant by adopting a pre-defined QMS. The standard is a list of requirements that must be present in a QMS developed by the organization and verified by a third-party auditor. In other words, a suitable QMS can only be developed by an organization that conducts a review of all aspects of the organization, performs a gap analysis to identify where the organization is not compliant with the standard, develops a plan to make organizational changes to achieve compliance, and then implements that plan.

ISO 9001:2015 CERTIFICATION REQUIREMENTS

ISO 9001:2015 certification is confirmation, as assessed by independent third-party auditors, that an organization has adopted a quality management system (QMS) compliant with ISO 9001:2015. A QMS, as described in the standard, is not a separate function or activity within the organization; it is, rather, an organization-wide focus on ensuring that its products and services meet the expectations of interested parties. For this reason, in order to be compliant with ISO 9001:2015, an organization must meet requirements given in the standard for six key enterprise activities:

1. Leadership
2. Planning
3. Support
4. Operations
5. Performance evaluation
6. Improvement

There are 132 requirements¹ in the standard that must be met in order to be compliant. Many of these requirements have two or more components. For instance, one of the requirements for compliance in

¹ The number of requirements was ascertained by identifying the number of times "shall" appeared in the standard indicating an action or set of actions that must be taken by the organization. According to the standard "shall" indicates a requirement.

Leadership expects the group of persons responsible for control and direction (i.e. Council) “shall demonstrate leadership and commitment with respect to customer focus by ensuring that:

- a) customer and applicable statutory and regulatory requirements are determined, understood and consistently met;
- b) the risks and opportunities that can affect conformity of products and services and the ability to enhance customer satisfaction are determined and addressed;
- c) the focus on enhancing customer satisfaction is maintained.”

The processes and practices needed to meet the above requirements are

The organizational requirements listed above are based on eight quality management principles described in another standard, ISO 9000:2015, which, taken together², are the foundation for creating a viable quality management system.

- QMP 1 – Customer focus
- QMP 2 – Leadership
- QMP 3 – Engagement of people
- QMP 4 – Process approach
- QMP 5 – Improvement
- QMP 6 – Evidence-based decision making
- QMP 7 – Relationship management

For each quality management principle, there is a “statement” describing the principle, a “rationale” explaining why the organization should address the principle, “key benefits” that are attributed to the principle, and “possible actions” that an organization can take in applying the principle. The possible actions are not requirements; however, they do provide examples of the type of actions that an organization would need to take in order to have a compliant QMS. For example, the possible actions listed under the Improvement principle are:

- promote establishment of improvement objectives at all levels of the organization;
- educate and train people at all levels on how to apply basic tools and methodologies to achieve improvement objectives;
- ensure people are competent to successfully promote and complete improvement projects;
- develop and deploy processes to implement improvement projects throughout the organization;
- track, review and audit the planning, implementation, completion and results of improvement projects;
- integrate improvement consideration into development of new or modified products and services and processes;
- recognize and acknowledge improvement.

² “All concepts, principles and their interrelationships should be seen as a whole and not in isolation of each other. No individual concept or principle is more important than another. At any one time, finding the right balance in application is critical.” ISO 9000:2015, p. 1

The reason for describing the requirements for compliance is to emphasize that the actions needed to ensure compliance with these requirements are operational actions that fall within the purview of the CEO/Registrar.

We should note here, one problem with developing an ISO compliant QMS: the terminology used in the document generally refers to commercial enterprise activities. Though the standard claims that it is appropriate for all organizations, regulators and government agencies have noted that its focus on both “customers” and “products and services” can make it difficult to apply. For instance, NASA, the first major government agency to become ISO 9000 certified, decided that in adapting the standard to its own needs, the agency should focus on the concept of “mission realization” rather than “products and services”, and both “government” and “the public” rather than “customers”³. If PEO Council agrees to adopt the policy described in the submission, we would first need to develop our own interpretations of the terminology in order to understand how the standard can be applied to PEO regulatory mandate and functions.

CURRENT PEO ACTIONS

PEO is currently engaged in a multi-year multi-phase transformation strategy with the following major components:

1. High-level action plan related to implementation of the recommendations from the external regulatory performance review conducted by Harry Cayton.
2. Implementation of structural changes to PEO’s operational organization required to produce the capacity and agility needed to achieve the strategic objectives.
3. Implementation of a governance road map with the goal of ensuring PEO is a well-governed, world class regulator, embracing excellence in its governance.

This project involves organization-wide activities and deals with many of the same concerns as the ISO standard such as establishment of an appropriate culture, clarification and understanding of roles and responsibilities, development of a comprehensive set of corporate policies, and ensuring that processes effectively deliver their intended outputs.

CONSIDERATIONS

Implementation of a ISO compliant QMS has many benefits for an organization since the objective of such a system is to ensure that the organization 1) can consistently provide outputs that meet the expectations of interested parties, 2) complies with all applicable statutory and regulatory requirements, and 3) employs risk-based thinking. ISO claims that an organization adopting a QMS that meets the requirements will improve its overall performance and create the foundation for sustainable development. Since these objectives and benefits are consistent with the intent of the transformation plan, attaining compliance with ISO 9001:2015 would be a good means of ensuring the success of the transformation program. However, given that PEO is already engaged in transforming the organization

³ “Systems Engineering and Management Applications of ISO 9001:2015 for Government”, Christena C. Shepherd, <https://ntrs.nasa.gov/search.jsp?R=20160004380>, retrieved July 29, 2020.

to make it into a world class regulator, taking on a parallel project with a similar but less comprehensive goal would be counter productive.

The transformation of PEO envisioned by this plan will not be completed by 2022. If PEO was to attempt to be certified as ISO compliant by 2022, this might restrict the type of changes that could be implemented as part of the transformation strategy since having made changes required for compliance with the standard there will likely be reluctance to undo those changes to make broader changes to suit the transformation strategy.

The most reasonable approach would be to implement changes according to the transformation plan with the additional stipulation that the changes are consistent with the intent to ultimately acquire ISO9001 certification.

RECOMMENDATIONS

Based on this analysis, staff recommend that that Council leave the decision regarding ISO certification to the CEO/Registrar. Staff have determined that the best course of action is to establish a corporate policy stating PEO will eventually obtain ISO 9001 certification but not fix a date for doing so. Instead, all changes to PEO governance, operations, legislation, and corporate policies being considered as part of the transformation strategy will be assessed to ensure that they are ISO 9001 compliant. This way PEO will incrementally adopt the changes needed to become compliant. After the planned transformation projects detailed in the Cayton Report Action Plan, the organizational restructuring plan and the governance roadmap are completed, then a project should be initiated to carry out any further work needed to become compliant based on the ISO 9001 standard applicable at that time.

Briefing Note – Information

C-536-2.8b

AGM Member Submission #4 – Regional Town Hall Meetings

Purpose: To provide Council with a summary of the staff review of AGM Member Submission #4 – Regional Town Hall Meetings for Member Dialogue on the Future of the Profession

No motion required

Prepared by: A. Tapp, Policy Analyst, with input from J. Chau, P.Eng., Manager, Government Liaison Program

1. Status Update

- *AGM Member Submission #4 – Regional Town Hall Meetings for Member Dialogue on the Future of the Profession* received majority support at the AGM on May 30, 2020 and in accordance with the guidance document was passed to staff for further review and recommendations. The complete staff review is in Appendix A, and the original submission is in Appendix B.
- Based on the staff review, scheduling Regional Town Hall Meetings on the matter of the future of the engineering profession would not be appropriate at this time. PEO is currently occupied with the implementation of the Action Plan resulting from the External Regulatory Review (“Cayton Report”) as well as other ongoing initiatives related to governance and restructuring. For the reasons set out in Appendix A, staff is not recommending undertaking further consultation at this time.

2. Background

- At its March 20, 2020 Meeting, Council approved a revised guidance document for submissions at the Annual General Meeting. The document approved by Council specifies that member submissions are not resolutions, and that the Council is under no obligation to accept them and need not vote on them. They can however be referred by Council for staff review and recommendations.
- Member submissions are received at an AGM on the basis of s.22(f) of By-Law No. 1 that permits “such other business, if any, as may properly come before the meeting” to be added to the order of business of the meeting.
- As noted above, Council has adopted guidelines for the purpose of accepting member submissions and referring them to staff for further consideration and advice as appropriate. Council is not bound to take any action on any submission.

3. Appendices

- Appendix A – Complete Staff Review
- Appendix B – Original Submission

AGM Submission Review Report 2020 template**AGM Submission title: Regional Town Hall Meetings for Member Dialogue on the Future of the Profession****1. Is the proposed action lawful under the current legislative scheme?**

At the Professional Engineers Ontario Annual General Meeting on May 30th, it was proposed that PEO put together a team to hold Regional Town Hall Meetings (RTHMs) throughout the province to seek member input on “the form of a new structure to properly license and regulate all engineering practices as well as the bordering applied science practices in order to serve and protect the public interest.” These meetings would be held in each geographic region and would also involve break-out sessions organized by practice discipline.

There is nothing in the current regulatory scheme that would prevent Professional Engineers Ontario from creating a team to convene a series of Regional Town Hall Meetings (RTHMs), for consultation purposes. Any new licence structure would require modifications to the Act.

2. Apply the Activity Filter approved by Council in November 2019 to assist in determining if the activity and its associated output is Regulatory, Governance or Neither and indicate below and rationale

Regulatory/Governance/Neither (highlight one)

Rationale:

The expected output of the RTHMs would be a new regulatory mandate for Professional Engineers Ontario (and potentially a new governance model as well). It is anticipated that such a regulatory model would relate to PEO's obligation to serve the public interest. In that respect, the activity is potentially regulatory.

3. What is the relationship to any PEO Strategic Plan currently in force (ie. 2018-2020)?

This proposal is partially related to **Strategic Objective #4: Engage chapters as a valuable regulatory resource** as It is anticipated that PEO chapters might play a role in organizing the RTHMs. The type of regulatory change envisioned as the eventual goal of this proposal is beyond the scope of any of the current Strategic Objectives but could be placed under **Focus Area 1: Protecting the Public Interest**.

4. Outline any potential financial, operational or resource considerations involved in adopting the proposed action

Type of Town Hall	Total Estimated Cost
In Person	\$28,500
Virtual ¹	\$56,850
Hybrid ²	\$63,900

¹ Running a virtual town hall meeting would require the services of a professional A/V team, which is estimated to cost approximately \$10,000 per meeting based on PEO's previous experience.

² The hybrid model is a combination of having a live in-person session with a professional group managing the live stream.

Adopting the proposed action would require a major commitment of staff time and resources. While it is anticipated that the action will be volunteer led, the organizing team would require significant staff support to convene and organize meetings and break-out sessions. There are no resources budgeted for this purpose so there could be consequences in terms of existing work. Assuming that meetings will be held in person, rather than virtually, PEO will also need to cover travel costs for staff/volunteers and the costs of hosting the meetings themselves (event space, food).

Alternatively, PEO could outsource project coordination and support to an external contractor, but the cost for this would also be significant.

It is also worth noting that the persistence of the COVID-19 pandemic and the associated restriction on gatherings of appreciable size creates further logistical challenges that might make a series of in-person town hall meetings particularly difficult if not impossible to organize.

5. What are the public interest considerations related to the submission?

The main public interest consideration of this project is the potential for a new regulatory structure for PEO. The direct activity proposed in the submission, the convening of the RTHM's, will have little immediate impact on the public interest.

It is noteworthy that, by approving the Action Plan in response to the External Regulatory Review in 2019, Council has already tasked the CEO/Registrar with reviewing and proposing changes to the licensing model, so this process would duplicate an initiative that is already underway.

6. Results of an environmental scan among similar regulators (as needed). If not applicable, explain why not.

The following is a quick overview of some recent review efforts undertaken by other provincial or territorial engineering regulators.

Regulator	Review
Engineers and Geoscientists BC	Legislative and governance review written by Professional Standards Authority in 2018. Review was in-depth but did not include extensive consultation with branch locations. The review does not recommend drastically altering the scope of regulation.
Association of Professional Engineers and Geoscientists of Alberta	An internally driven review starting in 2015 (last update was from 2017 but project was expected to take until 2019) that consulted extensively with members, including at Branch events. It did not recommend significantly changing the scope of regulation.
Ordre des ingénieurs du	There have been numerous attempts to update the Québec Engineers Act, which has remained unchanged since it was written in 1964. The

Québec	latest attempt, Bill 29, is currently in committee. The current Act resembles PEO's earlier Act and its regulatory model depends on specific lists of activities rather than general principles. Bill 29 will bring this Act more into line with its provincial counterparts.
EngineersPEI	Started an Act review Committee in 2016 to modernize the Act, and this initiative was tied to the Canadian Framework for Regulation project. Per the website, the Committee still exists but updates are not publicly available.

While in-depth reviews of engineering regulators are somewhat common, none of those described above have the same scope as the review envisioned in the AGM submission. The one that comes closest is the OIQ review, but this is a top-down initiative that will bring the Act into line with current regulatory standards rather than form a new structure.

7. What are considered relevant best practices at similar organizations, as applicable?

Consultation is helpful and important, but it is most effectively done when specific initiatives are being proposed by the regulator.

It should also be noted that although there are differences between each provincial regulator, labour mobility for engineers across Canada demands that there be a baseline of compatibility. If the proposed review results in PEO deviating too far from the current regulatory structure, it could result in barriers to inter-provincial labour mobility.

8. Is there any other factual information that will assist Council in its review?

Professional Engineers Ontario is currently in a time of transition. It is currently in the process of implementing a wide-ranging Action Plan based on the recommendations of the Cayton Report and is also conducting a governance review and operational restructuring. Having these RTHMs now could be confusing and unproductive, as members would be discussing an organization that is already undergoing significant change. Moreover the ongoing COVID-19 pandemic could complicate holding regional town halls or other in-person events for the foreseeable future.

9. What is the recommended proposed course of action and/or options for Council's consideration, based on PEO's mandate, workload and other stated priorities? (provide rationale for recommendation)

Proceed/Study further or refer proposal Council/Do not proceed (highlight one)

Rationale:

PEO is focused on implementing the Action Plan developed by management and approved by Council in response to the External Regulatory Review. Council is also in the midst of a implementing a governance roadmap, part of which must address Council's role in relation to members and other stakeholders and how they are to be engaged and consulted on policy

changes. **An additional consultation initiative at this time is neither timely nor appropriate and could result in significant and costly resource issues for the organization.**

Regional Town Hall Meetings for Member Dialogue on Future of the profession.

1. Title of Submission

Regional Town Hall Meetings for Member Dialogue on Future of the profession.

2. Please briefly describe the issue, problem, risk or gap that this submission addresses.

Whereas,

"Since the introduction of the iPhone, PEO has been in a rapid decline and today it is generally regarded as irrelevant, both to its membership and to society. It is basically agreed that it is no longer self governed in a meaningful sense, nor does it protect the public in a regulatory sense"¹; and,

Whereas at the 2019 AGM last year, the "Evolution of Ontario Engineers" motion passed that requested that PEO create an organizing task force to then 'convene a general meeting of the members forthwith to determine a course of action that the profession may consider' (passed by 88%); and,

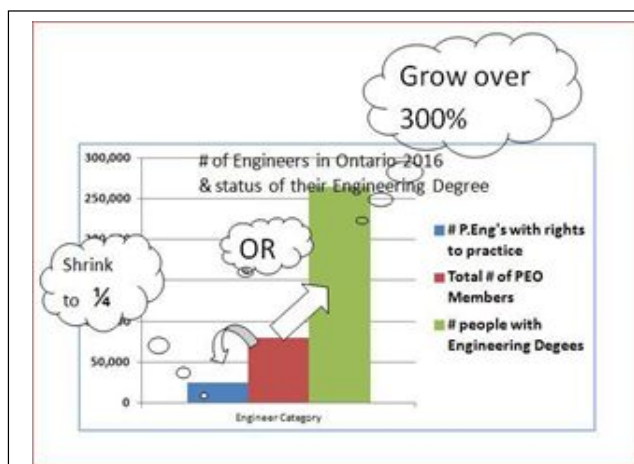


Figure 1: Shrink or Grow the Profession

Whereas at the Mar 20,2020 PEO Council meeting, the Emerging Disciplines Task Force, called attention to the growing irrelevance of the profession and asked Council to decide on a path that either expands the regulatory scope of the profession to properly license all forms of engineering, or, to shrink itself to only licensing traditional engineering and then help the other disciplines of Engineering to form a new regulatory body to license these disciplines;

The span of today's engineering scopes of practice are so broad that they cannot be governed by a single Council. The profession must now decide on the form of a new structure to properly license and regulate all engineering practices as well as the bordering applied science practices in order to serve and protect the public interest.

¹ Quote from Pat Quinn from a private email

3. Please summarize the action that you are requesting from Council and how it will address the issue, problem, risk or gap stated above.

Be it resolved that,

PEO create an organizing team to convene a series of Regional Town Hall Meetings (RTHM) across Ontario per Region, to engage the members in a dialogue of the issues, and, what we might do about them; and,

That the RTHM include, as a major component, break out sessions for each of the main practice disciplines to discuss the key issues impacting these practices and the ability to properly serve and protect the public interest; and,

That the main engineering practice areas shall include: Civil (all current forms of Water Treatment, Roads, Traffic Control), Structural, Mechanical (HVAC and Transportation), Electrical Power, Electrical Computers and Control, Software, Cyber Systems Security, Mining, Chemical, Industrial and Manufacturing, Artificial Intelligence (AI) – robotics-Mechatronics, Bio, Nano-Molecular, others with a significant number of members present; and,

That in preparation for these RTHMs on where the profession is to go, the PEO provide members with a comprehensive list of fundamental documents such as the McRuer reports that define Canadian self-regulation, as well as documents on the fundamentals of a proper Licence and what it means in relation to serving and protecting the public interest.

4. Please cite and briefly summarize any research that supports the proposed action.

OSPE survey by John O'Grady

5. As applicable please describe how the proposed action will contribute to serving and protecting the public interest as it pertains to the regulation of professional engineering and the engineering profession.

Over 70% of PEO members do not have exclusive rights to practice in what their work. Properly licensing all engineering as well as those branches of applied science that have crossed into engineering is the ultimate step forward in serving and protecting the public interest. This motion proposes that we engage the members in a deep dialogue on how to accomplish this.

6. Please identify any legal considerations (eg., the need for changes to the statute, regulation, by-laws etc.) that may affect Council's ability to implement the proposed action.

There are no immediate legislation considerations but the conclusions of the dialogue may result in a request for a new act to govern applied science and engineering.

7. Please identify any considerations that are relevant to the timing (or urgency) of the proposed action.

The PEO is rapidly losing relevance in this modern age. Less than 20% of PEO members have exclusive rights to practice. In Ontario, there are about twice as many people with engineering credentials as there are members of PEO.

8. Please provide any other information that you feel will assist members of the AGM and Council in understanding your submission, in particular your proposed action.


9. Please list any attachments to this document.

Letter from Pat Quinn.

EDTF presentation to Mar 20 Council meeting notes.

BN from EDTF to Mar 20 Council meeting

Member #1 (name/signature): Peter M DeVita



☒ I wish to Pre-record a brief introduction to this submission.

Member #2 (name/signature): George Comrie



I wish to Pre-record a brief introduction to this submission.

Date: May 10 , 2020

**PLEASE FORWARD THE COMPLETED SUBMISSION ELECTRONICALLY,
WITH ANY ATTACHMENTS**

TO:
CEO/REGISTRAR, c/o AGMSUBMISSIONS@PEO.ON.CA

**AT LEAST TEN (10) BUSINESS DAYS PRIOR TO THE ANNUAL GENERAL
MEETING**

PEO REALITY. Patrick Quinn PhD., P.Eng., C.Eng. April 2020(C).

The twentieth century was the century of the engineer, the profession with the major contribution to the building of the hard infrastructure of modern society, (the dams, bridges, buildings, highways, power generation and transmission, airports, aircraft, even rockets and bombs). Because it was everywhere, the contribution did not stand out, and to engineers it was under-appreciated.

In Canada, as a self-regulating profession, PEO nurtured the yearnings of engineers for recognition, status, and community belonging, through its licensing control, the protected P.Eng. brand and professional engineer title, the integration of large numbers of volunteers in its operations, and its Dimensions publication which sought to interest and inform the membership of all sides of the happenings within the profession. The definition of engineering, as applied science, could be confined to a manageable number of disciplines, civil, mechanical, electrical and chemical, following the English trend of institutions of those names.

Since the introduction of the iPhone, PEO has been in a rapid decline and today it is generally regarded as irrelevant, both to its membership, (nine out of ten members fail to vote), and to society (it is basically agreed that it does not protect the public in a regulatory sense). The internet readily made available a host of possibilities, from hardware, software, circuitry, prototypes, design aids, etc., etc., that was available to all and is way beyond the timely ability of PEO to regulate.

Today, PEO licenses, but barely touches the profession with regard to regulating practise and then, only in relation to the old branches of engineering, most notably the practises of structural engineers. The collapse of a shopping centre or a temporary stage structure evokes a stirring of reaction in PEO, which soon dies down.

To quote from the recent review by an outside expert, ***"PEO remains fundamentally an engineers' membership association rather than a professional regulator"***, and, ***"As the concept of engineering has developed and engineering methodologies and concepts are applied in new fields such as artificial***

intelligence and biotechnology, PEO's legislation lacks the flexibility needed to accommodate 'engineers' working in new roles and in new industries".

These realities have brought Council acceptance that PEO has problems it cannot fix, and that the answers lie in studies by outside "so-called" authorities, on regulation and governance. Without Council defining or admitting the primary concerns, which its leadership avoids by controlling discussion, the solutions are Band-Aids.

Engaging an authority on regulation in the medical field with little grasp of the history and culture of engineering, brought mostly administrative suggestions easily accepted as adaptable to PEO operations. The notes on underlying issues of engineering regulation which the reviewer couldn't help noticing were not so easily or eagerly grasped and fell by the wayside.

The experts on governance, again with little grasp of the character of engineers, have applied back-to-basic general rules. Having a practising lawyer as president, who is seen as being trained and monitored in running council, the control of agendas to virtually eliminate discussion, or to suppress alternate solutions, is without precedence and diminishes the engineering profession.

In society today, regulation is an unacceptable restriction of the positive disruptive nature of today's progress, (we are in a Uber world) and self regulation is seen as self protection. The definition of engineering is no longer that of the industrial age, (the application of science), and is only definable in such a broad sense as to be incapable of regulation except as to demand side legislation. Accreditation, the controlling of the education of engineers toward meeting old definitions of topics to suit licensing and regulation, has stifled and is restricting universities from the initiatives that this era demands.

Engineering is ubiquitous, is involved in every product, and in every piece of software or hardware in the information technology arenas. An engineering degree is the BA of the 21st. century, an entry into vast possibilities, many of which, such as invention, innovation, business, finance, or administration, would not be considered the practise of engineering. Less than one out of three

engineering graduates will go on to the practise of engineering, however generous is the interpretation of their work's engineering content. In licensing, the internship requirements are too long and too prescriptive in an disruptive world.

In any real practical sense, PEO's future is solely in the licensing of engineers to cater to demand side legislation. Notwithstanding PEO's sporadic discipline process, regulation of its licensees is now through legislation which the government deems required for public safety, and through the courts for breaches of contracts or laws.

What remains for engineers is still the yearning for belonging, recognition, and a sense of community which was part of PEO's nurturing under the P.Eng. brand pre-OSPE and which has supported PEO from its inception with selfless volunteering. Now OSPE is the voice of engineers who wish to participate or not in the furtherance of the profession and its recognition in the public arena. From the review previously mentioned, ***"OSPE says about itself 'We are the voice of the engineering profession in Ontario. OSPE was formed in 2000 after members of Professional Engineers Ontario (PEO) voted to separate regulatory and advocacy functions into two distinct organizations. It seems however that PEO, particularly through its Chapters, has been unwilling or unable to relinquish that part of its original role. For example, PEO devotes considerable resources, and its volunteers considerable amounts of time, to its Government Liaison Programme. This programme lobbies the government and members of the legislature. The PEO website describes it thus, 'Ultimately, the long term desire is that involvement in the Government Liaison Program sparks the interest of more engineers to hold public office and have the profession's voice represented directly at the decision-making table'. This is not a regulatory activity".***

The learned societies, brought in mainly from the UK, have their own attraction to those who want to share in specific areas of knowledge or emerging disciplines, and the definition and voluntary support of these will evolve with the evolution or revolution of the progress in society. If they become more active, Canadian learned societies could provide the needed debate forums for the sharing of ideas

on the profession in their areas and for the community ethos that we seem to desire.

The challenge for engineers is in the unknowable future, now so clearly disrupted by a simple virus. We are still a great profession with much to contribute. We need to accept that when you are everywhere, you just don't stand out and will only be recognised occasionally by a special contribution. Look at the recent highways and bridges in China. Spectacular, the designers are government departments. Engineers working there or here on such projects, or in the research on a viral antidote, are working in teams, the reality for many years now which makes the regulation of individuals with concepts like PEA outdated. Engineering fulfillment now has to be in the work, done professionally, and PEO, however it survives as a limited regulator or licensor, is prohibited from its old role of promoting the profession.

Yet PEO is really the only body to have the means to reach out to those engineers who by their membership have shown they want to be part of an engineering community, and to engage with OSPE in a new partnership. We deserve a leadership that grasps the need for an interior, radical, revolutionary change, and the uninhibited discussions and debates necessary to define the problems, research the alternatives and bring consensus to solutions. Outsiders can't do it, **"we have met the enemy and he is us"**.

If the thrust of the paper is true, engineering must change if it has ambitions for a major role in the future. We must provoke/promote a discussion on the future for our profession, it won't have one if some bold steps are not taken now. Something needs to happen to shake us as a profession into this now disruptive world, we are past the Band-Aid solutions of outsiders, which are actually regressive. The answers have to come from and be led from within the profession.

We need to express our dreams for the future of our profession; the need for a new definition of engineering as the technological innovative application of science, with engineers as the leaders in transformational change (innovation), and engineering education with an objective of equipping our graduates to be the

go-to change agents and innovators in technology which will require adding philosophy and psychology and the so-called soft aspects of strategic critical thinking, problem solving and leadership.

It won't happen by administrative or governance changes, by restricting any opinions contrary to set views, or by eliminating our history with restrictive election laws. Despite the apathy to PEO today, it will only take a spark and the emergence of an inspiring leadership, for the fire in the belly, already in so many engineers for a seen, appreciated role in society's progress, to erupt.

It is up to us.

Extended Notes to Mar 20, 2020 Council Presentation
 By Peter M DeVita, MAsC, MBA, P.Eng., FEC
 George Comrie, P.Eng., CMC

1 Preface

These notes support the presentation slides prepared for the Mar 20,2020 PEO Council meeting with additional context information. The Briefing Note for Council was edited by George Comrie with suggestions and research provided by me, Peter DeVita. Extra eyes on the work were provided by Roger Jones and Changiz Sadr. The material was also reviewed by members of the EDTF as well as by PEO's Licensing Committee.

Mar 20,2020
 PEO Council Meeting

2 Introduction – Governing Engineering

We have recognized that unlike Law and Medicine, Engineering scopes of practice grow with new science and technology. A surgeon can do surgery using a stainless steel blade or with a Laser and X-Ray machine. Either way, doing surgery remains as the surgeon's right to practice. For Engineering, designing a process to make stainless steel is radically different than designing Laser and X-Ray machines.

It is not likely that humans will become all knowing, in the near future, hence, we come to our core problem statement:

The Problem:

How do we effectively govern and regulate a skilled occupation whose scopes of practice constantly expand at an ever accelerating pace of change?

The issue of discipline specific organizations of Engineering must be understood in its global and historical context.

How do we effectively govern and regulate a skilled occupation whose scopes of practice constantly expand at an ever accelerating pace of change?

There will be a constant stream of new engineering practices, each introduced at an accelerating rate and subjecting the public to new engineering 'works' before humans can adjust.

We have reached a point in human history in which our technology is growing faster than our ethics and moral values can take the changes into account.

In such context, how can engineering and related practices govern to proactively serve and protect the public interest? This accelerating pace of change demands depth of understanding in each area of practice. A general overview is not sufficient to expose the detail 'street level' issues that pervade all engineering practices, including traditional ones.

The issue of discipline specific organizations of engineering must be understood in its global and historical context.

3 Overview

Here is what we will cover in this paper.

- 1) 1818: UK Start of modern Engineering.
 - 2) 1922: APEO Act is Discipline Specific for next 50 years
 - 3) 1952: Licensing Committee Proposed Engineering & Science Act;
Follow up committee did nothing.
 - 3) 2002: Council PASSED motion to effectively create Our EEDC proposal, a Horizon Watching committee,
Never implemented.
 - 4) 1999-2010: PEO has formally approves 4 new Disciplines of practice,
but no Exclusive rights to practice created.
-
- 5) Better serve the public and increase relevance by "enlarging PEO's tent"
We need the will and determination to act.
The alternative is to shrink into a regulator of only traditional engineering.
 - 6) The window for Cyber Systems Security will close rapidly.
If we don't act, we will lose it.
 - 7) We missed software engineering because we were too slow.
Do not allow this to happen with Cyber Systems Security Engineering.

We will quickly scan 200 years of Engineering history to illustrate that the issue of emerging disciplines has always been with us. PEO has had several initiatives on the matter.

We will then paraphrase the key motions focusing on their meaning and intent.

4 UK History

Modern Engineering can be said to have begun in 1818 with the formation of the Institution of Civil Engineers, only two generations since the Industrial Revolution began. These were 'civilian' engineers as distinct from Military Engineers. From the beginning we have a new practice of engineering splitting off from previous practice. In 1847, the mechanical engineers similarly decided that their practice was sufficiently different from that of civil engineering to merit their own Institution. In 1871 the electricals created their own institution. Telegraph and Radio Engineers (communications) also had their own Institution but eventually merged with the IEE to create today's **Institution of Engineering and Technology** (IET).

Founding Date	Organization	Comment - discipline specificity
1818	Institution of Civil Engineer (ICE)	1 st Institute; Civilian Engineers vs Military Engine
1847	Institution of Mechanical Engineers (IMechE)	Mechanical Engineers vs Civil
1871	Institution of Electrical Engineers (IEE)	Not Mechanical
1922	Institution of Chemical Engineer (ICChemE)	Not any of the others
2020	Engineering Council	40 Institutes

Today, there are some 40 institutions in the UK reflecting the growth in engineering practices. They affiliate through the Engineering Council providing a form of Registration approaching the Canadian concept of a restricted practice. In his report in 2000 (UK), Sir James Hamilton, did an extensive survey of 17 other countries to compare their engineering professions those in the UK. The document is a good resource for PEO

Councillors and committees to review. Hamilton concluded that while the Engineering Council provided a method for all Institutions to connect, it fell short in coordinating action with confusion around 'who did what'.

5 Ontario Engineering Disciplines

Since its beginning in 1922, (A)PEO has had a continuing stream of initiatives that dealt with the subject of how to handle new engineering practices as they were introduced.

The chart below lists some of the notable ones.

1922	APEO created	Council is Discipline Specific for 50 yrs elected, 65yrs appointed;
1952	Licensing Committee Eng & Sci Act Proposal	Implementation Committee Created but no further action
1996	Task Group on Emerging Engineering and Multidisciplinary Groups	From Fundamental Review
1998-2002	Engineering Disciplines Task Group (EDTG)	DiStefan's Motion passed in 2002 to create a permanent Committee <i>to identify new engineering disciplines</i>
2000-2002	Ontario Software Engineering Task Force (OSWET)	Council agreed to consider <i>licensing of other classes of applied scientist or technologist</i>
2002-2006	External Groups Task Force	Consider concept of <i>governing allied applied science practitioners</i> ; joint work with CIPS to focus on Software Engineering issue;
2008 - present	Emerging Disciplines Task Force (EDTF) 2010 recognition of NME & CIE	Nano Molecular Engineering and Cyber Systems Security Engineering (former CIE)

6 APEO 1st Council in 1922

The APEO was created in 1922 as a Discipline Specific Council consisting of 5 disciplines called Branches. Each Branch had 2 elected and 1 AG appointed Councillor from their Branch. These Branch Councillors were the gate keepers for their Branches. They did the admissions and the ejections (Discipline Panel idea) for their Branches. One could only get their P.Eng. via one of these Branches and its Councillors¹.

President Charles Hamilton Mitchell, of Toronto	Branch of Chemical Engineers James Watson Bain, of Toronto Stafford Frederick Kirkpatrick, of Ottawa Harold Van der Linde, of Toronto
Vice-President Robert Alexander Bryce, of Toronto	
Branch of Civil Engineers Willis Chipman, of Toronto John Bow Challies, of Ottawa Andrew Wellington Gray, of Westport	Branch of Electrical Engineers Henry U. Hart, of Hamilton Frank Richard Ewart, of Toronto Morris James McHenry, of Walkerville
Branch of Mechanical Engineers Henry G. Acres, of Toronto Harry Holborn Angus, of Toronto Arthur Knowlton Spotton, of Galt (now Guelph)	Branch of Mining Engineers George Reginald Mickle, of Toronto H. E. T. Haultain, of Toronto James McEvoy, of Toronto

Figure 1: 1922 APEO Council

Over time, new practices were emerging so that the 1922 structure could not handle all the new areas of practice. At first these were added to existing Branches. Creating new Branches and new Councillors for them would have significantly increased the size of Council. There were 7 to 9 specific engineering practices by 1969 when the new Act did away with discipline specific branches and created the 5 geographic regions we have today. While questions remained about computers and software it was clear that a major new practice was happening. IBM introduced its 360 Series in 1964. It included a major 5000 man year software project. This series was the most influential computer launch ever in computer history opening the door for companies of any modest size to own a computer. Something big was happening. Given history to this point and obvious new developments, PEO had to either expand Council or change its structure.

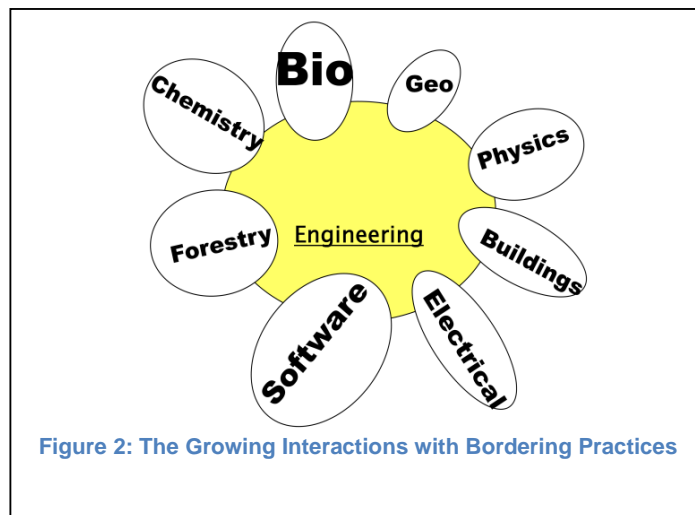
The 1969 Act changed the elected Councillors to regional representatives rather than branch representatives. The Engineering LGA appointees remained discipline specific until the 1984 Act change. However, volunteers and staff did not seem aware of this change given that I was appointed as the Civil Engineering Branch LGA in 1990 even though I was an Electrical Engineer. Appointees after me did away with being discipline specific as there were far more disciplines than the 7 appointees allowed by the Act.

For the first 50 years of PEO history, we had discipline specific councillors elected. Appointees were chosen for about another 65 years. This is more than half of PEO's existence. Perhaps the profession threw the baby out with the bath water?

¹ The notion of being Discipline Specific was a strong factor in the profession in the 1920's. The original Canadian Society of Civil Engineers was formed in 1887 and centered in Montreal was seeing considerable turmoil and unrest. The engineers of the day saw themselves as being more than only Civil Engineers and demanded that their Society reflect this. As WW1 ended, Engineers across Canada re-organized the CSCE into the Engineering Institute of Canada in 1918 with discipline specific practices recognized. Within a year, The EIC legislation committee created the Model Law which became the basis of all the Provincial Acts in the early 1920s. the APEO was one of these new regulatory bodies. It could not have been shaped any other way but to be discipline specific.

7 Practices Bordering Engineering

The graphic in Figure 2 below illustrates that there are other practices bordering engineering also growing. Several of these crossed into engineering work. The structural engineering and architect conflicts (part of Building sector) were legendary and eventually had the AG step in to mediate these destructive conflicts. Friction in these border areas still exists today, at least in the field at the 'street level'.



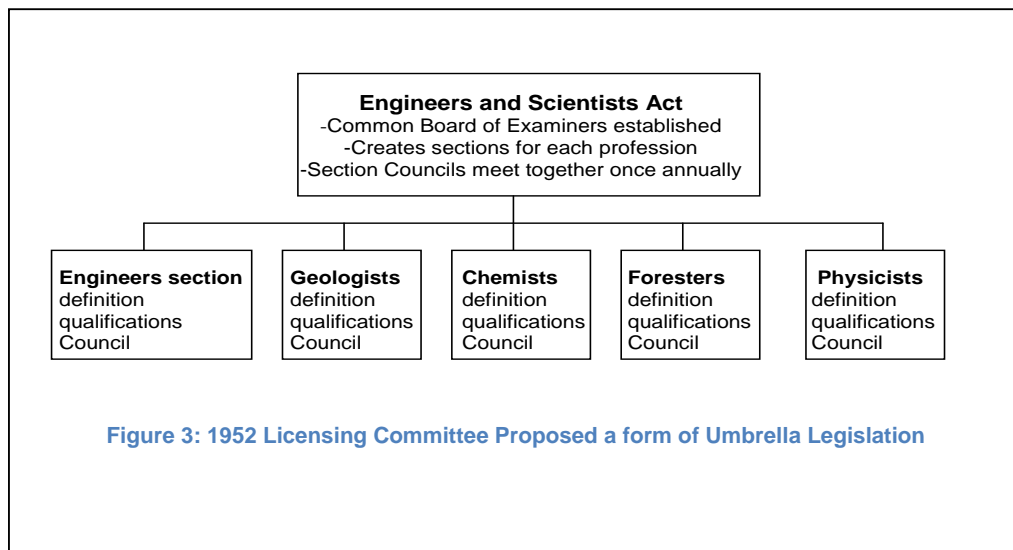
8 1952 Licensing Committee Proposal

Our retired Editor in Chief and archivist, Connie Mucklestone, wrote a historic summary of PEO's interactions with the concept of Umbrella Legislation in 2000 while I served as President of PEO. In this report, she shows that the Engineering Profession recognized all these factors of growing Engineering Disciplines and bordering areas of practice going back to the 1950s.

In 1952, the Licensing Committee brought their proposal to Council as shown in Figure 3. They proposed that the APEO Act of the day be totally scrapped and that a new Act replace it that would include the science disciplines to govern engineers and other applied scientists. The structure mirrors Canada's Federal – Provincial structure with each level having specific responsibilities. Each Science Council would have 2 elected and 1 appointed representative for their practice. This matches the structure in Engineering with their 5 Branches at that time (recall that APEO was still a discipline specific Council at this time). Such a structure could accommodate growth of new "Qualification Councils". Indeed, even new engineering branches could be accommodated as a new 'Qualification Council'.

This structure is truly far ahead of its time. It is similar in approach to the Health Disciplines Act which was introduced some 40 years later!

Unfortunately, the committee created to implement this proposal never proceeded.



9 2002 DiStefano Motion of the EDTG

We suggest that the Ontario Engineering profession took a wrong turn in 1969.,The pressure to be discipline specific and to somehow address the emerging areas of practice, will never go away. It is equivalent to a force of nature, perhaps human nature. We can ignore it for a time but it will always be there and growing at an accelerating rate.

In 1996, under the guidance of President Bob Gillespie, PEO underwent a "Fundamental Review" . What did regulating the Profession mean? What should PEO be doing and what should PEO NOT be doing? The latter question gave momentum to the chain of events that eventually created OSPE. The first question led to considering emerging and multi disciplinary practices. The Engineering Disciplines Task Group (EDTG) came out of these considerations.

This task force was chaired by software engineer, Bruno DiStefano, and aided by other notables of the day. They reported back to Council in Feb 2002 under the President G. Sterling, and staff support of Johnny Zuccon, today's Registrar.

Here is the motion passed by Council:

That Professional Engineers Ontario

- *Establish a permanent committee to monitor the qualifications and experience of applicants and job advertisements to identify new engineering disciplines, or, alternatively, task staff to do this;*
- *Apply the outlined process for defining a body of knowledge to identified new engineering disciplines;*
- *Promptly identify an area of exclusive practice for the licensed practitioners of any new engineering discipline and work with government to secure appropriate demand-side legislation.*
- *Implement enforcement processes in relation to new engineering disciplines with legislated exclusive scopes of practice;*
- *Examine a discipline-specific licensing model.*

Most of these initiatives are at the policy level so staff would not be able to do much except monitor news items asking for new types of engineering and reporting this to the standing committee. This motion is essentially the same in its intent to what EDTF is proposing to Council with the EEDC. In effect, the EEDC was created in Feb 2002. What we are really asking now is that this committee be implemented.

The 2002 motion creates a horizon watching committee to ‘ monitor new engineering disciplines, to define their body of knowledge, secure demand legislation and to implement enforcement processes.’ As well, it proposes that PEO again examine (or re-examine) the concept of a discipline specific licensing model.

This proposal and motion was passed in 2002 but never implemented. However, Council today in 2020 has the opportunity to pick up where we left off in 2002.

10 PEO Recognitions

Since 2002, PEO has in fact recognized 4 new areas of practice. The work of successive task forces are summarized in the Council approvals listed below.

1. Software Engineering - Council motion Dec 1999 (PEO working with CIPS since 2002 re practice issues)
2. Bio-Engineering (Nov 2001)
3. Nano Molecular Engineering (April 2010)
4. Communications Infrastructure Engineering (Oct 2010), now called Cyber Systems Security Engineering (CSSE)

While these were clearly accepted by PEO Councils to be part of the practice of Engineering, they unfortunately were left with

**No Demand Legislation, and
No Exclusive Rights to Practice.**

It seems that the Profession has moved a long way from the 1920's where the reasons for wanting a Engineering Licence were understood. We have fallen short of what is truly needed to ensure that all engineering practices 'serve and protect the public interest'.

11 Today's Motions/Initiatives

There are 3 core purposes in the proposed initiatives.

1. PEO must decide if it wishes to effectively regulate and license all engineering practices, or only the traditional practices – shrink or grow?
2. Implement the Committee created in Feb 2002.
3. Approve the roster of CSSE experts to be on the first working group of EEDC.

These are discussed in more detail below.

12 Enlarge the Tent or Not = Shrink or Grow?

This is the key philosophical motion that will guide PEO's future direction. Does PEO wish to properly regulate all engineering practice or devolve to regulate only the traditional areas of practice?

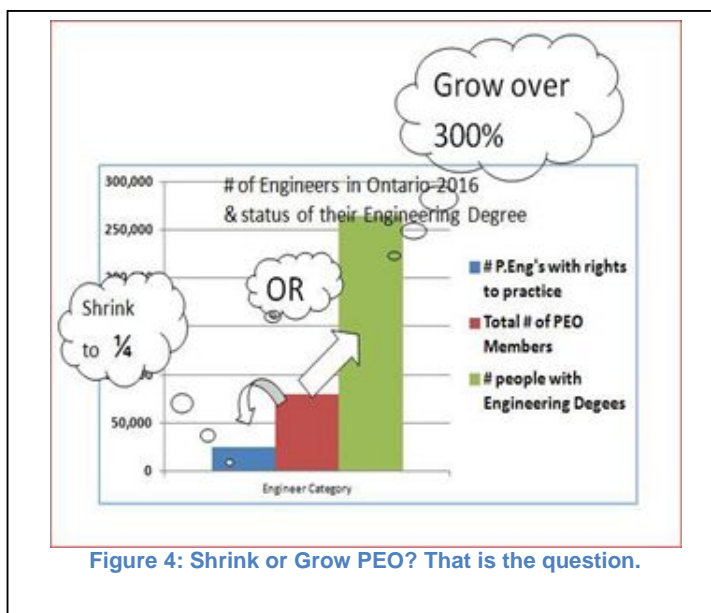
Should we decide to shrink PEO, we must also have the grace to assist those who are left out to create a new regulatory body that will govern and license these practices.

13 The Statistics

It is important to know how much we are talking about in either shrinking or growing.

The graphic, Figure 4, shows the statistics compiled by Prism for OSPE in 2016. The principal of Prism is John O'Grady who has been doing Engineering surveys for CCPE (EngCan) for over 20 years.

The blue bar shows the number of engineers who MUST have their P.Eng. in order to practice. This is



what it means to have a proper licence to practice.

The green bar shows all those in Ontario who have engineering credentials. This is a combination of Ontario graduates and immigrant engineers. It should also be noted that only about 30% of recent graduates have been able to get an engineering job. So about 2/3s of graduates will add to the green. This means that the green bar is growing twice as fast as the red bar, PEO's members, and considerably faster than the blue bar. PEO is already in the irrelevant zone and this is getting worse.

PEO can shrink to ¼ of its current size or elect to grow to over 300%. This does not include scientists who are applying their discoveries to works that impact humans, that is, they are doing engineering. The number of science graduates significantly outnumbers the number of engineer graduates.

14 Implement the Emerging Engineering Disciplines Committee of 2002

Our original motion formulated in the Briefing Note proposes creating a new Committee. It was only later that we recognized that this committee was actually created in 2002. Hence, we only need to appoint people to the committee and provide it with resources to proceed. A new committee is not needed.

15 Cyber Systems Security Engineering (CSSE) Work Group

This motion officially recognizes the proposed roster of experts to participate on this Working Group of the EEDC. This is a very important initiative. Ontario and Canada are in jeopardy with respect to Cyber attack. We have been fortunate to have gathered some of the top experts in Canada who want to help the profession deal with this national security threat.

Keep in mind that if PEO elects to shrink to only govern traditional disciplines this area or practice will seek immediate alternatives. The threats to the public interest are far too great to wait any longer. Certifying bodies have already begun. As these grow into Canada, it will be a natural extension for them to adopt the concept of Canadian self-regulation.

In short, this working group cannot wait to be created. If PEO is not willing to act now, it will grow out of our control, much like Software Engineering.

We should not let this happen. The engineering experts want to work with us and we know what to do.

Proposed Roster for the CSSE Working Group of EEDC

<u>Name</u>	<u>Affiliation</u>
Daksha Bhasker, P.Eng., CISM, CISSP, CCSK	Core network security analyst – formerly with Bell Canada, now with Comcast
George Comrie, P.Eng., CMC, FEC	EDTF/CIE Chair, cyber security consultant
Peter DeVita, MASC, MBA,P.Eng., FEC	EDTF Chair
Tyson Macaulay, LEL	Cyber security consultant and text author
Parisa Mahdian, P.Eng.	OPG, Smart Grid, IoT Cyber issues
Mike Rowland, P.Eng.	International cyber security expert with Sandia Labs, USA
Changiz Sadr, P.Eng.	Cyber Security consultant, formerly with Symcor
Larry Stoddard, P.Eng.	Communications Security Establishment/Canadian Centre for Cyber Security
Chris McMullen, P.Eng,	DND, Cyber Security

Briefing Note – Decision

C-532-

Regulation of Non-Traditional Engineering Disciplines

Purpose: *To establish mechanisms for effective regulation of emerging and non-traditional engineering disciplines, subdisciplines, and scopes of professional practice, including creation of a standing committee on emerging engineering disciplines that would replace the existing Emerging Disciplines Task Force (EDTF), and expansion of its CIE / CSSE Task Group.*

Motions to consider: (requires a simple majority of votes cast to carry)

1. That the progress report of the Emerging Disciplines Task Force (EDTF) and its task group on Communications Infrastructure Engineering (CIE) in Appendix A be received, and its recommendations considered.
2. That Council make a policy decision to “enlarge PEO’s tent” to include emerging and non-traditional disciplines, subdisciplines, scopes of practice, and controlled acts that are deemed to be the *practice of professional engineering* within the meaning of the Professional Engineers Act, and to implement structures, mechanisms, processes, and programs to regulate their practice and practitioners in an effective manner and without delay.

Revised #3

Whereas Council in Feb 2002 passed a motion creating a Standing committee to effectively monitor emerging disciplines and propose methods to integrate these into the Engineering profession as reproduced here,

- “Establish a permanent committee to monitor the qualifications and experience of applicants and job advertisements to identify new engineering disciplines, or, alternatively, task staff to do this;
- Apply the outlined process for defining a body of knowledge to identified new engineering disciplines;
- Promptly identify an area of exclusive practice for the licensed practitioners of any new engineering discipline and work with government to secure appropriate demand-side legislation.
- Implement enforcement processes in relation to new engineering disciplines with legislated exclusive scopes of practice;
- Examine a discipline-specific licensing model.”

Be it Resolved,

That Council implement the decision by PEO Council in Feb 2002 under President Sterling and moved by Bruno DiStefano,

And,

That the committee be known as the Emerging Engineering Disciplines Committee (EEDC), and, that the initial and with initial membership as outlined in Appendix C., and, be constituted as per the draft terms of reference in Appendix B, to be reviewed at the first meeting of the EEDC and to make changes as necessary within the context and purpose of this initiative.

3. (part of revised #3)

4. That Council authorize the ex-budget expenditure of \$10,000. in 2020 for the Committee's and Task Group's operation.
5. That Council approve the roster and 2020 workplan of the CIE / CSSE Task Group under the new Committee, as set out in Appendix D.
6. Contingent on Motions 2., 3., 4., 5., and 6. being passed, that Council stand down the Emerging Disciplines Task Force with thanks, upon appointment of the EEDC at a future meeting.

Prepared by: Peter DeVita, P.Eng., FEC, -- Chair, Emerging Disciplines Task Force
George Comrie, P.Eng., CMC, FEC – Chair, CIE Task Group

Motion Sponsor: Councillor Guy Boone, P.Eng.

Need for PEO Action

Engineering is fundamentally different from most other senior professions by virtue of its large number of scopes of professional practice and areas of specialization, which number in the hundreds. This should not be surprising, given that engineering is fundamentally applied science, and that scientific / technical knowledge and its application are expanding exponentially. The scopes of professional practice that are associated with traditional engineering activities – particularly those that are defined in legislation as requiring a licensed professional to sign, seal, or otherwise take responsibility for the work – are relatively well established from a regulatory point of view, and are generally well understood and accepted on the part of practitioners, their employers and clients, and PEO as the regulator. They are also supported by established academic programs that have been designed to prepare practitioners for them.

On the other hand, scopes of practice that are on the periphery of the core engineering disciplines, or are entirely new, are often not well understood or accepted by industry or the profession. In many cases, even their practitioners do not see their work as the practice of professional engineering because they do not enjoy exclusive scopes of practice that are enforceable, and are therefore not inclined to seek or maintain licensure.

Those who do seek licensure may face challenges convincing the regulator (PEO) that what they are doing constitutes the *practice of professional engineering*, or that it meets the licensing criteria for acceptable engineering experience. Even if they are graduates of accredited engineering programs, their knowledge and skill in the emerging discipline will not likely have been acquired in academia, but rather on the job. PEO's approaches to evaluating experience are evolving slowly to address this problem, but in recent years Council has heard numerous complaints about the challenges some applicants face – even in some of the more traditional engineering disciplines.

The fundamental question being raised by the Task Force in this briefing note is this: **What is PEO's commitment to “enlarging its tent” as a regulator?** (i.e., to including areas of applied science on the periphery of the traditional engineering disciplines within its regulatory umbrella)

This is far from a new question for PEO Council, as documented in an unpublished paper by PEO's former Editor of *Engineering Dimensions* and Director of Communications Connie Mucklestone entitled *Regulation of Occupations Allied to Engineering in Ontario: Historical Overview and Explanation of Terms* that traces the discussion back to 1952. In the late 1990s, Council debated whether or not to include the practice and practitioners of geoscience within its purview, as has been done by a majority of Canadian engineering regulators. In the end, Council's decision was not to include the geoscientists, and they were left to form their own professional licensing body: *Professional Geoscientists Ontario (PGO)*. Some consider this decision a missed opportunity for PEO. In 2002, Council again debated whether or not to license engineering technologists with limited scopes of engineering practice, and this time, the decision – based on a report of the Engineering Technologist Licensure Task Force – was “yes”. That decision, albeit a long time in implementation because of government delays, saved PEO from much of the turmoil and conflict experienced by PEO's counterparts in Alberta and BC over the same issue.

For the past thirty years, PEO has had an almost continuous succession of task forces that have considered the regulatory aspects of various emerging engineering disciplines and applied science disciplines that are allied to engineering. Their recommendations – many of which were accepted by Council - are particularly relevant here. These include:

- (i) ***Committee for the Professional Registration of Geoscientists in Ontario: 1989-1998***
- (ii) ***Task Group on Emerging Engineering and Multidisciplinary Groups: 1996***
Established in November 1996 as part of PEO's "Fundamental Review", this task group recommended the creation of an *Engineering Disciplines Task Group*.
- (iii) ***Engineering Disciplines Task Group (EDTG): 1998-2002***
Established in March 1998 and chaired by Dr. Bruno DiStefano, P.Eng., this Task Group looked into regulation of then emerging areas of engineering practice, in particular software engineering, with a view to how PEO's licensing criteria and process could be modified to deal with their applicants for licensure more effectively and fairly. Council received its final report with recommendations on February 28th, 2002 and passed the following motion: ***That Professional Engineers Ontario***
 - ***Establish a permanent committee to monitor the qualifications and experience of applicants and job advertisements to identify new engineering disciplines, or, alternatively, task staff to do this;***
 - ***Apply the outlined process for defining a body of knowledge to identified new engineering disciplines;***
 - ***Promptly identify an area of exclusive practice for the licensed practitioners of any new engineering discipline and work with government to secure appropriate demand-side legislation.***
 - ***Implement enforcement processes in relation to new engineering disciplines with legislated exclusive scopes of practice;***
 - ***Examine a discipline-specific licensing model.***
- (iv) ***Technologist Licensure Task Force: 1999-2002***
- (v) ***Ontario Software Engineering Task Force (OSWET): 2000-2002***
On September 16th, 2000 Council established the *Software Engineering Task Force* to prepare a reasoned response to the CCPE – AUCC proposal to create a joint Software Engineering Accreditation Board (SEAB). The Task Force completed this task, but although the SEAB was never created, the engineering profession's ability to regulate the practice of software engineering remained in doubt. As a result, on March 26th, 2001 Council empowered OSWET to hold discussions with the Canadian Information Processing Society (CIPS) and other groups representing the information technology community regarding the possible licensing of applied computer scientists with the following motion:
That Council agree in principle to hold discussions that may lead to the licensing of other classes of applied scientist or technologist by our Association under our Act.
- (vi) ***External Groups Task Force: 2002-2006***
At the same meeting, Council determined that the review of the regulation of other applied scientists should be handled by a super task force, with OSWET and the Technologist Licensure Task Force as subcommittees. The motion passed was:
That Council create a super task force to study the public interest implications of alternative models for governing allied applied science practitioners.

As a result, OSWET became known as *External Groups – Software*, and its discussions with CIPS National and CIPS Ontario continued through 2006. The agreed upon goal of these discussions was to:

- Define the world of software practice and come to an understanding of common terms that describe this field;
- Define standards of practice;
- Determine if there are areas of practice that are amenable to licensing or certification.

A white paper was prepared and received by Council in June, 2004.

(vii) *Emerging Disciplines Task Force (EDTF): 2008 - present*

To proactively embrace emerging disciplines is also a “watershed” decision that is fundamental to PEO’s future as a regulator. With the rapid advances in applied science and technology, the number of new scopes of professional engineering practice can be expected to continue to increase. Many of these scopes of practice will embody significant risks to the public, and ought to be regulated. If PEO chooses not to embrace them and regulate them effectively, PEO will continue to lose relevance and influence as a regulator, and over time will regulate a smaller and smaller percentage of engineering activity. One can imagine a scenario in which PEO devolves to represent only those professional engineers in the traditional building-related engineering disciplines who must be licensed in order to practise them.

The engineering subdiscipline highlighted in much of this report – *Communications Infrastructure Engineering (CIE)*, or *Cyber Systems Security Engineering (CSSE)* as it is more commonly referred to – is probably the best example of an emerging discipline that requires effective regulation to protect the public from the severe consequences of system security breaches that are in the news on a weekly basis. These scopes of practice will inevitably be regulated in the public interest, and soon. PEO is clearly the best positioned and equipped entity to regulate CIE / CSSE, and much good work has already been done to prepare PEO to do so. But if PEO chooses not to embrace these and other emerging disciplines and scopes of practice, some other entity will be created to regulate them, and PEO’s opportunity to do so will be lost forever.

As previously noted, PEO’s current Task Force on Emerging Disciplines (EDTF) has been in existence since 2008. EDTF spawned two Task Groups to deal with *Nanomolecular / Nanomaterials Engineering (NME)* and *Communications Infrastructure Engineering (CIE)* respectively, both of which were declared by Council to be the *practice of professional engineering* in 2010. Both subgroups had original workplans consisting of two phases that included consulting with academic and industry, defining scopes of professional practice and core bodies of knowledge, and developing recommendations as to how PEO should regulate them effectively. The NME subgroup submitted a report on its Phase I work in April of 2010, and a final report at the conclusion of its Phase II work in November of 2013, after which the subgroup effectively disbanded. The CIE subgroup submitted its Phase I report in September of 2010, and the executive summary of a planned Phase II report as a progress report in November of 2013.

The CIE Task Group’s Phase II work involved extensive consultation with industry and government agencies in the telecommunications sector regarding regulatory aspects of CIE and the need for licensure / certification of practitioners. Because of this work, an opportunity

arose for the Task Group to conduct a pilot project on licensure of existing practitioners with varying backgrounds, many of who were employed by Bell Canada in its Core Networks Group. With the support of the Registrar and staff in the Licensing and Registration Department, a group of over 40 potential applicants for P.Eng. and Limited licences were triaged, and those that applied were monitored through the assessment process. In the course of this exercise, a number of new applicants with CIE /CSSE scopes of practice were licensed, and PEO's internal licensing processes were refined to deal with such applicants.

This work constituted a third phase of the CIE Task Group's work. It also involved extensive consultation and collaboration with external experts, including PEO licensees who are cyber security experts in the Canadian Computer Security Establishment (CSE, part of DND). In the process, much valuable information was learned concerning what PEO needs to do to regulate CIE / CSSE effectively, and how to deal proactively with new and emerging disciplines in general. As it turns out, to embrace an emerging or non-traditional discipline requires focused activities such as extensive external outreach that are not part of PEO's normal licensing protocols for established disciplines.

The work required to regulate CIE / CSSE effectively is far from done. The appended report outlines a number of steps that remain to be completed, including refining the scopes of practice / controlled acts, refining the core body of knowledge, and introducing curriculum components into accredited engineering programs that deal with security in general and cyber security in particular. For this reason, the CIE Task Group should be continued and revitalized as a working group under the proposed new standing committee.

Proposed Action / Recommendation

1) Make a Commitment in Principle to "Enlarge PEO's Tent"

This is the fundamental decision on which everything else in this Briefing Note stands: **to make a commitment to regulate emerging and non-traditional engineering disciplines, subdisciplines, and scopes of professional practice – and their practitioners – in an effective and timely manner.**

It has profound implications for most of the other major decisions facing PEO Council, including some related to recommendations in the recent external regulatory review. If PEO intends to include and regulate practitioners of scopes of engineering practice on the periphery of the traditional scopes of engineering practice, it must change certain aspects of its core regulatory rubric, processes, and programs. If, on the other hand, PEO is content to confine its regulatory purview to the well-established scopes of engineering practice, then less dramatic change is required.

One thing we have learned from PEO's past attempts to embrace emerging disciplines such as software engineering and nanomaterials engineering is that it is completely ineffective to declare scopes of engineering practice to be the *practice of professional engineering* without having in place concrete plans and resources to implement the changes necessary to integrate them in a timely and effective manner. In addition, a licence is only effective if it has well defined rights to practice that can be enforced. This typically requires demand-side legislation or other regulatory regimes that ensure the involvement of licensed practitioners in the work.

For these reasons, the fundamental decision as to whether or not to "enlarge PEO's tent" should be made before taking other actions in response to the external review, not after.

2) Replace EDTF with a Standing Committee on Emerging Engineering Disciplines

PEO needs to create a standing committee to identify emerging and non-traditional engineering disciplines, subdisciplines, and scopes of professional practice and guide the process for their effective and timely regulation by PEO. The new committee would succeed the existing *Emerging Disciplines Task Force (EDTF)*, which would be stood down. History has demonstrated clearly that the work required to identify and incorporate emerging disciplines is not a one-time project suitable for a task force, but rather ongoing, and requiring a long-term commitment.

The proposed structure for the new Emerging Engineering Disciplines Committee is analogous to that of the Licensing Committee and the Professional Standards Committee, in that it would have the ability to spawn (with Council approval) task groups of limited duration to deal with specific disciplines, subdisciplines, and scopes of engineering practice that have been identified as falling within PEO's purview and are not presently being regulated effectively.

3) Launch the Next Phase of PEO's Pilot Project to Bring CIE / CSSE Fully Into PEO's Tent

As described in Appendix A, PEO has made substantial progress over the past several years at incorporating the CIE / CSSE scopes of practice and their practitioners into PEO's regulatory rubric. CIE / CSSE is our best example of an emerging engineering discipline, in that:

- It is truly emerging, and evolving rapidly;
- It is largely unregulated at the present time, and has few professional standards;
- Its existing practitioners have acquired most of their knowledge and skills on the job;
- Its leaders recognize the need for engineering discipline;
- It is of critical importance to the safety and well being of society.

Treating this emerging [sub]discipline as a pilot project has enabled significant accomplishments in terms of adapting PEO's licensing requirements and processes to accommodate applicants who would otherwise be "outliers" in our traditional admission system.

This initiative would provide for the continuance of the Task Group on *Communications Infrastructure Engineering (CIE) / Cyber Systems Security Engineering (CSSE)*, with an expanded roster, under the new Committee.

It would further provide for the continuance of the pilot project to complete some of the outstanding work required, including:

- Revision of the CIE / CSSE Core Body of Knowledge (CBOK);
- Incorporation in accredited engineering programs of core knowledge components related to security in general, and cyber security in particular;
- Establishment of a CIE / CSSE specialist designation;
- Establishment of virtual CIE / CSSE practice working group consisting of all willing PEO licensees practicing in the field;
- Significant further outreach to industry, practitioners, government agencies, and academia;
- Determining what demand-side legislation is required at both the provincial and federal levels.

Next Steps (If Motions 2. through 5. are approved)

Motions 2. through 5. are presented separately for purposes of Council debate and possible refinement, but are essentially inseverable.

The foundational policy decision represented by Motion 2. is necessary, but not sufficient, to accomplish the intended objective (i.e., to facilitate the effective and timely regulation of emerging and non-traditional engineering disciplines, subdisciplines, and scopes of professional practice). By itself, Motion 2. is impotent.

Needless to say, if motion 2. is not passed, the remaining motions need not be considered. In the event that Council decides not to move forward with this initiative, practitioners in emerging and non-traditional areas of engineering practice may seek alternative regulatory mechanisms outside of PEO to enhance their professional status and ensure that the public interest is served.

Motions 3., 4., and 5. enable the constitution of the new Emerging Engineering Disciplines Committee (EEDC) which will meet, elect a Chair and Vice-Chair, and commence its work. Its first tasks will include:

- To review its Terms of Reference and recommend any changes to Council for approval;
- To prepare a Work Plan and HR Plan for 2020 for Council approval.

Motions 3., 4., and 5. provide the necessary framework for developing the Council decisions that must follow, such as:

(a) What specific areas of practice should be included in the “enlarged tent”, and how they should be defined

Besides *Communications Infrastructure Engineering / Cyber Systems Security Engineering*, other examples for early consideration would include:

- ***Software Engineering***
- ***Industrial / Systems Engineering***
- ***Bio / Biomedical / Biomaterials Engineering***

These are suggested because:

- Council has long ago declared each to be the practice of professional engineering within the meaning of the Act;
- With the notable exception of CIE / CSSE, academia has already embraced them and our accredited engineering schools are already offering degree programs in them;
- PEO is not regulating a significant percentage of their practitioners at the present time;
- PEO does have a core base of licensed practitioners in each field on which to build.

(b) What changes are necessary to PEO’s regulatory rubric, policies, programs, and procedures in order to embrace and regulate them

Based on the Task Group’s experience to date with CIE / CSSE, PEO must undertake the following in order to achieve the objective of integrating emerging and non-traditional areas of practice:

- Careful definition of targeted scopes of practice (what work is included, and what isn’t);

- Discipline-specific specialist designations;
- Outreach to industry and existing practitioners;
- Outreach to academia, including the colleges;
- Discipline-specific competency frameworks for experience evaluation.

Even more fundamental aspects of PEO's current regulatory rubric may need to be examined in order to deal appropriately with licensees in "marginal" areas of practice, such as graduates of accredited engineering programs working in management consulting, banking and finance, law, etc. Potential changes could include separating the title from the licence, and introducing new classes of licence or discipline-specific licences.

Motion 6. authorizes the reconstituted CIE / CSSE Task Group to continue its remaining work.

Policy or Program Contribution to PEO's Strategic Plan

These initiatives will contribute to the following three high-level objectives in PEO's 2018-2020 Strategic Plan:

- **Objective #3 – Enhance PEO's public image**

PEO will be seen by industry, governments, and practitioners as a leader in public protection for faithfully discharging its mandate to serve the public by addressing one of society's most serious threats to its security.

- **Objective #5 – Increase influence in matters regarding the regulation of the profession**

PEO will begin to fulfil its legislated mandate to regulate the whole practice of professional engineering, not just the traditional areas of practice which by most estimates account for significantly less than half of all engineering practice in Ontario.

- **Objective #6 – Augment the Applicant and Licence Holder Experience**

PEO will enhance its licensing outreach, criteria, and processes to more readily attract and include practitioners in non-traditional and emerging areas of practice. These would include our own engineering graduates, many of whom do not see PEO as relevant to their careers.

Financial Impact on PEO Budgets (for five years)

	Operating	Capital	Explanation
Current to Year End	\$10,000.	\$	Funded from Reserves (Council discretionary funds)
2 nd	\$20,000.	\$200,000.	To be included in 2021-2022 Operating Budget for operation of Committee and Task Group(s) To be included in 2021-2022 Capital Budget for

			Public Information Campaign
3 rd	\$30,000.	\$200,000.	To be included in 2022-2023 Operating Budget for operation of Committee and Task Groups To be included in 2022-2023 Capital Budget for Public Information Campaign
4 th and thereafter	\$40,000.	\$200,000.	To be included in 2023-2024 Operating Budget for operation of Committee and Task Groups To be included in 2023-2024 Capital Budget for Public Information Campaign

Human Resource Implications

As noted in Appendices B and C, the volunteer rosters of both the Emerging Engineering Disciplines Committee and the CIE / CSSE Task Group need to be expanded and refreshed. Since their inception, the Emerging Disciplines Task Force and its CIE Task Group have enjoyed the support of PEO's Manager of Policy, Jordan Max, who has contributed extensively to their administration, as well as their outreach and networking efforts. For their continued operation, equivalent staff support will be required on an ongoing basis at a level of approximately 1/4 FTE.

Peer Review & Process Followed

Process Followed	<ul style="list-style-type: none"> Repeated attempts made during 2017-2018, 2018-2019, and 2019-2020 Council terms to make a presentation at a Council plenary session. Briefing Note placed on Council agenda for March 20th, 2020 regular meeting
Peer Review	<ul style="list-style-type: none"> Existing members of Emerging Disciplines Task Force (EDTF) and Communications Infrastructure Engineering (CIE) Task Group

Appendices

- Appendix A – Progress Report of Task Group on Communications Infrastructure Engineering (CIE)
- Appendix B – Draft Terms of Reference for Emerging Engineering Disciplines Committee (EEDC)
- Appendix C – Proposed Initial Roster of Emerging Engineering Disciplines Committee (EEDC)
- Appendix D – Roster and 2020 Work Plan of Reconstituted CIE / CSSE Task Group

*Emerging Disciplines Task Force (EDTF)****Communications Infrastructure Engineering (CIE) Task Group*****PROGRESS REPORT****1. Introduction and Overview**

This is the third report of the *Communications Infrastructure Engineering (CIE) Task Group* of PEO's *Emerging Disciplines Task Force (EDTF)*.

Our first (Phase I) report was issued in July 2010. The Phase I report demonstrated the need for - and the public interest inherent in - the establishment of a CIE field of engineering practice in Canada. It attempted to define:

- the impacts associated with protection of communications infrastructure and other critical infrastructures dependent on communications infrastructure,
- the core body of knowledge that should be mastered for competent CIE practice, and
- the scope and limitations of that practice.

In response to the Phase I report, *Communications Infrastructure Engineering* was accepted by PEO's Governing Council as the practice of professional engineering in September 2010.

The principal purpose of the Task Group's Phase II work was to give real meaning to licences to practise in this field by identifying (i) scopes of exclusive practice in CIE, and (ii) actions necessary for PEO to regulate the practice of CIE effectively. Our goal was to answer the question:

"What will it take for the self-regulating engineering profession to embrace the practice of CIE within its regulatory fabric, and to establish itself as a leader in the protection of our society's critical communications and network-dependent infrastructures?"

In its early days, the Task Group attempted to track and document the ever-increasing incidence of cyber security breaches with their associated vulnerabilities, attack vectors, mitigation strategies, and losses – but this proved to be an overwhelming task for a small group of volunteers. Fortunately, both public and private organizations have emerged in the burgeoning cyber security industry that investigate, track, and communicate such information for the benefit of those who are trying to protect their data and systems. Suffice it to say that the almost constant media coverage of cyber abuse is making the general public much more aware of the inherent risks to their privacy and security of our on-line way of life.

At its inception, the Task Group debated what to call the emerging discipline it was dealing with. The first iteration was *Communications Infrastructure and Networking (CIN)*, which soon gave way to just *Communications Infrastructure Engineering (CIE)*. Recently, the Task Group has debated at some length whether this nomenclature depicts adequately the nature and importance of the discipline. Most CIE practitioners would refer to what they do as *cyber security*, a term that more likely has meaning to members of the general public. As a result, we are leaning towards calling it *Cyber Systems Security Engineering (CSSE)*, as term that has gained acceptance in the U.S.

and other jurisdictions. Throughout this report, we will use the terms *CIE*, *CSSE*, *CIE / CSSE*, and *cyber security* interchangeably.

2) Stakeholder Consultations

Our initial step in Phase II was to consult extensively with interested stakeholders - both within and outside the engineering profession - to broaden our understanding of the environment in which CIE is taking place and to obtain their feedback on the concepts developed in our Phase I work. The Phase I report was distributed widely to a range of potential stakeholders, with a request for comments. The distribution was followed up with offers to meet with interested stakeholders to present PEO's position on CIE and to hear and understand their reactions. The following meetings / presentations were conducted, resulting in much useful feedback.

- PEO Academic Requirements Committee (ARC)
- PEO Experience Requirements Committee (ERC)
- PEO Enforcement Committee (ENF)
- PEO Professional Standards Committee (PSC)
- OCEPP Policy Engagement Series Presentation
- ISACA Golden Horseshoe Chapter
- Office of the CIO, Ontario
- Canadian Radio-Telecommunications Commission (CRTC)
- Industry Canada - ICT Sector Group
- Council of Ontario Deans of Engineering (CODE)
- Presentation to ITAC Cyber Security Forum
- Computer Security Establishment Canada (CSEC)
- Ontario MGS Communications Branch
- Canadian Internet Registration Authority (CIRA)
- Consulting Engineers Ontario (CEO) Board of Directors
- PEO Regulatory Committee Chairs
- Licensing Process Task Force (LPTF) re LEL Applicants (Sep 2013)
- Association of Power Producers of Ontario (APPRO) Panel on Cyber Security (Nov 2013)
- Bell Canada - Core Networks Group (Mar 2015)
- Engineering Innovations Forum Presentations on Cyber Security (Mar 2017)

3) CIE / CSSE Scopes of Practice

The first step in establishing a regulated profession is to define and delimit the activities for which a licence to practise is required in the public interest. Our Phase I report set the bounds for such activities within the CIE domain in terms of both network technology and level of responsibility. The Task Group then proceeded to define specific work activities that constitute professional CIE practice.

At a high level, Communications Infrastructure Engineering (CIE) may be defined as the systems-level design, implementation, management, analysis, and audit of assured or trusted communication networks. In this context, "trusted" includes concerns for availability, confidentiality, integrity and privacy. CIE deals with data in transit, as opposed to data in repository or at rest. It excludes configuration and troubleshooting of network devices such as routers and firewalls. It also excludes application-specific security concerns and provisions.

The practice of Communications Infrastructure Engineering is primarily a systems level practice that uses product level components developed by other engineering disciplines such as electrical engineering, computer engineering, and software engineering. This is analogous to structural engineers using materials developed by metallurgical or chemical engineers in their design of structures.

Our Phase I report attempted to define the bounds of CIE in terms of network technology / topology and the core network elements of data, physical infrastructure, logical infrastructure, and point of demarcation. It emphasized that CIE deals with data in transit, thereby excluding cyber security issues associated with end-point data repositories and application software. Finally, it excluded from the CIE scope definition activities that normally fall within the purview of network technicians and technologists, such as installation, configuration, and troubleshooting of routers and firewalls, for example.

Without limiting the generality of the foregoing definition, the following subsections describe some specific areas of practice within the field of CIE.

3.1 Planning and Design of Assured Communication Networks

By definition, assured communication networks include those supporting other critical infrastructures, as defined by the Government of Canada.¹ Any communications infrastructure whose failure, compromise, or unavailability can adversely affect society's well-being is critical, and must be secured against a broad spectrum of threats and failures.

The role of the CIE practitioner is concentrated at the systems level; i.e., it is concerned with the overall design of the network from the point of view of:

- *availability* (which encompasses performance) and reliability,
- *confidentiality* (protection against unauthorized access or exposure),
- *integrity* (protection against unauthorized modification/corruption, including "operations" security),
- *privacy* (restrictions on unauthorized disclosure),

¹ Public Safety Canada, *National Strategy for Critical Infrastructure*, <http://www.publicsafety.gc.ca/cnt/rsrscs/pblctns/srtg-crtcl-nfrstrctr/srtg-crtcl-nfrstrctr-eng.pdf>, 2009.

and includes the design of secure operating and monitoring procedures. It is not intended to encompass the configuration of network devices and interfaces (which is the purview of the network technician or technologist), nor is it intended to encompass the design of secure applications (which is the purview of the software analyst and/or designer). However, the CIE practitioner is expected to understand these works and take overall system responsibility for the work done.

CIE practitioners apply their engineering discipline – which includes comprehensive risk assessment and mitigation strategies – to develop and document requirements for network assurance and security, along with specifications and designs that will meet those requirements.

3.2 Implementation of Assured Communication Networks

As in most other engineering disciplines, there is a requirement for a licensed CIE practitioner to monitor, inspect / review, and provide oversight to the implementation of an assured network to ensure that it is implemented in accordance with its designs. In some cases, issues will arise during implementation that may require the design to be revisited and possibly revised. Any such reviews and revisions cannot be left to persons less skilled than the designer without risking compromise of the network security. Thus, CIEs are expected to be involved in implementation of their designs, just as other engineers are. A CIE should "sign off" on the "as-built" implementation of an assured network as verification that it may be trusted.

3.3 Operational Oversight of Assured Communication Networks

Just as a certified aircraft must be operated in accordance with its Pilot Operating Handbook to be flown safely, so a secure network that has been properly designed and risk assessed must be operated in accordance with documented operating procedures to avoid failure or compromise.

The role of the CIE practitioner in operation of critical communications infrastructure is to provide the oversight necessary to ensure that its operation is in accordance with design limitations and secure practices, and to ensure that those practices are updated as and when required to reflect any changes in the design or configuration of the network.

This role includes ensuring that monitoring facilities are in place to detect any compromises of the network, and that appropriate corrective action is taken to address any threats detected.

It is not intended to encompass routine day-to-day operation and control of networks (which is the purview of network operators), or repair and configuration of network devices (which is the purview of network technicians and technologists).

Again, however, the CIE practitioner must understand the fundamental technologies and be able to verify that implementation and maintenance work does not compromise the reliability and security of the network as originally designed.

3.4 Auditing and Risk Analysis of Network Infrastructure

As networks, network technology, and cyber-security threats are evolving rapidly, it will be necessary to evaluate existing network infrastructure on a regular basis to ensure that risks are properly identified and mitigated. Many existing networks were designed when technology was simpler and threats were fewer, without the end-to-end design undergoing formal risk analysis.

This scope of CIE practice emphasizes the critical engineering aspect of risk analysis in secure network design and operation. It also encompasses oversight of remedial analysis and contingency planning for corrective actions that may become necessary following a network failure or security breach.

3.5 Risk Analysis and Mitigation of Other Critical Infrastructure that is Dependent on Network Infrastructure

Since so much of society's critical infrastructure depends on network infrastructure, risk analysis and mitigation for infrastructures such as energy, finance, health care, public safety, and transportation will require knowledge of network infrastructure and its vulnerabilities. Communications infrastructure engineers will therefore be called upon to bring their specialized knowledge and skill to bear on designing, operating, and protecting other critical infrastructures.

Since the above scopes of practice were established, the Task Group has broadened somewhat its view as to what should be included in the CIE / CSSE scopes of practice. While we believe the focus should remain on networks and data in transit, it is difficult in cyber security practice, and probably unwise, to attempt to exclude data at rest (in storage) and data in use at network endpoints. With this in mind, a review and likely expansion of these scopes of CIE / CSSE practice is contemplated as a Phase IV activity.

4) CIE Practitioners

One of the challenges inherent in regulating a new engineering (sub)discipline like CIE is that its practitioners come from widely diverse backgrounds. Many lack formal education or training in their field of specialization, and have acquired their expertise solely through practical experience. In the case of CIE, academic programs that provide the required body of knowledge are just now being developed and introduced, and their graduates are few.

To this day, relatively few existing CIE practitioners have formal engineering or engineering technology backgrounds, and even fewer are licensed. This challenge is exacerbated by the fact that there exists currently an acute shortage of persons with the requisite CIE skill set in the labour market, and by the fact that there is as yet no agreed upon standard of knowledge and skill for them.

An important concept in the strategy to regulate an emerging discipline is that of *targeted domains*: industry sectors and application areas that are logical choices for

regulation and restricted rights to practise. The most obvious target domains for CIE are those in which there is a "logical-kinetic" interface between the communications network and a device or system that is already recognized as falling within the purview of licensed professional engineers. CIE target domains include networks used to control mission-critical and safety-critical systems such as those used in communications (e.g., carriers and network / internet service providers), power generation (e.g., nuclear), transportation (e.g., aircraft and train control), industrial processes (SCADA), and so on.

5) Phase II Recommendations

In November, 2013 the Task Group filed with PEO Council a summary report of its Phase II work containing the following recommendations, organized according to whom the Task Force believed should be responsible for their implementation. The current status of each recommendation is noted in the table.

	Recommendation	Current Status
	<u>Admissions - Related Recommendations</u>	
1	That the Academic Requirements Committee (ARC) create a Syllabus (as defined in Regulations) for CIE, in order to substantiate its core body of knowledge.	Completed (2015)
2	That the Experience Requirements Committee (ERC) begin to add to its roster licensees who are practising in the CIE field, in order to be able to staff CIE interview panels and to structure interviews of CIE applicants.	Completed (2015)
3	That the proposal for a Limited Licence in CIE set out in Appendix L, be referred to PEO's standing committees on Academic Requirements (ARC), Experience Requirements (ERC), and Legislation (LEC), and its Licensing Process Task Force (LPTF), for peer review with a view to its implementability, and with the intention of bringing recommendations to Council for approval in the near term.	Completed: LEL Regs amended in 2016
4	That PEO establish a voluntary CIE specialist designation available exclusively to its licensees who meet a CIE certification standard.	Pending
5	That PEO establish as an additional character requirement for CIE designees a formal security clearance to be completed and maintained at the request and expense of the applicant / licensee.	Pending
6	That PEO establish a general certification process that can be applied to CIE and other such emerging disciplines and areas of specialization.	Pending
7	That Council task the Licensing Process Task Force / Standing Committee on Licensure Policy with investigating the need to increase the academic requirement for licensure to the equivalent of five (5) years of academic study.	Abandoned
8	That the CIE knowledge base and associated elements of the licensing process updated to reflect technology and regulatory	In Phase IV Work Plan

	changes by a task force composed of CIEs a minimum of once every 5 years for the next 20 years.	
	<u>Recommendations Related to Protection of Rights to Practice</u>	
9	That the Terms of Reference for the Enforcement Committee (ENF) be amended to ensure that members of the Committee have practical experience with CIE scopes of practice, the cyber security industry, and control of critical physical infrastructure.	Not Implemented
10	That enforcement activity against unlicensed CIE practitioners be phased in gradually, beginning with instances of work on networks used to control mission-critical / safety critical infrastructure, including the shared backbone networks of telecommunications service providers, and private backbone networks of financial and government institutions.	Not Implemented - Premature
11	That the Professional Standards Committee (PSC) create a professional practice guideline for CIE that outlines the core body of knowledge and applicable technical standards and government regulations.	Refused by PSC
12	That licensees not originally licensed in CIE who wish to practice in this area refer to the CIE Core Body of Knowledge, Syllabus, and Practice Guideline (when available) to determine the technical knowledge and skill requirements for CIE practice, in order for their self-assessment of competency to begin practising in the field.	Pending
13	That PEO, together with other Canadian engineering regulators, begin to draft and promote public policies regarding necessary credentials of CIE practitioners in critical target domains.	Discussed with Engineers Canada Board
	<u>Recommendations for Execution by the Registrar</u>	
14	That PEO engage with Ontario engineering faculties to acquaint them with the body of knowledge expected of CIE practitioners / applicants for licensure, and to encourage them to offer and to seek CEAB accreditation of academic programs that meet those expectations.	Ongoing, by Task Group
15	That the CIE curriculum and knowledge base include instruction in: <ul style="list-style-type: none"> • systematic approaches to risk management, and • development of business cases associated with security and assurance of systems. 	Pending
16	That the following content requirements for accredited CIE programs be prescribed by the Canadian Engineering Accreditation Board: <ul style="list-style-type: none"> • Security / Safety (Syllabus 04-Soft-B3) • Networking & Communications (Syllabus 04-Soft-B10) • Safety Critical Systems (Syllabus 04-Soft-B14) • Telecommunications Engineering (Carleton syllabus) 	Pending
17	That PEO's Licensing and Registration Department maintain contact with post-secondary academic institutions that offer courses, programs, and certificates in CIE-related subject matter so as to be in a position to advise both applicants and existing	Ongoing, by Task Group

	licensees as to where they may obtain necessary additional CIE knowledge and skills.	
	<u>Other Recommendations</u>	
18	That PEO support CIE licensure with communication and promotion targeted at the executive level, so that awareness and appreciation of the value of the CIE is understood and business case development is facilitated from lower levels in the organization.	Recommended by Public Information Campaign Task Force
19	That, with respect to communication and stakeholder relations concerning CIE: <ul style="list-style-type: none"> • Clear objectives and success criteria be developed and approved by Council; • A communication and stakeholder relations master plan be developed for the regulation of CIE along the lines presented above; • A project manager be assigned full-time to manage the execution of the communication and stakeholder relations plan; and • Achievement of plan objectives be tracked, and the plan and resources adjusted as required to deal with shortfalls. 	Not Implemented
20	That the Emerging Disciplines Task Group continue to engage key external stakeholders in regulation of CIE with a view to identifying opportunities for collaboration.	Ongoing, by Task Group
21	That PEO, either independently or through Engineers Canada, partner with the Information and Communications Technology Council (ICTC) to develop labour market intelligence related to CIE occupational profiles with a view to determining the backgrounds and qualifications of those currently practising in CIE scopes of practice.	Not Implemented
22	That Council strike a standing committee on Emerging Engineering Disciplines with composition and terms of reference as set out in Appendix C.	Pending

6) Licensing of CIEs

Late in 2014, the Task Group established contact with representatives of Bell Canada's Core Networks Group in Toronto. This national group, which includes a few licensed professional engineers, is responsible for the architecture of the carrier's backbone networks and their security. We were invited to deliver two presentations on CIE to their interested staff in March of 2015. Some staff participated remotely from offices in Montreal and Calgary, which raised the question as to whether PEO's counterparts in other provinces were also interested in licensing practitioners in this field.

As a result of these presentations, Bell listed the P.Eng. and LEL as preferred qualifications / designations for professional development of their network security staff. This meant that the Company would reimburse application and other (e.g., examination) fees for these licences, as well as a bonus upon being awarded the licence or credential.

This positive development resulted in the receipt of approximately 30 applications for licensure from Bell Canada employees in a short period of time. PEO's Licensing and Registration staff were soon inundated with inquiries as to how these CIE applications would be treated, especially given that most of the applicants did not have typical engineering academic backgrounds.

In order to achieve consistency in messaging and in the handling of applications from CIE practitioners, an ad-hoc working group consisting of L&R staff and representatives of ARC, ERC, and the CIE Task Group was established to review and refine the internal application process. This work was spearheaded by then Manager of Registration Lawrence Fogwill, P.Eng., who had been assigned to handle inquiries from CIE applicants. ARC members (notably Drs. Bob Dony, P.Eng. and Barna Szabados, P.Eng.) worked on refining the academic assessments, while ERC members (notably Changiz Sadr, P.Eng. and David Kiguel, P.Eng.) did the same for the experience assessments.

In the process, they were able to take advantage of changes to Section 46, of O.Reg. 941 dealing with Limited Licences and the L.E.T. designation that came into force on July 1st, 2015. These long-awaited changes that originated with the Technologist Licensure Task Force in 2002 made it easier for applicants to meet the academic requirements for a Limited Licence.

The results were a streamlined and consistent process, demonstrating that PEO's existing requirements for licensure could be applied fairly to applicants with the non-standard backgrounds typical of practitioners in an emerging discipline.

As a pilot project, the Bell applications were "triaged"² and their progress through the system tracked by Deputy Registrar Michael Price and the Chairs of EDTF and the CIE Task Group. This permitted us to identify [potential] delays and obstacles to licensure, whether attributable to the applicant and his / her circumstances or to the process itself. It also provided a good indication that the Limited Licence would be applicable to a majority of CIE / CSSE practitioners (given that, as already reported, most existing practitioners do not have formal engineering backgrounds, although most have some post secondary education with sufficient basic science and mathematics to master the CIE core body of knowledge). Special assistance in the triage effort was provided by Daksha Bhasker, CISSP, P.Eng., of Bell Canada (at the time, herself an applicant for licensure).

In March of 2016, Council approved the addition of Element 2.4 – *CIE Outreach and Licensure* to PEO's 2015-2017 Strategic Plan. As of this report date, some 150 PEO licensees whose scopes of practice are in the CIE / CSSE field have been identified by the Task Group.

7) Education and Development of CIEs

Over the past few years, the Task Group has expended significant effort on outreach to academia in an attempt to identify new engineering programs with relevant CIE / SCCE content. Given that there is a well-documented and publicized shortage of cyber security professionals in every developed country including Canada, it is

² An initial assessment of the applicant's credentials to determine if he / she would be a likely candidate for (i) an unlimited [P.Eng.] licence, (ii) a Limited Engineering Licence, or (iii) no licence.

somewhat surprising that so few specialist programs have emerged in our Canadian engineering and engineering technology schools.

This opportunity has been discussed on multiple occasions with the Council of Ontario Deans of Engineering (CODE), as well as with representatives of its national counterpart (NCDEAS) and Ontario's Deans of Technology. Their response to the question of why academic programs related to CIE / CSSE were developing so slowly has been that demand among students has not materialized as expected.

Plenty of training programs exist at the more practical, hands-on end of the spectrum oriented towards networking technicians, but university-level programs with more conceptual content targeting network design and protection are still few and far between, even at the post-graduate level. Recognizing a critical shortage of technical expertise in this area, the Government of Canada has recently begun to stimulate development of centres of cyber security research and development in academic institutions.

In 2018, the Task Group was approached by representatives of Canada's *Computer Security Establishment (CSE)* in Ottawa. Part of DND, CSE is the federal government's leading internal authority on cyber security, and is responsible for auditing and advising on the security of important federal government systems. Our contacts in CSE – coincidentally all PEO [P.Eng.] licensees – had been tasked with identifying academic programs in cyber security in Canada, and assessing the extent to which they adequately prepare graduates for the kinds of work undertaken by CSE itself and by other organizations with similar stringent skill requirements.

During the past two years, the Task Group has held regular teleconference meetings with the CSE representatives and other stakeholders, who have provided invaluable assistance in identifying emerging international knowledge, training, and practice standards. As a result of these in-depth discussions, we have come to the conclusion that it is necessary to revisit both the core body of knowledge and the defined scopes of professional practice in CIE / CSSE in order to bring them up to date.

A further result of our involvement with CSE is recommendations to incorporate:

- (i) Core material related to security in general in all accredited Canadian engineering programs (regardless of discipline);
- (ii) Core material covering the basic concepts of cyber security in all accredited Canadian engineering programs in *Electrical Engineering*, *Computer Engineering*, *Software Engineering*, *Systems Engineering*, *Communications / Networking Engineering*, and related areas of specialization;
- (iii) Programs and program options designed to prepare graduates for professional practice in CIE / CSSE in their undergraduate course offerings.

The rationale for these recommendations, which are recast in Section 9. below, is as follows:

- (i) Every licensed professional engineer must be prepared to consider the security of the artifacts and/or systems he /she designs, operates, and manages, regardless of their nature. The day in which one can assume that no one will attempt to attack, compromise, or destroy one's work product is long gone. Every engineering graduate should understand the basic concepts of security, risk management, and asset protection, and

should have developed the related (technology-dependent) practice skills in his / her area of specialization.

- (ii) These days, virtually all mission-critical / safety-critical devices and systems are interconnected, monitored, and controlled using internet protocol (IP) network technology, and are thus vulnerable to a wide range of cyber attacks. Those responsible for the design of such systems, regardless of their specific scopes of practice and technical specialization, need to have a basic understanding of the principles of cyber security, including vulnerability /threat assessment, attack vectors, and prevention / mitigation strategies in order to adequately protect the public. All undergraduate programs in the electrical /computer space should have this basic content.
- (iii) The demand for cyber security specialists to will continue to grow exponentially. As detailed in the Task Group's Phase I report, the security of Canada's critical infrastructure will depend on sufficient supply in this segment of the labor market.

Most recently, the Task Group has obtained the assistance of a PEO licensee working with the US Military who has developed training materials for use in upgrading the cyber security skills of technical personnel in less developed countries. These materials should prove helpful in delivering basic cyber security competencies to existing practitioners who have not been exposed to them previously through their formal education / training.

8) Further Work Required

Despite its limited resources, and minimal support as a priority by PEO Council, the CIE Task Group has attempted to maintain momentum in its work to preserve for PEO the opportunity to take a leadership role in regulating this critical area of professional practice. The Task Group wishes to recognize the strong support it has received for our work from a relatively small but committed cadre of licensees who are practicing in the CIE / CSSE space, and who constitute the base for a discipline-specific practice committee / working group. The Task Group intends to continue its earlier attempts to pilot a virtual discipline-specific practice committee in order to assess the viability of this approach to obtaining input on regulatory issues and concerns specific to the discipline.

As previously noted, the following substantive items remain in the Task Group's Work Plan for 2020 (set out at Appendix D) and beyond:

- 8.1 Reconsideration of name of [sub]discipline
- 8.2 Review and extension of [sub]discipline definition and scopes of practice
- 8.3 Review and refinement of core body of knowledge
- 8.4 Ongoing consultation with academia regarding new programs and options
- 8.5 Consultation with CEAB concerning amendments to accreditation criteria

8.6 Development of a certification proposal for CIE / CSSE practitioners

9) Phase III Recommendations

- 9.1 That PEO agree in principle to a voluntary CIE / CSSE specialist designation to be available exclusively to its licensees who meet a certification standard to be developed by the Task Group / Committee.
- 9.2 That PEO formally request the Canadian Engineering Accreditation Board (CEAB) to amend its accreditation criteria to include the following:
 - (i) Core material related to security in general in all accredited Canadian engineering programs (regardless of discipline);
 - (ii) Core material covering the basic concepts of cyber security in all accredited Canadian engineering programs in *Electrical Engineering, Computer Engineering, Software Engineering, Systems Engineering, Communications / Networking Engineering*, and related areas of specialization.
- 9.3 That PEO support CIE / CSSE licensure with communication and promotion for target industries and practitioners, as recommended by the Public Information Campaign Task Force (PICTF).

Terms of Reference

Emerging Engineering Disciplines Committee (EEDC)

Issue Date:
Approved by:

Review Date:
Review by:

Legislated and other Mandate approved by Council	To identify potential new engineering disciplines, subdisciplines, and scopes of professional practice to determine whether they meet the definition of the <i>practice of professional engineering</i> set out in section 1 of the Professional Engineers Act, and if so, to guide the process for their regulation
Key Duties and Responsibilities	<ol style="list-style-type: none"> 1. Maintain a continuous horizon watch for new and emerging areas of engineering practice that may fall within PEO's legislated mandate to regulate the practice of professional engineering. 2. With approval of Council, establish working groups (sub-committees or task groups) of specialists as necessary to investigate and report on new areas of engineering practice that appear to fall within PEO's regulatory mandate by virtue of a demonstrable need to protect the public interest. 3. Advise Council on how to resolve issues related to the growth in the number of new engineering disciplines, subdisciplines, and scopes of professional practice, including recommendations on possible new governing structures and their implications. 4. Work with PEO committees and staff to identify and support "communities of practice"³ in the newly identified discipline(s) 5. Advise Council on what how to regulate effectively disciplines that are in common practice today but have limited or even no rights to practice associated with them. 6. Establish and maintain documentation on processes and best practices for assessing emerging and non-traditional disciplines and for establishing appropriate regulatory environments for them. 7. Maintain dialogue with Engineers Canada and its Constituent Associations and boards (CEAB and CEQB) on issues related to emerging and non-traditional engineering disciplines. 8. Work with ARC and CEAB to define and maintain a Core Body of Knowledge for each emerging engineering discipline. 9. Outreach to industry, government agencies, and academia as necessary with respect to their involvement in emerging and non-traditional engineering disciplines, subdisciplines, and scopes of professional practice. 10. Continue the Communications Infrastructure Engineering (CIE) Task Group as a sub-committee of this Committee.

³ "community of practice" is a group of people who share a concern or a passion for something they do, and learn how to do it better as they interact regularly. (source: <http://wenger-trayner.com/resources/what-is-a-community-of-practice/>)

Constituency & Qualifications of Committee/Task Force Members	<p>A maximum of ten (10) members on the Main Committee itself. The Main Committee must have at least five (5) members to operate and will request additional members if membership falls below this.</p> <p>Each task / working group established under the Committee will be chaired by a Vice Chair of the Committee, and will have additional members appointed for the term of the task / working group from amongst members of the Committee and others chosen for their expertise and/or interest in the discipline under consideration.</p> <p>Committee members should have knowledge of and experience with professional engineering practice and at least one PEO regulatory committee such as ARC, ENF, ERC, LEC, LIC, or PSC.</p> <p>Preference will be given to committee members with experience in emerging and non-traditional scopes of engineering practice.</p>
Qualifications and election of the Chair	<p>Extensive knowledge of PEO's regulatory processes acquired through volunteering on one or more of PEO's regulatory committees</p> <p>Broad knowledge of engineering practices, including engineering research, design, development, and teaching.</p> <p>Election method to be determined by the committee; result presented to Council for approval</p>
Qualifications and election of the Vice Chair(s)	<p>Knowledge of PEO's regulatory processes</p> <p>Knowledge of engineering practices, and engineering research, design, development and practices.</p> <p>Election method to be determined by the committee and result presented to Council for approval</p>
Duties of Vice Chair(s)	<p>To chair meetings of the main Committee in the chair's absence, and to provide orientation and training for new members.</p> <p>To chair meetings of their respective working / task groups.</p>
Term Limits for Committee members	<p>A term on this Committee is three (3) years. A member may be re-appointed to an additional second term. There must be at least a one-year gap before coming back for additional appointments to this committee.</p>
Quorum	<p>Following the spirit of Wainberg's Society Meetings Including Rules of Order <i>and section 25(i) of By-Law No. 1, Quorum of the main Committee is 5 members or 50% of the Main Committee whichever is less.</i></p>
Approvals	<p>Task group decisions are not binding on the main Committee and require approval of the main Committee for taking actions such as advising Council.</p>

Meeting Frequency & Time Commitment	The Committee will hold at least four regular meetings per year, one in each calendar quarter, for at least one hour at a time. Additional regular or special meetings may be scheduled at any time with the agreement of the members. Ideally, participation will be in person, but teleconferencing/ videoconferencing is available as an option. Mutually convenient times will be determined by the Chair consulting with the committee members.
Operational year time frame	January – December
Committee advisor	To be determined by the Registrar

Emerging Engineering Disciplines Committee (EEDC)

INITIAL ROSTER

Existing members of EDTF, for continuity

- **George Comrie, P.Eng., CMC**
- **Peter DeVita, P.Eng.**
- **Roger Jones, P.Eng.**
- **Changiz Sadr, P.Eng.**

Four (4) additional members selected from the ranks of PEO licensees with emerging or non-traditional scopes of professional practice

One (1) sitting PEO Councillor (as Council Liaison)

Reconstituted CIE / CSSE Task Group

WORK PLAN - 2020

 C-532-
Appendix D

Approved by Committee: 28 February 2020		Review Date:	
Approved by Council:		Approved Budget:	
Mandate [as approved by Council]:	Task Group created pursuant to mandate of Emerging Engineering Disciplines Committee (EEDC), and Key Duty /Responsibility 2.: <i>With approval of Council, establish working groups (sub-committees or task groups) of specialists as necessary to investigate and report on new areas of engineering practice that appear to fall within PEO's regulatory mandate by virtue of a demonstrable need to protect the public interest.</i>		
Terms of Reference [Key duties]:	1. Identify issues relevant to PEO in the area of practice; 2. Define scopes of practice / controlled acts to be regulated; 3. Define core body of knowledge required for competent practice; 4. Investigate and make recommendations re academic programs related to the area of practice. 5. Make recommendations regarding licensing of practitioners; 6. Make recommendations regarding establishment and enforcement of rights to practice; 7. Evaluate existing and proposed certification programs as they may relate to PEO's responsibility to regulate the practice. 8. Outreach to practitioners, industry, government agencies, and academia as required, and develop external relationships where appropriate.		
Tasks, Outcomes / Deliverables, and Success Measures	Tasks / Activities	Outcomes / Deliverables / Success Measures	Due Date
	1. Work with other PEO committees (ARC, ERC, LIC, ENF, PSC) on licensure issues	Provide support to the other committees to implement CIE / CSSE licensure and regulation	As required
	2. Complete external stakeholder consultations for licensure issues; Gather market intelligence	Document stakeholder perspectives;	As required
	3. Provide Registrar with critical implementation factors for PEO to regulate CIE / CSSE	PEO secures substantive stakeholder agreement for implementation	As required
	4. Identify existing P.Eng.s practising CIE / CSSE, call for volunteers for PEO regulatory committees and establish a "Community of Practice" for CIE	Existing P.Eng.s. identified (voluntarily or through CPD practice questionnaire) At least 3 volunteers recruited for committees CIE Community of Practice established	June 2018

	5. Update the CIE Core Body of Knowledge	CIE CBOK updated	December 2020
	6. Develop Certification / Specialist Designation for CIE	Designation requirements and approval process developed for Council approval	December 2020
	7. Resolve nomenclature for CIE / CSSE discipline	Agreement on terminology	June 2020
Inter-committee collaboration:	Academic Requirements, Experience Requirements, Licensure, Professional Standards, Enforcement, Government Relations - consulting on proposals, presenting at committees		
Stakeholders:	<ul style="list-style-type: none"> Engineers Canada and its constituent associations and boards (CEAB, CEQB) Telcos and ISPs Electricity generators and distributors, IESO, APPrO Industry Ontario universities and colleges of technology Consulting Engineers Ontario, OACETT, OSPE Ontario Ministries of Attorney General, Government Services, Research & Innovation, Health & Long-Term Care, Economic Development and Trade Canadian Standards Association, Canadian General Standards Board Information and Communications Technology Council (ICTC) Industry Canada Public Safety Canada Department of National Defense, Computer Security Establishment Public Works and Government Services Canada Transport Canada RCMP, CSIS, CBSA CRTC, ITU, ITAC, CATA, CIRA ISACA, ISSA, IEEE, IETF, ACM, Institution of Engineering and Technology International Information Systems Security Certification Consortium (ISC)² International Standards Organization Ontario Information & Privacy Commissioner Ontario Provincial Police, Emergency Management Ontario 		

Reconstituted CIE / CSSE Task Group

ROSTER - 2020

- Daksha Bhasker, P.Eng.
- George Comrie, P.Eng., CMC
- Peter DeVita, P.Eng.
- Tyson Macaulay, LEL
- Parisa Mahdian, P.Eng.
- Mike Rowland, P.Eng.
- Changiz Sadr, P.Eng.
- Larry Stoddard, P.Eng.
- Chris McMullen, P.Eng.

Briefing Note – Decision

AGM Submission #5 - Digital Seals for PEO Licence Holders

Purpose: To deal with AGM Submission #5 – Digital Seals for PEO Licence Holders

Motions to consider: (each motion requires a majority of votes cast to carry)

That Council approve the recommendation that PEO join the Notarius program in order to provide PEO licence holders with the opportunity to subscribe to the digital certification service on a voluntary basis and direct the Registrar/CEO to take steps necessary to implement this recommendation including communication of this action to all PEO licence holders.

Prepared by: Bernard Ennis, P. Eng., Director, Policy and Professional Affairs

Moved by: Lisa MacCumber, P.Eng.

1. Need for PEO Action

Attendees at the 2020 AGM approved the submission “Digital Seals for Licence Holders” (see Appendix B) by a margin of 84% in favour.

Council has a policy of addressing all approved member submissions to the AGM. Staff was asked to provide an analysis of the member submission and provide a recommendation to Council.

2. Assessment

In accordance with the “Guide for Member Submissions at the Annual General Meeting” approved by Council at its March 2020 meeting, this submission has been reviewed to determine whether the proposed action is lawful under the current legislative scheme. The submission has also been passed through the Activity Filter to determine whether the activity and its output fall into the Regulatory, Governance or Neither categories.

Section 7(1)12 of the Professional Engineers Act authorizes Council to make regulations “requiring and governing the signing and sealing of documents and designs by members of the Association, holders of temporary licences and holders of limited licences, specifying the forms of seals and respecting the issuance and ownership of seals”. Clearly, it would be lawful for PEO to establish regulations concerning the manner in which electronic documents are signed and sealed by licence holders. However, in this case, the use of Notarius digital signatures will not be required so no regulations governing this activity will be created.

Since the “signing and sealing of documents and designs” is within the legislative powers of PEO, this activity and its output falls within the Regulatory domain.

3. Proposed Action / Recommendation

As described in the attached policy paper (Appendix A), staff are recommending that PEO should join the Notarius program in order to enable the voluntary use of digital signatures provided by that firm by PEO licence holders.

4. Next Steps (if motion approved)

If the motion is approved the Registrar/CEO will take the following steps:

1. Enter into a contract with Notarius
2. Provide information to all PEO licence holders about the Notarius program, that PEO has joined the program and that all licence holders can voluntarily subscribe to the program directly.
3. Set up the internal processes needed to verify licence holder status upon request by Notarius and to update those statuses when licences are revoked, suspended, or cancelled due to non-payment of fees, or when licence holders resign or are reported deceased.

5. Policy or Program contribution to the Strategic Plan

This program will contribute to *Item 6 - Augment the applicant and licence holder experience* as it will provide a service that some licence holders have requested and provide further “customer satisfaction”.

6. Financial Impact on PEO Budgets (for five years)

	Operating	Capital	Explanation
Current to Year End	\$5000	\$	Fee to join the Notarius program
2 nd	\$0	\$0	
3 rd	\$0	\$0	
4 th	\$0	\$0	
5 th	\$0	\$0	

7. Peer Review & Process Followed

Process Followed	<p>Outline the Policy Development Process followed.</p> <p>Staff conducted an environmental scan of other engineering regulators to identify policies on use of digital signatures</p> <p>PEO staff discussed the Notarius program, use of digital signatures, and technical issues with Notarius staff</p> <p>Staff reviewed the relevant legislation and existing PEO documentation.</p>
Council Identified Review	<p>Identify who is to be consulted; how they will be consulted and what kind of response is expected.</p> <p>Since the recommendation is for a voluntary program no peer review or stakeholder consultation is necessary</p>

Actual Motion Review	Detail peer review and relevant stakeholder review undertaken N/A

7. Appendices

- Appendix A – Policy Paper - Digital Signatures for PEO Licence Holders
- Appendix B – AGM Submission #5 - Digital Seals for PEO Licence Holders

Digital Signatures for PEO Licence Holders

Executive Summary

At the 2020 Annual General Meeting, PEO Members approved a submission requesting Council to “expeditiously investigate and pursue a partnership with Notarius such that licence holders may purchase a third-party digital certificate for signing/ sealing of documents.”

This paper explains what a digital signature is and how it is used. It also provides information on the Notarius CertifiO for Professionals program which combines issuance of digital certificates with verification of the current licence status of the signing professional.

Staff recommends that PEO join the Notarius program but make the use of this program voluntary for PEO licence holders.

Background

Though the submission’s title refers to digital seals the motion itself refers, correctly, to digital certificates. This confusion about the relationship of the seal to the digital authentication product is widespread so before discussing the issue clarification of terms involved is needed.

First, the document security industry makes a distinction between “electronic” and “digital”. Items identified as “electronic” such as “electronic signatures” are physical items that have been rendered in an electronic format. So, for example, a scanned image of a person’s handwritten signature in a .jpg format is an electronic signature. A digital signature, on the other hand, has nothing to do with a person’s handwritten signature as it is a “mathematical scheme for verifying the authenticity of digital messages or documents.”¹ That is, a digital signature is a bitstream of cryptographical information, including a digital certificate, appended to the document. The digital certificate contains the owner’s name and identifying information, their public encryption key (which is used by the receiver to verify the document), information about the certificate such as issue date, and the third-party’s digital signature which attests to the validity of the information. This additional information added to an electronic document is used to verify the authenticity of the document. Any alteration of the document after it is digitally signed would be detected because the information in the digital signature would not correspond to the information associated with the document.

PEO’s Guideline on the Use of a Professional Engineer’s Seal has used the same distinction in terminology and refers to electronic, not digital, seals and documents. An electronic document is a document that has been rendered in an electronic format such as a .doc file. Similarly, an electronic seal is either a scanned image of the physical impression of a seal or it is a facsimile of the seal produced by a drawing program. The guideline describes how a licence holder can create an electronic seal. Alternatively, PEO can provide a .doc template that the licence holder can edit and convert to a .jpg for use in their documents.

¹ https://en.wikipedia.org/wiki/Digital_signature. Retrieved August 5, 2020.

There is no meaning to the term “digital seal” since the authentication information is contained in the “digital signature” and not in the seal. While a document such as a drawing can include an electronic seal by pasting the file containing the facsimile of the seal into the document, the entire document would be signed digitally, an act that occurs separately from the pasting operation. The electronic seal and signature must be included as elements in the document before the digital signature is applied. The digital signature is created and appended to a document by specialized software provided to the user by a third-party certification agency.

Legislation

The use of the professional engineer’s seal is governed by s.53, Regulation 941/90 which states:

Every holder of a licence, temporary licence, provisional licence or limited licence who provides to the public a service that is within the practice of professional engineering shall sign, date and affix the holder’s seal to every final drawing, specification, plan, report or other document prepared or checked by the holder as part of the service before it is issued.

Further clarification of the current policy regarding the use of seal and explanation of the terminology used in this section is provided in the PEO guideline *Use of the Professional Engineer’s Seal*. The guideline also discusses the use of seals on electronic documents. The general principle applied to electronic seals is the same as applied to physical seals – licence holders are responsible for taking the measures necessary for ensuring that their seals are under their control and that sealed documents cannot be altered. With paper documents, the general practice was to apply ink impressions of the seal to originals only and to keep these in a safe storage location. Only copies should be distributed.

Of course, with electronic documents there is no original that is distinguishable from copies; therefore, different measures are required to maintain the integrity of sealed documents. The guideline provided the following general principles on how this should be done:

professional engineers responsible for sealing electronic documents must ensure that their organizations adopt a method of creating, archiving and distributing electronic format documents that will:

- *control and protect the electronic facsimile of the seal and signature;*
- *ensure document integrity, i.e. documents are not altered once signed, without undergoing the revision process; and*
- *allow verification of the identity of the practitioner originating the document.*

The subcommittee that developed the guideline believed, and the Professional Standards Committee agreed, that there were many ways of achieving this level of protection and that individual licence holders and/or their employing organizations should decide what was best for their situation. Consequently, the committee believed that there was no need to recommend joining the Notarius program. The Enforcement Committee, independently, came to the same conclusion after reviewing cases of illegal use of the seal.

In addition to direction on use of the seal, the legislation stipulates under what conditions licence holders must return their seals to PEO. Sections 54 and 55 of Regulation 941/90 stipulate that every

person whose licence is revoked or suspended, and every person who resigns from the Association must return their seal immediately to the Registrar. In other words, when a licence holder is no longer in good standing they must surrender their seals.

Notarius

Notarius is a third-party certification agency; it provides subscribers with the digital certificates that are the core of the digital signature as well as the software (CertifiO) used to append the signature to documents. A certificate is issued by the agency each time a subscriber appends a digital signature to a document.

As a provider of digital certifications which can be used to verify documents, Notarius provides a service identical to many other agencies. The additional service provided by Notarius is that they keep a database of the subscribers and will issue certificates only to those who are in good standing. When a licence holder applies to become a Notarius subscriber, Notarius contacts PEO to verify that the licence holder is currently in good standing. PEO would be responsible for informing Notarius if a subscribing licence holder's status changes. This would occur if a licence holder resigns or takes fee remission or if their licence is suspended, revoked, or cancelled due to non-payment of fees. In order to ensure that Notarius has an up to date database, PEO would need to maintain its own database of those who subscribe to Notarius and keep this database current.

Since the digital signature is separate from the seal, the subscriber can append a Notarius digital signature to any document not just sealed documents. It could be used with contracts, business correspondence and anything else that needs to be authenticated.

Though Notarius supplies subscribers with the digital certificates and the software needed to append these to documents, PEO will have complete control over the issuance of these certificates to PEO licence holders since Notarius will not issue a digital certificate unless the person's status as a licence holder is verified by PEO.

PEO can join the Notarius program for \$5000. As a member association, PEO would receive a 5% commission on all subscriptions which is intended to cover the cost of administration work.

Licence holders subscribe to Notarius' CertifiO for Professionals program directly by paying a sign-up fee and an annual subscription fee. Currently, the sign-up fee is \$145, and the annual fee is \$180.

Only documents in PDF format can be reliably authenticated by a Notarius digital signature. Files in other formats such as .dwg, .xls, .doc, need to be included inside a PDF/A document which serves as a container. The authenticity of the package (PDF/A plus contained files) can be verified by a receiver, then the contained files can be extracted. Once extracted the contained files cannot be independently verified.

Notarius reported that approximately 2000 Ontario professional engineers are already subscribers through the CertifiO for Employees program. This program works like the CertifiO for Professionals program except that it verifies that the person applying a digital signature to a document is a current employee of the firm that participates in the program. Typically, these are large consulting engineering firms, but even sole proprietors can create a CertifiO for Employees account.

Options for Implementation

Option 1: Voluntary Use of Digital Signatures

PEO would join the Notarius program thereby providing licence holders with the opportunity to subscribe to Notarius if they wish. This is the option used by many engineering regulators. Licence holders may continue to provide sealed electronic documents to clients, contractors, and government agencies without digitally signing the documents if they do not want to subscribe to Notarius for any reason. Licence holders could also use a different third-party digital certificate authority such as DigiSign or GlobalSign if they wish. However, PEO would have control of electronic seals only for those licence holders who subscribe to the Notarius program.

Option 2: Required for Use of Electronic Documents

In order to enforce control over the use of electronic seals, APEGA and some other regulators require that licence holders sealing electronic documents must use a digital signature provided by a certifying agency approved by APEGA. So far, the only such agency is Notarius. The following are the authentication methods allowed for practitioners licensed by APEGA:

Authentication Methods (APEGA)

Authentication requires the following criteria depending on the authentication method.

Physical Professional Work Products

- an ink impression or electronic image of the licensed professional's stamp
- the licensed professional's handwritten signature
- the handwritten authentication date

Digital Professional Work Products

- an electronic image of the licensed professional's stamp
- the licensed professional's digital signature (verifiable through a digital certificate provider meeting APEGA's best practice) and an electronic image of the licensed professional's handwritten signature
- the authentication date included with the digital signature and inserted as an electronic image

PEO could adopt similar requirements.

In order to implement this option, PEO would need to amend Regulation 941/90 to stipulate that licence holders are not allowed to provide sealed electronic documents unless the documents are digitally signed using a Council approved digital certificate. Section 7(1)12 gives Council authority to make regulations "requiring and governing the signing and sealing of documents and designs by members of the Association, holders of temporary licences and holders of limited licences, specifying the forms of seals and respecting the issuance and ownership of seals." This would appear to allow Council to make the necessary regulation.

With this regulation in place, licence holders who need to seal electronic documents must be a subscriber to the Notarius CertifiO program (or use any other digital certification agency approved by Council).

Under this option PEO could ensure that licence holders whose licence has been revoked or suspended and licence holders who have resigned, are on fee remission, or whose licence has been cancelled for non-payment of fees cannot use a digital signature. Since the proposed regulation prohibits the use of a seal on an electronic document without the use of a digital signature, these licence holders would be unable to use their seal on such documents. However, they could still affix an impression of their physical seal on paper documents, if they have their seal.

Currently, PEO does follow up with all those whose licence has been revoked or suspended for more than a couple of months to ensure that they return their seals. There is no similar effort made to obtain seals from licence holders who have resigned or lapsed. There is no requirement for those on fee remission to return their seals. There is record of only one licence holder who continued to seal documents after his licence was revoked. Regulatory Compliance reported that there were only three cases in the last five years of a lapsed member using their seal while not in good standing. In all cases, PEO has mechanisms for dealing with these violations.

Given that there are likely tens of thousands of documents sealed in Ontario annually, the small number of infractions indicates that PEO does not need to rely on digital signatures as a means of policing inappropriate use of the seal. Therefore, it is unreasonable, according to the principles of right-touch regulation, to force all licence holders to participate in the program.

Recommendation

Staff are recommending that Council proceed with Option 1: Voluntary use of Digital Signatures. The cost to PEO is small and this option provides PEO licence holders who are required or prefer to provide authenticated documents with a readily accessible source of digital certificates.

Appendix B

DIGITAL SEALS FOR PEO LICENCE HOLDERS

- WHEREAS the COVID-19 pandemic has increased the need for professional engineers to produce and seal/ sign electronic documents;
- WHEREAS the Supreme Court (Edgeworth Construction Ltd. v. N. D. Lea & Associates Ltd.), stated that the “**seal attests that a qualified engineer prepared the document**. It is not a guarantee of accuracy”. Instead, **it should be considered a “mark of reliance”**, an indication that others can rely on the fact that the opinions, judgments, or designs in the sealed documents **were provided by a professional engineer...**”
- WHEREAS the PEO has acknowledged in the “Use of the Professional Engineer’s Seal” document that “electronic documents can easily be changed and copied with no obvious indication”;
- WHEREAS the PEO has recognized the existence of electronic signatures (in the same document), and has placed the burden of ensuring the security of the signature on companies and practitioners;
- WHEREAS companies often do not adhere to these guidelines and instead require staff to use insecure self-signed certificates;
- WHEREAS it is impossible in Canada to obtain a validated third-party certificate from the sole Canadian company (Notarius) that is on Adobe’s Approved Trust List unless either the individual’s company or professional association have partnered with Notarius;
- WHEREAS ten (10) out of the twelve (12) Provincial Engineering regulatory bodies have partnered with Notarius, with PEO and Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG) being the sole exceptions;
- WHEREAS a partnership with Notarius does not replace the paper seal, and is in no way compulsory upon a practitioner, but simply provides them with a tool, at their own cost, for ensuring the public of the security and veracity of their seal/ signature;
- WHEREAS the correct and consistent implementation of digital signatures/ seals provides assurance to the public that an electronic document has the same integrity as a paper document with the traditional P.Eng. stamp;
- WHEREAS timely implementation of digital seals is essential to minimize the time-at-risk, or risk exposure of practitioners who must prepare and sign electronic documents using insecure methods, at their employer’s request during the COVID-19 lockdown;
- WHEREAS it is impossible for many practitioners to seal a paper copy of a document, since most do not have access to the large-format plotters and scanners that are necessary for many engineering drawings;
- THEREFORE BE IT SUBMITTED THAT Council expeditiously investigate and pursue a partnership with Notarius such that licence holders may purchase a third-party digital certificate for signing/ sealing of documents.

PEO SKILLS & ATTRIBUTES MATRIX

Purpose: To approve the Skills & Attributes Matrix

Motion to consider: (requires a simple majority of votes cast to carry)

- That Council approve the PEO Skills & Attributes Matrix as presented to the meeting at C-536-2.9, Appendix A.

Prepared by: Jeannette Chau, P.Eng., MBA, CAE, Manager Government Liaison Programs

Moved by: Nancy Hill, P.Eng., LLB, FEC, FCAE, Past-President

1. Need for PEO Action

- There are potential skills and attributes gaps that could occur amongst PEO Council members without having a competencies framework for Councillor selection
- These gaps could be filled in by the appropriate selection and appointment of Lieutenant-Governor Appointees (LGAs) onto PEO Council and/or by PEO elections of those people who have these missing skills or attributes
- LGAs are currently selected by the Ontario Public Appointments Secretariat. A skills and attributes matrix showing the composition of the current Council and where any gaps are would be helpful for the government to refer to when making their LGA selections. Hence it is proposed that a skills and attributes matrix be created.

2. Proposed Action / Recommendation

That Council approve the following motion:

- That Council approves the PEO Skills & Attributes Matrix shown in Appendix A

3. Next Steps (if motion approved)

- The approved Skills & Attributes Matrix will be populated with the skills and attributes profile of the current Council
- The completed Skills & Attributes Matrix with the identification of profile gaps will be sent to the Public Appointments Secretariat's office for their reference when selecting a new LGAs for PEO
- The Skills & Attributes Matrix will be updated on a yearly basis with each new Council elected

4. Policy or Program contribution to the Strategic Plan

- The creation of the PEO Skills & Attributes Matrix is related to Strategic Objective 9 – Enhance Corporate Culture, in the 2018-2020 Strategic Plan

5. Financial Impact on PEO Budgets (for five years)

	Operating	Capital	Explanation
Current to Year End	\$0	\$0	No cost to implement
2 nd	\$0	\$0	
3 rd	\$0	\$0	
4 th	\$0	\$0	
5 th	\$0	\$0	

6. Peer Review & Process Followed

Process Followed	<ul style="list-style-type: none">• October 17, 2018 - HRC requested list of competencies for LGAs• January 21, 2020 – Draft Skills & Attributes Matrix was presented to the Executive Committee. The Executive Committee was generally supportive of the direction and directed that a final draft be brought to the next Executive Committee meeting. Once finalized it will go to Council for approval via the Executive Committee.• August 4, 2020 – Executive Committee review of PEO Skills & Attributes Matrix. Executive committee members were asked to review and provide feedback for any changes prior to sending to Council for approval
Council Identified Review	<ul style="list-style-type: none">• Executive Committee Review• HRC review
Actual Motion Review	<ul style="list-style-type: none">• August 4, 2020 – Executive Committee review

7. Appendices

- Appendix A – PEO Skills & Attributes Matrix

C-536-2.9
Appendix A

PEO Skills & Attributes Matrix

Purpose

The purpose of using the Skills & Attributes Matrix is to be able to identify any gaps in the competencies and attributes of the current Council. These gaps would be identified to the Public Appointments Secretariat who in turn could use this information to help guide them in their selection of LGAs to fill these gaps.

Process

The process used for the matrix is modeled after the methodology proposed by GSI in their ABC's of the profiling of the Board (Chapter 19 of the *Governance Solutions* book by David and Debra Brown, 2019):

- Step A is to build the inventory of competencies and attributes that you want and need around the board table
- Step B is to look at your current board members against the inventory
- Step C is to determine the gap between the optimal inventory and the current directors

Step A – the inventory of competencies and attributes desired are proposed in the matrices below

Step B - when the current council members are assessed against the inventory, it can be seen what skills and attributes are currently on council. It is envisioned that the PEO Human Resources Committee (HRC) would be involved in the completion of this inventory.

Step C - any gaps in areas, for example gender, can then be identified and shown to the Public Appointments Secretariat (PAS). PEO can then ask the PAS if they could look for and appoint an LGA which would help address the gaps that the current PEO council has.

PEO COUNCIL SKILLS MATRIX

Rating scale 1-5 (1 = very weak, 2 = weak 3= moderate, 4 = good, 5 = very good)

#	Name	Finance & Acctg	Risk & Controls	Business Mgmt	Board & Governance Experience	Govt Rel. or Public Policy	Legal /Regulatory Knowledge	Demonstrated Board Leadership	Strategic Planning	Stakeholder Relations & Engagement	Commun & Mktg
1	Example [name 1]	3	3	4	4	3	5	4	3	3	3
2											
3											

...											
25											

PEO COUNCIL Self-Identified ATTRIBUTES MATRIX

#	Name	Gender (M/F/X)	Racial or Ethnic Origins	Geographic Region
1	Example [name 1]	M		East Central
2	Example [name 2]	F	Black	West Central
3	Example [name 3]	M	Indigenous	Northern
...				
25				

Definitions:

- 1. Finance & Accounting:** Possesses fair-advanced principles of accounting and finance including budgeting and financial reporting. Possesses financial designation such as Chartered Professional Accountant (CPA).
- 2. Risk & Controls:** Familiarity with principles of risk management and controls; possesses a good understanding of legal and regulatory requirements.
- 3. Business Management:** Experience in organizing and coordinating the activities of a business in order to achieve defined objectives.
- 4. Board & Governance Experience:** Possesses experience as a director on a board of directors; good understanding of the role of the board versus the role of management. Institute of Corporate Directors (ICD) or other similar designation/training helpful.
- 5. Government Relations or Public Policy Experience:** Experience in developing and influencing public policy with varying levels of government (e.g. municipal, provincial, national).
- 6. Regulatory Knowledge:** Experience in a regulatory environment; possesses a good understanding of the role of the regulator, factors influencing effective regulatory performance, and policy development. Legal designation helpful.

Briefing Note - Decision

C-536-2.10

THE ESTABLISHMENT OF A PROACTIVE ANTI-RACISM COMMITTEE TO STUDY PEO'S CULTURE AND OPERATIONS

Purpose: A proactive study to ensure any racial bias or discrimination within PEO is identified and addressed proactively by Council.

Motion to consider: (requires a simple majority of votes cast to carry)

That Council authorize the creation of a Racial Equity Monitoring Committee consisting of a minimum of five independent members of PEO who self-identify as having experienced racism in the past to study any elements of racism or discrimination within the profession and to propose appropriate remedies.

Prepared and moved by: Peter Cushman P.Eng., East Central Councillor

1. Need for PEO action

Given recent shocking events in the USA, which were followed by outrage and protest around the world, in Canada, and even in Ontario, it should now be evident that racism and discrimination are societal problems whose solution is long overdue. Racism indeed does exist in Canadian society and the noble professions are not immune. While the racism south of our border is overt and often violent, contemporary Canadian racism tends to be more subtle and hidden, but just as harmful. Regardless of its manifestation, racism and discrimination lead to unfairness in regulation and employment; by extension the public is deprived of engineering talent. The concerns raised by the community need to be seriously examined.

We have seen the ugly face of racism in the past as how we treated indigenous people, residential schools, treatment of Japanese Canadian and Chinese migrant workers and of course, slavery. These most brutal expressions of official racism are thankfully in our past, but the sickness lingers on to the present. It is malignant. Now we see it affecting new immigrants and people of colour. It not only exists but thrives in hidden corners that we now call "structural racism." In order to shine not just a light but a searchlight on it, I believe we here must look at ourselves in a mirror and ask ourselves: How have we been complicit? How do we coast on our privilege of race and class whilst others suffer from its yoke? [2]

Accordingly, PEO has the opportunity now to proactively identify any elements of racism and remedy them by creating and implementing proper rules, regulations, policies and processes in

order to combat this societal malaise. The establishment of this committee would also demonstrate to the Fairness Commissioner of Ontario, PEO's ongoing efforts to ensure that our professional regulator is examining and will proactively address any systemic racism found.

Other Canadian public organizations have shown how they have proactively taken action to identify and eliminate systemic racism or biases. PEO can show how they can be a world leader in self-regulation by leading the other Canadian engineering regulators. The appendix provides links to these current examples both in Ontario and across Canada. Therefore, PEO can observe what other regulators have done and encourage them to join PEO in our commitment to this work.

To avoid obvious conflict-of-interests and unintended systemic bias influencing the proposed anti-racism committees work it is important that this committee be independent from all current committees. A practical example is, when police investigate themselves, their results tend to be biased against victims while simultaneously absolving the police of wrongdoing. As a result we see riots in the USA and protests in many provinces of Canada. Even the Chief of the RCMP has admitted on TV that there is systematic racism within the RCMP and Canada's Prime Minister has said that systemic **racism exists within all Canadian institutions**. PEO is a well-respected Canadian institution and so should be careful not to fall into the trap of examining itself with existing structures and processes that may be similarly contaminated.

2. Proposed Action and Recommendation

It is recommended that the immediate creation of a Racial Equity Monitoring Committee be struck that will begin by proactively soliciting feedback from PEO membership, applicants and the general public. In this fact-based gathering effort, great care must be taken to avoid the many types of unintentional biases.

e.g. confirmation bias [*"the tendency to search for, interpret, favour, and recall information that confirms or supports one's prior personal beliefs or values. It is an important type of cognitive bias that has a significant effect on the proper functioning of society by distorting evidence-based decision-making. ... The effect is strongest for desired outcomes, for emotionally charged issues, and for deeply entrenched beliefs."* -Wikipedia]

It is recommended that the work plan include an environmental scan of other Canadian public facing organizations including other engineering regulators to research and adopt the best practices.

It is recommended that the work plan include a review of PEO's practice standard on human rights (which has not been updated since 2009) and Code of Ethics and any other relevant sources for any ways to proactively incorporate anti-bias.

This committee should be constituted with at least five independent members of PEO who self-identify as having experienced racism in the past to study and identify any elements of racism or discrimination within the profession and to propose appropriate remedies.

3. Next steps

After the creation of this committee, PEO staff will provide full support and cooperation to help the committee review and investigate current rules, regulations, policies and process in PEO in order to ensure that they are not racist or discriminatory in nature and if any cause for concern is raised, the committee will make recommendations to Council for appropriate remedial action.

This committee also can assist the Executive committee and/or Council with upgrading the PEO strategic plan and future plans so that it can help guide our organization towards a path that is free of racial, gender and any inequities.

It is anticipated that the committee could complete its work within two years, after which it may be stood down by Council if they should so deem.

Fundamentally, Canadians have an unease with the concept of race, partly because of the experience in the past, where race was used to discriminate against indigenous people, people of colour, Chinese, Japanese and people from the Middle East. The problem is also an avoidance of uncomfortable conversations. We have a Canadian way of avoiding race issues; we don't talk about it, and how do we not talk about it? We don't collect data based on race. We collect on everything else – but not on race. [1]

Similar to Statistics Canada [3] that started collecting race-based crime data, PEO should start to collect race base data to have solid evidence base to work from. Some examples of race-based statistical data could be collected include (but not limited to):

- Successful applicants vs. failed applicants for licensure
- Complaints filed for investigation and outcome of the investigation
- Complaints referred to the Complaints committee and outcome
- Complaints referred to the Discipline committee and outcome

4. Policy or Program contribution to the Strategic Plan

Strategic Plan's Objective #3. Enhance PEO's public image

Strategic Plan's Objective #6. Augment the applicant and license-holder experience

Strategic Plan's Objective #7. Redefine the volunteer leadership frame-work

Strategic Plan's Objective #9. Enhance corporate culture

PEO's strategic plan is advanced by demonstrating its commitment to a profession which is safe and free of bias, racism, and discrimination. This will make a firm public statement that PEO is inclusive of all races and gender identities without discrimination and provides equitable opportunities to all.

5. Financial impact on PEO budgets (over five years)

Current to year end	\$15k	\$0	Committee meetings and staff support
2 nd	\$10k	\$0	Committee meetings and staff support
3 rd	\$0	\$0	
4 th	\$0	\$0	
5 th	\$0	\$0	

6. Peer Review & Process Followed

Process Followed	PEO Strategic Plan
Council-Identified Review	As this is a high-level policy matter, Council is the appropriate peer group.
Actual Motion Review	<p>2020-06-19 Council in-camera meeting Vice-President Arthur Sinclair, P.Eng. East Central Regional Councillor President Marisa Sterling, P.Eng.</p> <p>East Central Region Chapters East Toronto www.easttoronto.peo.on.ca Lake Ontario www.lakeontario.peo.on.ca Scarborough www.scarborough.peo.on.ca Simcoe Muskoka www.simcoe-muskoka.peo.on.ca Willowdale/Thornhill www.willowdalethornhill.peo.on.ca York www.york.peo.on.ca</p> <p>Several comments received from members at large</p>

7. References

Guideline on Human Rights in Professional Practice, June 2009 Published by the Association of Professional Engineers of Ontario

<https://peo.on.ca/sites/default/files/2019-07/Guideline%20on%20Human%20Rights%20in%20Professional%20Practice%20%282009%29.pdf>

Unconscious Bias --Rumeet Billan, PhD

<http://www.chapters.peo.on.ca/wordpress/wp-content/uploads/2017/03/Engineering-Workshop-Nov-17-2018-Final.pdf>

[1] How Canada's racial data gaps can be hazardous to your health

<https://www.theglobeandmail.com/canada/article-how-canadas-racial-data-gaps-can-be-hazardous-to-your-health-and/>

[2] Hon. Senator Ratna Omidvar of the Province of Ontario, Senate speech June 18, 2020

[3] Statistics Canada to start collecting race-based crime data

Federal agency teaming up with the Canadian Association of Chiefs of Police on new project

<https://www.cbc.ca/news/politics/statistics-canada-race-data-police-1.5650273>

PEO Equity and Diversity Policy (2011)

<https://www.peo.on.ca/sites/default/files/2019-08/Equity%20and%20Diversity%20Policy.pdf>

Engineers New Brunswick equity statement in Code of Ethics

https://www.linkedin.com/posts/apegnb_it-is-our-duty-to-uphold-this-standard-to-activity-6676468054878101504-5zbA

Engineers Nova Scotia equity statement in Code of Ethics

https://www.linkedin.com/posts/engineers-nova-scotia-1585b548_engineers-nova-scotia-reaffirms-its-commitment-activity-6677196507382349824-IYG8

Engineers Geoscientists Manitoba dismantling bias education

<http://www.enggeomb.ca/DismantlingBias.html>

Registered Nurses' Association of Ontario policy statement on racism (2002)

<https://rnao.ca/policy/position-statements/racism>

Law Society of Ontario 13 recommendations to address issues of systemic racism in the legal profession

<https://www.lawnow.org/law-society-of-ontario-targets-systemic-racism-in-the-legal-profession/>

Ontario College of Teachers guideline to address anti-Black racism

<https://www.oct.ca/public/media/announcements/college-addresses-anti-black-racism>

8. Appendix

Recent photographs from across Canada

Ontario: Ontario -Ottawa



Ontario -Toronto



Ontario -London



Ontario -Thunder Bay



Other parts of Canada: Quebec -Gatineau



PEI -Charlottetown



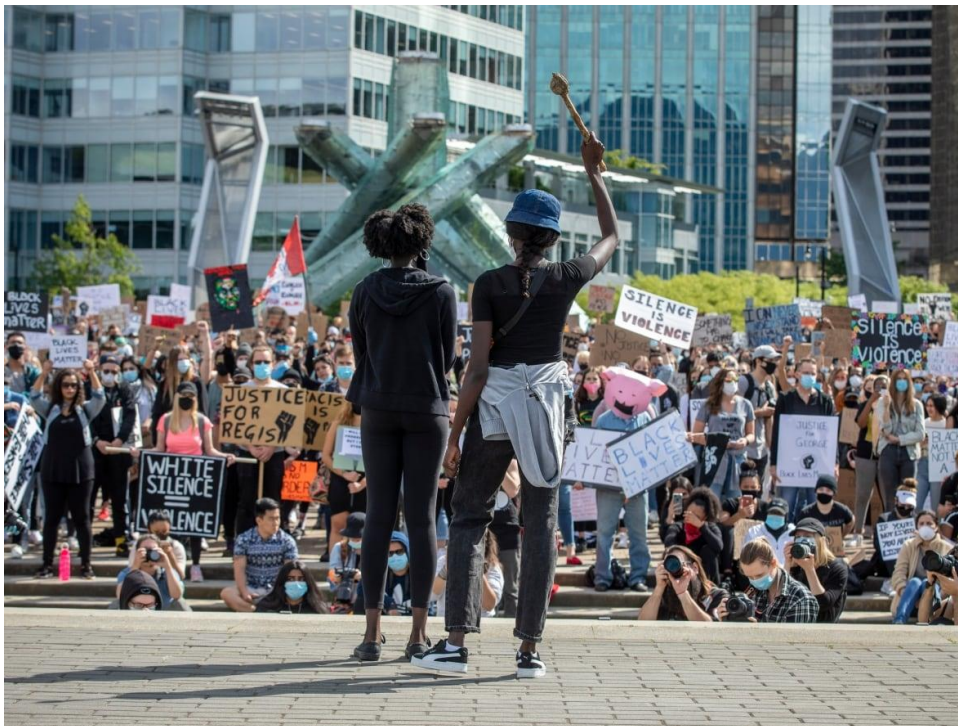
New Brunswick -Moncton



Saskatchewan -Regina



British Columbia -Vancouver



Nova Scotia -Halifax



Manitoba -Winnipeg



- 7. Demonstrated Board Leadership:** Ability to inspire and provide direction to others.
- 8. Strategic Planning:** Ability to critically assess strategic opportunities and threats to the organization and to identify the strategic directions needed to give effect to the Board's/Council's vision
- 9. Stakeholder Relations and Engagement:** Ability to build networks and nurture relationships with communities and stakeholders.
- 10. Communications & Marketing:** Experience in communications, public outreach or media relations.

Skills that would be helpful:

1. Possesses a well-Recognized Formal Governance Education Certification (e.g. ICD.D or C.Dir)
2. Organizational Behaviour Expertise
3. Transformational Change Management Expertise
4. Human Resource Sr. C-Suite Leadership / CHRP designation
5. People who have sat on other boards of Modern Regulatory bodies
6. Finance Professionals with Audit Committee Experience and/or Finance Committee Experience of a similar NFP organization
7. People from Private or Public for Profit Corporations to bring their best practises
8. Lawyers with experience in Professional Self-Regulatory bodies
9. Lawyers with Compliance Experience
10. Communications Professionals
11. Entrepreneur Engineers/Engineering Graduates
12. Futurists or Strategists (there is actually a global professional bodies that certifies Futurists now)
13. Diversity and Inclusion Expertise (re: Unconscious Biases & Workplace Behaviour)

Other attributes/qualities:

There are other attributes that would be desired for all council members, irrespective of whether they are elected or LGAs. These are attributes or qualities such as integrity, ethics, strategic thinker, communicator, etc. As these are general qualities that would be expected in any candidate, the focus of the skills matrix is on identifying the Functional skills (e.g. Financial, HR, Legal) and Diversity attributes (e.g. gender, geography, race or ethnicity) that are missing and could be filled by the appointment of a suitable LGA.

Briefing Note – Information

C-536-2.11

2020 Vital Signs Survey Report

Purpose: To inform Council of the 2020 Vital Signs Survey results and recommendations from the Advisory Committee on Volunteers (ACV).

No motion required

Prepared by: Viktoria Aleksandrova – Committee Coordinator

1. Status Update

Appendix A is the analysis of the *2020 Vital Signs Survey*.

Appendix B contains a letter to all committee and task force volunteers with the recommendations from the Advisory Committee on Volunteers (ACV) pertaining to specific questions and one pertaining to all the committees resulting from the COVID – 19 related questions.

2. Background

Early this year, the Advisory Committee on Volunteers (ACV) coordinated an email survey of PEO committee and task force volunteers. Similar surveys were previously conducted in 2011, 2013 and 2017. They were intended to provide the ACV with a means to evaluate the standing of their support of and from PEO volunteers. The surveys are intended to assist all committees in evaluating what works and what needs improvement.

The 2020 Vital Signs Survey was conducted using SurveyMonkey from May 25 to June 25, 2020. There were 140 responses to the survey. The survey was sent to 335 volunteers who occupy 405 positions on PEO's committees and task forces.

Appendices

- **Appendix A** – 2020 Vital Signs Survey Analysis
- **Appendix B** – Letter to Committee and Task Force Volunteers



Professional Engineers
Ontario

2020 PEO Committee Vital Signs Survey

Analysis

V1 July 17, 2020

V2 August 20, 2020

2020 PEO Committee Vital Signs Survey Analysis

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2020 PEO Committee Vital Signs Survey Analysis

of agreement from 1 to 5, and one (in brackets) that also includes those who chose “Does Not Apply” (no weight).

Q4 about Terms of Reference was not given “Does Not Apply” as an option since all committees have Terms.

Q5’s “Does Not Apply” became “I have not seen my Committee’s Terms of Reference.”

Unique to the 2020 survey is Section F, concerning PEO committee operations during the COVID-19 pandemic. PEO offices were closed on March 2020 and continued through the June 25th survey deadline. All onsite meetings were cancelled, and committee volunteers and PEO staff were forced to adapt as necessary. Q38-40 detail the impact of the pandemic on committee operations, those operations that could be continued, and how committees could change.

2020 PEO Committee Vital Signs Survey Analysis

Survey Demographics

Q1. Committee Memberships of Respondents				
Committee	Number of Survey Respondents	Number of Committee Members	Percentage of Committee Respondents	Percentage of Total Survey Respondents
Experience Requirements Committee (ERC)	53	146	36%	37.86%
Discipline Committee (DIC)	13	34	38%	9.29%
Professional Standards Committee (PSC) and subcommittees	13	37	35%	9.29%
Academic Requirements Committee (ARC)	7	25	28%	5.00%
Complaints Committee (COC)	6	14	43%	4.29%
Enforcement Committee (ENF)	6	10	60%	4.29%
Advisory Committee on Volunteers (ACV)	5	10	50%	3.57%
Awards Committee (AWC)	5	15	33%	3.57%
Audit Committee (AUC)	4	4	100%	2.86%
Regional Councillors Committee (RCC)	4	10	40%	2.86%
Consulting Engineer Designation Committee (CEDC)	4	10	40%	2.86%
Finance Committee (FIC)	3	8	37%	2.14%
Fees Mediation Committee (FMC)	3	6	50%	2.14%
Government Liaison Committee (GLC)	3	10	30%	2.14%
Equity and Diversity Committee (EDC)	2	6	33%	1.43%
Licensing Committee (LIC)	2	7	29%	1.43%
Registration Committee (REC)	2	10	20%	1.43%
Volunteer Leadership Conference Planning Committee (VLCPC)	2	5	40%	1.43%
Legislation Committee (LEC)	1	7	14%	0.71%
PEO-OAA Joint Liaison Committee	1	3	33%	0.71%
30 by 30 Task Force (30x30 TF)	1	4	25%	0.71%
Executive Committee (EXE)	0	8	0.00%	0.00%
Human Resources Committee (HRC)	0	5	0.00%	0.00%
OSPE-PEO Joint Relations Committee (JRC)	0	4	0.00%	0.00%
Central Election and Search Committee (CESC)	0	6	0.00%	0.00%

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Complaints Review Councillor (CRC)	0	1	0.00%	0.00%
Total Correspondents to Committee members	140	405	34.6%	

Q2: Name (optional)	
Total Named Respondents	76
Respondents who evaluated more than one Committee (2 each)	5

Q3: Number of years spent in this Committee		
Less than 1 year	10.07%	14
1-5 years	38.85%	54
6-10 years	15.83%	22
11-15 years	12.95%	18
16-20 years	7.91%	11
More than 20 years	14.39%	20
No answer given		1
Total		140

2020 PEO Committee Vital Signs Survey Analysis

Section A: Meeting the Mandate

Q4: Our committee's Mandate, as stated in its Terms of Reference, is clear and well understood by all members.											
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Total	Weighted Average
0.77%	1	3.85%	5	6.15%	8	53.08%	69	36.15%	47	130	4.2

Q5: Our committee spends adequate time considering any needed modifications to its Terms of Reference. If you have not seen your committee's Terms of Reference, indicate so.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		I have not seen the Terms.		Total	Weighted Average
0.00%	0	3.88%	5	18.60%	24	42.64%	55	27.91%	36	6.98%	(9)	120 (129)	4.02 (3.74)

Q6: Our committee gives full attention to relating committee priorities, the Human Resources Plan and the Work Plan to Council's mandate for this committee.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
0.00%	0	0.78%	1	13.95%	18	42.64%	55	35.66%	46	6.98%	(9)	120 (129)	4.22 (3.92)

Q7: Our committee has sufficient members to properly perform its Mandate.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
1.54%	2	3.85%	5	10.00%	13	44.62%	58	37.69%	49	2.31%	(3)	127 (130)	4.16 (4.06)

Q8: All priority issues relating to the Mandate were properly addressed in the past year.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
0.77%	1	3.85%	5	15.38%	20	46.92%	61	26.92%	35	6.15%	(8)	122 (130)	4.02 (3.77)

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Section B: Committee Operations

Q9: Members' expertise is broad enough to handle the work of the committee.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Weighted Average
0.00%	0	7.26%	9	4.03%	5	37.90%	47	50.00%	62	0.81%	(1)	123 (124) 4.32 (4.28)

Q10: Members receive sufficient information on committee business to render informed decisions.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Weighted Average
0.81%	1	2.42%	3	5.65%	7	41.94%	52	48.39%	60	0.81%	(1)	123 (124) 4.36 (4.32)

Q11: Meeting Administration Items												
Agendas are issued with adequate time for review.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Total		Weighted Average
0.00%	0	3.25%	4	8.94%	11	45.53%	56	42.28%	52	123		4.27
Minutes accurately reflect the committee's activities.												
0.00%	0	0.81%	1	12.20%	15	40.65%	50	46.34%	57	123		4.33
Minutes are issued with adequate time for comment and amendment.												
1.63%	2	1.63%	2	13.01%	16	41.46%	51	42.28%	52	123		4.21

Q12: The committee meets often enough to do its work in accordance with its Terms of Reference.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Weighted Average
1.61%	2	3.23%	4	11.29%	14	41.94%	52	37.10%	46	4.84%	(6)	118 (124) 4.15 (3.95)

Q13: The Committee Chair:												
Manages business satisfactorily.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Total		Weighted Average
0.00%	0	3.28%	4	13.11%	16	36.89%	45	46.72%	57	122		4.27
Allocates appropriate time to each issue.												
0.00%	0	4.17%	5	20.00%	24	39.17%	47	36.67%	44	120		4.08

Q14: Workloads are distributed fairly among committee members.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Weighted Average
0.00%	0	8.06%	10	17.74%	22	45.16%	56	22.58%	28	6.45%	(8)	116 (124) 3.88 (3.63)

2020 PEO Committee Vital Signs Survey Analysis

Q15: Additional formal training would improve the way the committee functions. Please check all types and formats of training you would like to see. Choose N/A if you do not wish to see training.		
Legal training	31.09%	37
Training Format: Blended (any combination of self-study / instructor led / in-class / web-based)	30.25%	36
N/A	28.57%	34
Policy training	22.69%	27
Training Format: Web-based (web-modules, webinars, etc.)	21.85%	26
Soft Skills training (conflict resolution, time-management, project management, etc.)	20.17%	24
On-boarding / Orientation	16.81%	20
Compliance training	15.13%	18
Technology training	14.29%	17
Training Format: Individual self-study	12.61%	15
Team training	11.76%	14
Training Format: In-class or instructor led (workshops, seminars, etc.)	10.92%	13
Leadership training	10.08%	12
Other (please specify)	14.29%	17
Response		Frequency
Interview and Interrogation Training		2
Problem solving over technical elements		1
Governance Training		1
Additional bias training		1
Observing discipline hearings		1
Inclusion of organization history and org. affiliates e.g. OSPE during orientation		1
Conducting effective meetings		1
Training for universal consistency in applicant evaluation		1
Verbal language, cultural difference and human rights		1
Adjudication training		1
Training of Councillors in Committee functions		1
Compliance/relevance of PE Act		1
Change management training, PEO policy training		1
Misc. Comments		3
- Capable individuals, with deep knowledge of their area of expertise shall be selected as members.		
- While most members are fine – there are couple who do not understand the mandate and also a couple who are underperforming.		
- Training is going on during meetings		

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Q16: Council needs to better understand and support Committees' reports and recommendations.											
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Total	Weighted Average
1.64%	2	1.64%	2	42.62%	52	27.87%	34	26.23%	32	122	3.75
What would you recommend?											
Comment											Frequency
Councillors improve understanding of Committee roles and mandates:											8
<ul style="list-style-type: none"> • COC • ERC 											
Regular attendance of Council representative at Committee meetings as observers											5
More feedback to Committees from Council about implementations.											3
Nothing/no comment											2
Improve focus on regulatory functions											2
Engage other Committee members after joining a Committee											2
Committee Chairs should be invited to regularly give reports to Council											2
Council should pay more attention to the engineering profession and less on their own welfare.											2
Transfer Chapter matters to OSPE											1
Have a Council member present at every ERC meeting											1
Change committee hours so that actively employed engineers may attend and contribute.											1
Terms of reference for Council should be formalized											1
Councillors should confirm in writing that all Decisions & Reasons have been read.											1
Council should not be bothered by ERC's motions which are outside of ERC mandate.											1
Councillor should read all material provided to them											1
Better direction from Council of Committee topics											1
Workshops											1
Role of statutory tribunals and their relationship with Council											1
Publish Decisions on CanLII for stakeholders' benefit											1
Review and update the PEA to better achieve mandate.											1
Less dismissive and antagonistic attitudes											1
ERC members should be strong technical engineers concentrate on engineering as per PEO , not project management											1

Q17: There should be opportunities for members of various committees to get together to learn from each other and exchange views.											
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Total	Weighted Average
0.83%	1	4.96%	6	20.66%	25	47.11%	57	26.45%	32	121	3.93
How would you recommend doing this?											
Comment											Frequency
Committee Networking Events <ul style="list-style-type: none">- Annual informal brainstorming sessions- Offsite social events with informal presentations from committees- Chairs, Vice-Chairs and a few select members for bi-annual information exchange- Breakout sessions at Committee Chairs workshop, meet the Chairs and learn roles											20
Committee Meeting Attendance and Items											10

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<ul style="list-style-type: none"> - Regular joint meetings with other committees, such as ones with similar mandates (e.g. ARC/ERC, COC/DIC) - Invite members to attend other meetings as guests. - Standard agenda items about other committee activities - A rotation of Committee Chairs/Vice Chairs (one per meeting) from each Committee attend each ACV meeting throughout the year as an observer 	
Training Sessions <ul style="list-style-type: none"> - Web-based and in-class training, lessons learned - Bi-annual workshops - Workshops for various disciplines: Electrical, Civil, Mechanical, etc. - Joint adjudication training for relevant committees - Extend Committee Chairs Workshop to more members, or vary the attendance 	7
Annual General Meeting related <ul style="list-style-type: none"> - Pre-AGM sessions - All-Committee meeting at AGM - Committee Retreats coinciding with AGM 	4
Committee online forum / Zoom / chat / conference calls	3
Information requests between committees passed by staff without editorial comment or interference.	1
Between members of the same Committee is more appropriate.	1
Non-social exchanges between relevant committees e.g., COC & PSC	1
No opportunity to serve on committees	1
Email reports to Councillors before each Council meeting	1
This already happens at breakfast and lunches	1
Council needs to step back from politics and operations and function as a strategic board	1
Succession planning sessions	1
Survey committees for topics of mutual interest with objective value	1
Focus on PE Act objectives of PEO	1

Q18: PEO meeting logistics, including rooms, teleconferencing, and refreshments, are satisfactory for our committee.

Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Does Not Apply	Total	Weighted Average
0.81% 1	1.61% 2	5.65% 7	42.74% 53	48.39% 60	0.81% (1)	123 (124)	4.37 (4.34)

Q19: PEO Volunteer service is properly recognized with appropriate awards and certificates.

Strongly Disagree 1	Disagree 2	Neither Agree nor Disagree 3	Agree 4	Strongly Agree 5	Does Not Apply	Total	Weighted Average
0.00% 0	4.03% 5	14.52% 18	44.35% 55	33.87% 42	3.23% 4	120 (124)	4.12 (3.98)

If you selected Disagree, what would you recommend?

Response	Frequency
Don't know / unaware of recognition tools / no exposure to other committees or volunteers	4
No awards communication since COVID this year.	
Improve informal recognition by thanking volunteers; should not be driven by "prizes."	3
Awards don't matter; respect is more important.	
Too many engineers volunteer solely for recognition and career advancement.	
Should do more	1
There is a disproportionate recognition of volunteers who conduct non-regulatory activities. An better balance would be more appropriate.	1

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Award/certificate presentation did not occur during Audit Committee meetings this year. Perhaps no members have reached a recognized milestone this year	1
DIC work should not be considered "volunteer service"	1

Q20: How can teleconference participation at meetings be made more effective?	
Response	Frequency
Videoconferencing e.g., Zoom, MS Teams, Skype for Business - COVID has increased the need and made meetings effective	18
No idea / no comment / N/A / never used	10
Ensure PEO has latest technology / equipment / IT support capacity	7
Ensure all devices are working properly and all participants can hear/speak	5
Common set of etiquette, timing, procedures and tightly scripted agenda – e.g. COC meetings	5
Train members to use remote technology, especially Chairs	4
In-person meetings are more effective and show respect for a volunteer's time.	4
Opportunities for questions/comments/suggestions during meetings	4
It is effective enough / It cannot be improved	3
Send material to participants at least one week ahead and provide meeting details	3
Revisit this question after COVID; new normals are coming	2
We do not meet often enough for teleconference to be effective, or it is not conducive to our work.	2
Schedule meetings to suit members	2
Common set of policies, privacy, recommendations, etc.	1
Apps with screen sharing and sketch functions improve meeting dynamics.	1
Accommodate accessibility requirements as necessary	1
Chair-controlled participant mute	1

Q21: The use of subcommittees is effective.											
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Total	Weighted Average
3.31%	4	3.31%	4	28.93%	35	47.11%	57	17.36%	21	121	3.72
If you disagree, please explain.											
Comment											Frequency
N/A / no comment / no subcommittee to answer for											3
My subcommittee is working fine.											2
Sub-committees should be used for specific tasks and not as standing replacement for what should be normal committee functions.											1
Members need to be routinely reminded of subcommittee purpose.											1
Pre-main committee meetings of subcommittees have been effective.											1
Too many subcommittees may work to drain resources, create unnecessary confusion											1
The subcommittee is an undefined entity. There are no terms of reference, no rules re: membership, operation and accountability.											1
Subcommittee doesn't make decisions											1

2020 PEO Committee Vital Signs Survey Analysis

Guidance on dealing with development and implementation of assignment would help.	1
Presentation of decision pro and con should be provided.	
members are not selected from wide spread of ERC members however limited for few for many years	1
Sub-committees of ARC when formed at times need a greater level of staff support than normal admissions staff can provide.	1
I don't think we have accomplished anything in the last few years. This is mainly because we have no direction or understanding as a committee of what we are able to do to effect change and make progress.	1
Issues can't be raised at business meeting unless first approved by sub-comm - controlled by "old guard"	1

Q22: Has your committee discussed and implemented term limits for the positions of Chair, Vice-Chair, and for regular members?

Yes	74.14%	86
No	25.86%	30
Total		116

Q23: My Committee is effective at succession planning.

Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Total	Weighted Average
1.63%	2	5.69%	7	37.40%	46	34.96%	43	20.33%	25	123	3.67

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Section C: Impacts on Personal Involvement

Q24: Before a decision is taken, issues are thoroughly discussed, and all members are encouraged to participate.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
0.00%	0	2.46%	3	6.56%	8	40.98%	50	45.08%	55	4.92%	(6)	116 (122)	4.35 (4.14)

Q25: Members' views are always given due consideration.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
0.00%	0	1.64%	2	12.30%	15	38.52%	47	43.44%	53	4.10%	(5)	117 (122)	4.29 (4.11)

Q26: Any conflict within our committee has been managed productively.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
0.00%	0	4.10%	5	10.66%	13	40.98%	50	28.69%	35	15.57%	(19)	103 (122)	4.12 (3.48)

Q27: Instances of poor performance have been dealt with effectively.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
0.82%	1	11.48%	14	21.31%	26	26.23%	32	9.02%	11	31.15%	(38)	84 (122)	3.45 (2.38)

Q28: Instances of poor attendance have been dealt with effectively.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
3.28%	4	6.56%	8	24.59%	30	28.69%	35	11.48%	14	25.41%	(31)	91 (122)	3.52 (2.62)

Q29: Unprofessional conduct has been dealt with in an appropriate manner.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
0.00%	0	0.00%	0	15.70%	19	23.97%	29	12.40%	15	47.93%	(58)	63 (121)	3.94 (2.05)

Q30: Our staff advisor and support staff provide adequate, timely, and appropriate administrative support.													
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total	Weighted Average
0.00%	0	2.50%	3	2.50%	3	30.83%	37	62.50%	75	1.67%	(2)	118 (120)	4.56 (4.48)

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Q31: I have a sense of satisfaction working on this committee.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total
0.00%	0	2.46%	3	4.10%	5	31.15%	38	59.02%	72	3.28%	(4)	118 (122)
												4.52 (4.37)

Q32: I do not feel overloaded with the work assigned to me.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total
0.00%	0	2.46%	3	5.74%	7	51.64%	63	36.07%	44	4.10%	(5)	117 (122)
												4.26 (4.09)

Q33: I am treated with respect by other committee members.												
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Does Not Apply		Total
0.00%	0	0.00%	0	2.46%	3	33.61%	41	62.30%	76	1.64%	(2)	120 (122)
												4.61 (4.53)

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Section D: Diversity

Q34: My committee is representative of PEO's membership diversity..										
Strongly Disagree 1		Disagree 2		Neither Agree nor Disagree 3		Agree 4		Strongly Agree 5		Total
1.68%	2	5.88%	7	18.49%	22	43.70%	52	30.25%	36	119
Please explain.										
Comment										
ACV		<ul style="list-style-type: none"> - Recruitment of new Members has always been based on capabilities first. But if the Committee appeared lacking in diversity, given two equal candidates, the selection subcommittee would look for favourably on the candidate who could help satisfy a diversity need. 								
ARC		<ul style="list-style-type: none"> - Because there is a need for specific knowledge base, members are selected for that, however it happens that the diversity representation is good - Highly racially diverse, while gender diversity is in approximate proportion to the diversity in the profession. All are highly respected. 								
AUC		<ul style="list-style-type: none"> - Although not by design, visible minorities and gender is represented on AUC. I would say AUC is more diverse than Council 								
CEDC		<ul style="list-style-type: none"> - We are required to complete the training modules related to all-encompassing "diversity" issues as interpreted by PEO. - All of the members are currently male, and most are Caucasian. In addition to this, most are advanced in age - this does not provide a good reflection of PEO's membership diversity and the various points of view that go along with having diverse representation. 								
COC		<ul style="list-style-type: none"> - The COC continuously examines its mandate, membership and working processes and we strive to enhance each of these - and have done so over many years. Other PEO committees would do well to emulate these practices. - We work very hard at ensuring that we have a diversity of committee members while not compromising on the quality and qualifications of those serving. It has been challenging, at times, finding persons of some groups but we do our very best and are committed to this. 								
DIC		<ul style="list-style-type: none"> - Diverse representatives from all walks of life - Women and men from various ethnic backgrounds and age groups. - One aspect of diversity that's missing is diversity by age - most of the members seem to be retired or nearing retirement. Some younger volunteers would be welcome. - The membership lacks women (only 6 out of 36 or so) and P.Eng. members with 10-15 years experience who are in the earlier stage of their careers. 								
EDC		<ul style="list-style-type: none"> - I don't know what the membership diversity is because we were never given information on this. It would be useful for the EDC committee to have such feedback. 								
ENF		<ul style="list-style-type: none"> - Members from a variety of ethnic groups and races, and is well represented by men and women. - Expertise crosses an array of engineering disciplines, and in particular structural engineering, computers and telecommunications, civil, and biomedical, as well as legal. 								

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ERC	<ul style="list-style-type: none"> - Diversity of the ERC members likely far exceeds the actual membership diversity. This is excellent as the majority of interviews involve candidates coming without engineering degrees from Canadian universities. - It is an insult to be continually be asked to apply FAIRNESS to decision making. The ERC is as diverse as it could possibly be. - Diverse team members consisting of individuals from different cultures, backgrounds, ethnicity and expertise. - It contributes a lot for experienced, foreign trained engineers to become registered. - Very few female-identified committee members, likely an older demographic among committee members - It seems to have a good diversity of CEAB and non-CEAB graduates, but in other areas of diversity such as women and indigenous members, it is not so diverse. - Overly weighted with foreign-trained
FMC	<ul style="list-style-type: none"> - Sample size of participants is too small to be valid.
GLC	<ul style="list-style-type: none"> - In general, we have different age group, different ethnicity representation in the Committee; however, it would be better if we have better gender representation in our Committee - We have gender as well as excellent ethnic diversity.
PSC	<ul style="list-style-type: none"> - Committee is primarily Caucasian. Now has 3 females though - All members have been appointed on merit.
REC	<ul style="list-style-type: none"> - Not enough women. Most members are older.
30X30 TF	<ul style="list-style-type: none"> - We are 50-50 men and women. We also have different generation representation and different backgrounds (management consulting, engineering consulting, academia and government)

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Section E: Additional Committee Opinions

Q35: Discuss additional concerns you may have with committee work or panels.	
Response	Frequency
<p>ERC</p> <ul style="list-style-type: none"> - Increase interviews from 60 to 90 minutes. - Prior review of candidate by ERC members was a good initiative. - A stronger working relationship should be developed between ERC and ARC. - Member selection needs to be reconsidered. Shortage of volunteers should not leave the door open to unqualified individuals to enter this important committee - Some ERC members are not kept to date with technological development so that the interviews are mundane thus lowering passing level/standards. - Committee Members to ensure they are familiar with the ERC Policy & Procedures Manual - In ERC interview for any prospective candidate with aerospace experience should be always evaluated by aviation expert member. This is a multidisciplinary engineering industry that requires a member with multidiscipline engineering experience to conduct proper and fair evaluation. - Committee should make it easier for actively employed engineers to participate. This should be considered seriously and all impediments removed. - Out of over 160 members we have, only about 30 to 40 people participate in the business meetings and know and understand the term of reference and committee mandates adequately. We are looking into online training to be able to get all the members trained. - The business meeting get clogged with irrelevant issues and/or discussions. The chair often loses control of the meeting. The panels I was member in were unfocused and slow in response, ready to go on tangents at every turn. - A more detailed and effective evaluation system needs to be developed and appropriate training should be provided, preferably discipline wise. In particular I have noticed that some committee members tend to be too strict and some too lenient in their evaluation of Applicants. More consistent approach would improve member performance. - There must be clear guideline of interview method, techniques, scope , in case of interdiscipline cases once clear that the applicant is only practicing one discipline a new interview based on the applicant real practice should be done and not having the two members agree if one is Ok because the applicant is in his/her are of practice , this make it a one person committee. - Poor attendance to committee meetings. Many absentee members who do not participate. - In two years of membership, I have never received a request to participate on a Board. - comm is fixated on the past - not open to new ideas - is very defensive to outside comments (Fairness Comm, etc) - leadership have stated that ERC is independent of Council??? 	15

2020 PEO Committee Vital Signs Survey Analysis

<p>COC</p> <ul style="list-style-type: none"> - This Committee requires a certain number of experienced members, therefore limiting terms would be detrimental. - The number of staff dedicated to COC is insufficient to manage the regular business and manage unusual circumstances that arise from time to time. - If we lost one or two key staff people, PEO would be in danger of being unable to fulfil its mandate. We have raised this concern to Council but have seen no action. Furthermore, we do not have sufficient staff resources to do some of the other things that PEO Council would like to actually improve how we regulate the profession since all resources are fully occupied just to keep up with the current Complaints caseload. - We need to deal with two key and related issues: the size of the committee and a couple of instances of under-performing members and a couple of with poor attendance – and we will. 	3
<p>ARC</p> <ul style="list-style-type: none"> - Concern is not with ARC but with PEO as a whole. It is getting left behind as new discipline emerge. I can honestly say that ARC is very flexible when it comes to new disciplines, but not all have this mindset or understanding of admissions. However, with a P.Eng. appearing to have little to no value for many who technically fall under the definition of engineering, PEO is losing these members and creating a society that makes an engineer more of a commodity instead of respecting an engineer's commitment to protecting the public interest. There is so much Council could have done over the years yet it squanders opportunities with navel gazing. This is a problem that goes to the heart of Council which seems more concerned with "governance" than with relevant and value-added "outcomes". Governance should be a simple outcome of purpose, governance should not be the driving force that creates a purpose which is the direction Council currently (and in the past) embarks. - I disagree strongly the dismissal of deputy registrar Michael Price. 	2
<p>DIC</p> <ul style="list-style-type: none"> - DIC is one of the mandated committees that is special, and requires training and commitment to do a proper job. - More training is needed overall. - The membership should not be composed of predominantly retired male members. - The leadership of the committee should not be left to a popular vote every two years. Instead of the committee voting on who should be its Chair and Vice-Chair, there should be a job competition for the position of Chair only, and the successful candidate should have five-year term, or should be hired on a permanent full-time basis in accordance with the practice of other Ontario administrative tribunals. This would allow for longer-term planning and implementation of best practices, and better overall functioning of the committee on all fronts (recruitment, training, professional development, accountability and continuity). Also, this would give the Chair the proper resources to carry out her duties, i.e. designated laptop and email. 	2

2020 PEO Committee Vital Signs Survey Analysis

<ul style="list-style-type: none"> - All members should be compensated as other adjudicators in the province are with an adequate per-diem that reflects the fact that their work is serious and important, and it should not be considered "volunteer work." 	
<p>ENF</p> <ul style="list-style-type: none"> - more options to attend meeting remotely - I believe the greatest need right now is to have an awareness of what other committees are doing. As mentioned in one of my previous responses, we could accomplish some cross-fertilization among the committees by having a meeting of committee chairs at one of the committee chairs workshops. Right now, the committees appear to be operating in silos. That is our perception, and we believe that Council should address this. 	2
<p>GLC</p> <ul style="list-style-type: none"> - There seems to be an misunderstanding what this Committee does and don't know why the Committee can help PEO to fulfill its mandates. - Staff ranking of the GLC as neither regulation nor governance related and that council could decide the work of the committee is not essential. The attitude of OSPE related to the work of the GLC. Our future. 	2
<p>PSC</p> <ul style="list-style-type: none"> - Our Subcommittee chair has little experience in the matter we are addressing. - Important that committees that develop guidelines involve people who are actively providing the services. I feel like some committee members are senior engineers who might be relying on first hand knowledge that is ten or fifteen years behind the times. This is who companies will naturally put forward, but it is really important that they be sufficiently "in the trenches" that they are really in touch with the marketplace. 	2
<p>RCC</p> <ul style="list-style-type: none"> - a toothless committee... committee can assess and make decisions effectively, however when it goes to the Council it will die, postponed, altered, 	1
<p>CEDC</p> <ul style="list-style-type: none"> - The CEO apparently feel that the CEDC is redundant, we disagree... 	1
<p>EDC</p> <ul style="list-style-type: none"> - Again, we never got anything done in the past few years. 	1

2020 PEO Committee Vital Signs Survey Analysis

ACV	1
- Where is ACV going in the future, based on the changes anticipated in PEO, especially if volunteers are seen as irrelevant?	
- What can ACV do to help PEO to improve its regulatory capabilities?	

Q36: Would you recommend others to put their name forward for this committee?		
Yes	95.87%	116
No	4.13%	5
Total		121

Q37: Overall, do you feel this committee is effective?		
Yes	95.80%	114
No	4.20%	5
Total		119

2020 PEO Committee Vital Signs Survey Analysis

Section F: COVID-19 Pandemic Questions

Q38: How has the COVID-19 situation affected your committee/task force?	
Comment	
ACV	<ul style="list-style-type: none"> - Most/All meetings are done virtually via Zoom. - Cancellation of the Spring Conference, and uncertainty regarding the Fall Conference - We have fewer "touch points" and less hands-on - Questioning what we can do as the ACV to help other Committees and PEO as an improved regulatory - Feeling of being distanced and not knowing next steps - Less communications since there are fewer requests from Committees/Task Forces/Council
ARC	<ul style="list-style-type: none"> - Not meeting during COVID - Affect the duties of ARC members significantly, particular in the assessment of application files from non-CEAB graduates.
AUC	<ul style="list-style-type: none"> - Meetings have transitioned online. 2 successful Zoom meetings have occurred
AWC	<ul style="list-style-type: none"> - We now do our calls via teleconference but we get the agenda items done effectively. - Cannot meet face to face which is necessary when assessing awards
CEDC	<ul style="list-style-type: none"> - negatively, we have not communicated since the lock downs have been instituted - Eastern subcommittee has not met - Delayed meetings, redesignations
COC	<ul style="list-style-type: none"> - tribunals are now via teleconference - Minimally. This Committee went to digital file transfers long before COVID-19. The success of the Committee demonstrates the value of digital transformation for the rest of the organization.
DIC	<ul style="list-style-type: none"> - One discipline hearing is scheduled to be held by way of an online virtual process - hearings may be conducted in writing where they would have to have been in person previously - Panels that I am a member of have not progressed up to now. - Three-person panels via Hearings in Tribunal Proceedings (Temporary Measures Act)
EDC	<ul style="list-style-type: none"> - No meetings
ENF	

2020 PEO Committee Vital Signs Survey Analysis

<ul style="list-style-type: none"> - The only impact of COVID-19 that I can see is that our bi-monthly committee meetings are being held using Zoom teleconferencing. - We have managed to have a committee meeting by conference call , and have interviewed a new member, from a number of candidates, by Zoom. - Staff support reduced
<p>ERC</p> <ul style="list-style-type: none"> - Last ERC Business Meeting was held using "Zoom" technology. - On hold / all main activities ceased - As a new member I am missing meeting other members - Interviews suspended
<p>FIC</p> <ul style="list-style-type: none"> - Not much as all preparation work are done at home prior to the meeting
<p>GLC</p> <ul style="list-style-type: none"> - No in person meetings, unable to complete certain tasks that require in person attendance. - Virtual town halls
<p>LIC</p> <ul style="list-style-type: none"> - Meetings have been cancelled
<p>PSC/subs</p> <ul style="list-style-type: none"> - Difficult meetings when (my) internet service is interrupted. - No meetings held during the COVID-19 outbreak in Canada. - Monthly meetings all online
<p>VLCP</p> <ul style="list-style-type: none"> - Not much for planning, we were usually teleconference anyway. Event was much different. - Virtual conference
<p>30x30 TF</p> <ul style="list-style-type: none"> - Yes as we were supposed to reach out to our stakeholders but that couldn't be done due to the situation.

2020 PEO Committee Vital Signs Survey Analysis

Q39: Of the activities that your committee/task force typically completes, what can you continue doing during this pandemic?	
Comment	
ACV	<ul style="list-style-type: none"> - nothing we're in somewhat of a holding pattern. I don't think "busy" work is particularly effective either. - Regular meeting schedule via teleconference - Completion of requests from Committees/Task Forces/Council - All of our normal tasks, except without the same satisfaction as in-person interactions
ARC	<ul style="list-style-type: none"> - Review submitted proposals and mark engineering reports - Virtually nothing - Our main work load is to process applications for the PEO licence from non-CEAB graduates. I don't know how this can be done remotely. I consider myself on the high risk group if got infected by the novel coronavirus. For my personal safe, I am certainly not comfortable traveling to Toronto to carry out my ARC duties at this troubling time.
AUC	<ul style="list-style-type: none"> - Able to continue 2020 audit cycle. Able to continue adjudication of volunteer expense appeals electronically
AWC	<ul style="list-style-type: none"> - Everything can be done virtually. We are debating the backup plan now for our OPEA Gala.
CEDC	<ul style="list-style-type: none"> - stay informed via alerts/information issued to us by our administrative secretary - All activities should be able to continue using technology such as video conferencing.
COC	<ul style="list-style-type: none"> - Virtually all activities can continue. I imagine that staff investigations can be more challenging working from home. - We can continue to deal with complaints files of a relatively routine nature.
DIC	<ul style="list-style-type: none"> - Discipline hearings can be held virtually following the example of the courts - Decision writing can continue - everything
ENF	<ul style="list-style-type: none"> - Education and awareness - We still have a number of issues being dealt with by our subcommittees, so our committee will continue to be busy throughout the balance of the year. The pandemic has not had an effect on the issues with which we are dealing.
ERC	<ul style="list-style-type: none"> - ERC Business Meetings as already done. ERC candidate interviews may also be done using video conferencing; i would recommend 90 minutes instead of 60 minutes for each such interview.

2020 PEO Committee Vital Signs Survey Analysis

<ul style="list-style-type: none"> - I would have to be in the same room as my co-interviewer... The applicant may be able to teleconference - Online self training on various regulatory update and issues could be beneficial - We have a subcommittee with ten members to discuss the main points, which can be continued. We had one short subcommittee meeting as a test, with no possibility of recording or minutes taking. Considering other organizations to conduct large meetings virtually and even PEO with the virtual council meeting, it is possible to equip and train the ERC team to conduct our meetings and interviews. - Nothing
<p>FIC</p> <ul style="list-style-type: none"> - Work at home - Continue to plan for the future of PEO
<p>GLC</p> <ul style="list-style-type: none"> - Stay in contact with our MPP's, as well as the groups we receive reports from. - Developing alternative relationship building alternatives and communication techniques.
<p>LIC</p> <ul style="list-style-type: none"> - Virtual activities
<p>PSC/subs</p> <ul style="list-style-type: none"> - Reviews of subcommittee submissions. - Online meetings
<p>REC</p> <ul style="list-style-type: none"> - Not very much without reconsidering our rules of procedure
<p>RCC</p> <ul style="list-style-type: none"> - Regular meetings and Chapter support
<p>VLCP</p> <ul style="list-style-type: none"> - Most everything
<p>30x30 TF</p> <ul style="list-style-type: none"> - We will try web sessions with our stakeholders and see how they go although the issues being discussed are sensitive and need workshopping in groups at times.

2020 PEO Committee Vital Signs Survey Analysis

Q40: What can your committee/task force do differently to transform and change during this period, to continue with your traditional duties and responsibilities?	
Comment	
ACV	<ul style="list-style-type: none"> - reduce the number of in-person annual meetings, and continue to use web-based video technology instead - Reach out to fellow Committees/Task Forces to see how we can help them - Develop online modules to cover topics affecting Committees/Task Forces/Council in areas such as professionalism, personal well-being, and mental health - Be more proactive and look for ways to help others
ARC	<ul style="list-style-type: none"> - Introduce Zoom meetings and document vetting online - If we were to receive files at home we could do the job. Unfortunately every file is only a paper trail, which means large volumes - Adapt to whatever temporary solution PEO Admissions can conceive of implementing to have ARC members review applicant files. PERSONAL RECOMMENDATION: Have a serious look at Tauria!!!!!! it is the most secure (elliptically encrypt, quantum proofed, peer to peer only encryption, forget about being able to ask for a forgotten password as the company CANNOT reset the system is so secure) messaging, video conferencing, collaboration program. Only one like it in the world, and it is Canadian. Their clients are banks, military, NSA, etc., i.e., those that demand security in online communications. May not be usable by ARC, but worth checking out as it may be. - My daughter is a P. Eng. registered in 4 provinces. The company couriers design works back-and-forth between the company office and her home for her endorsements and P. Eng. seal upon approval. I am not so sure if this can be done to transport application files back-and-forth between PEO office and my home for me to work on. The application files contain plenty of personal and valuable information to safely trust the courier services. - Create electronic ARC files
AUC	<ul style="list-style-type: none"> - During these times, AUC can continue with virtual meetings and continue with business
AWC	<ul style="list-style-type: none"> - It would be beneficial to implement award nomination submissions via online portals to keep up with the times of easy to use, streamlined online customer services and provide a virtual option for attending any PEO AGMs, galas, etc. This will promote inclusion amongst our membership that may be impacted due to costs, time, and travel restrictions.
COC	<ul style="list-style-type: none"> - Teleconferencing - The COC has already transformed and is working effectively during this transition.
DIC	<ul style="list-style-type: none"> - Virtual hearings and electronic documents - Written hearings
ENF	<ul style="list-style-type: none"> - more interaction in addition to regular committee meetings

2020 PEO Committee Vital Signs Survey Analysis

<ul style="list-style-type: none"> - Staff needs to catch up and restart committee support - Zoom
<p>ERC</p> <ul style="list-style-type: none"> - Full-time ERC staff can work out how to best interview using video conferencing , and then improve upon this method based on a few trials. The method must include video recording of each participant throughout all stages of the interview to maintain a recording similar in effect as during past interviews which are always "in-camera". Full-time ERC staff can contact each ERC member to confirm that they are prepared and willing to conduct ERC interviews in this way. - We could continue as previous but with some latitude as to travel and hotel time.. difficult to rush around as normal. - Staff has written asking how one fares during this pandemic lockdown. The committee has not. - Change and listen rank and file. Our Council is very dis-functional. - Because of the mandate of ERC that is interviewing the applicants, and no other committee has a similar task, ERC is a unique committee. Some other CA's have already started to conduct virtual interviews, but PEO is not equipped and ready for that. If we can start to do this, it will be a significant task for ERC and PEO. - Review all ERC guidelines and enhance them, ERC should also try to work on a Reference book similar to FE. PEO can also have a deal of getting a tablet loaded with engineering Handbooks in all discipline to be handed to ERC active members - Consider organizing small group social meetings to keep the engagement between fellow members alive. - Consider organizing small group meetings across committees. For example ARC and ERC, etc. This would create a better understanding and better exchange of practices.
<p>FIC</p> <ul style="list-style-type: none"> - Virtual meetings - Identify the most effective ways to maintain connections while remote - e.g. the use of audio/visual technology for viewing / recording / voting/ reporting, etc.
<p>GLC</p> <ul style="list-style-type: none"> - Move the responsibilities we can online.
<p>LIC</p> <ul style="list-style-type: none"> - Virtual activities
<p>PSC/subs</p> <ul style="list-style-type: none"> - Should have involved a couple other engineers who are currently active providing reserve fund studies and performance audits. Plus committee members all need to speak up. Some are very quiet. Strong members (probably me included) need strong counter-points to make sure our opinions are adequately challenged/tested - Use virtual sessions, email and phone as needed
<p>REC</p> <ul style="list-style-type: none"> - Not very much without reconsidering our rules of procedure
<p>VLCPC</p> <ul style="list-style-type: none"> - Zoom

2020 PEO Committee Vital Signs Survey Analysis

30x30 TF

- Record sessions and presentations

2020 PEO Committee Vital Signs Survey Analysis

Section G: Final Survey Comments

Q41: Identify issues that should be addressed in this survey in future.	
Response	Frequency
<p>New Issues</p> <ul style="list-style-type: none"> - The value the committee provides to protect the public in accordance with the Act. - Questions focusing on digital transformation may assist with resource allocation. - Better control of meetings with the idea of achieving something meaningful. Explanation of what has been suggested as sub-com meeting with the idea of coming to a good choice of alternatives. - Effective Communication, friendly approach and tactics are paramount. - Attendance, performance on committees (and lack thereof) - How much Committee activities relate directly to the core regulatory mandate of PEO. - The selection of an appropriate chairperson can expedite and improve the results of the work of the committee. Allow the committee members to be part of the selection process. - Take statistics, how many are actively employed? How many actively employed people are attending committee meetings? Find out why they are not able to attend? - Council structure needs overhaul. Present structure does not work. There should be a commission set to transform the PEO Council structure. - How can PEO become a better regulator? - Maybe a question to this group if they are even aware of all the committees. - A question dealing specifically with the Committee engagement level with individual members. 	9
<p>Survey Impact</p> <ul style="list-style-type: none"> - I think this survey should be redone after the pandemic and after the activity filter is completed and the actions taken to address the number of committees and roles and responsibilities are addressed by council. This seems premature to do while activity filter is being done. - Demonstrate that PEO has learnt from COVID-19 in moving forward. 	2
<p>Survey structure</p> <ul style="list-style-type: none"> - Most questions do not pertain to "Committee Members". They are better addressed by admin staff 	1
How PEO obtains volunteers for committees. The process to become a volunteer has become too bureaucratic; it resembles a high level job application and interview process.	1
I find the online training frustrating. I do many of the same training for work, then I need to do it again for PEO, for example. Condense PEO training by acknowledging reception n of employer's training.	1

2020 PEO Committee Vital Signs Survey Analysis

Q42: Suggest improvements to the survey itself.
Response
To add further relevance to our answers regarding ERC Business Meetings, please consider asking each ERC member regarding whether they regularly attend the Business Meetings, and if they are not attending these meetings then whether they review the Minutes of each Meeting to stay abreast of events.
Every question should offer a means of leaving related comments.
Ask questions that determine a committee members understanding of their core value to the Act and their obligations to protect the public's interest, and the reputation of the Association as a Regulator.
Survey should have been timed better with council activity filter and action plan.
Take stats.
Survey should be also focussed on the profession not only committee work.
We have no data to answer a number of questions but our staff support have. Review the questions and remove the useless questions. E.g. most of my not agree/not disagree answers.
Survey is well done.
ASK ERC members about their engineering activities and if they working in consulting Firms , if not what is the nature of their works to define level of engineering practice
Need feedback or summary of outcomes.
Should have been a comment box on the term limit question. ARC is a special case where term limits make no sense. Some level of turn-over for sure makes sense, but term limits make no sense.
You've nailed it! It's easy to complete, seeks enough free-form input, and is the right length.
Let us hear about any actions by PEO to this, or is this just to say "we had a survey"

Memorandum

To: All Committee Volunteers
From: Sean McCann, P.Eng. – Chair, Advisory Committee on Volunteers (ACV)
Cc: Council and Johnny Zucco P.Eng. – CEO & Registrar
Date:
Subject: 2020 Vital Signs Survey – Report and Recommendations

Early this year, the Advisory Committee on Volunteers (ACV) coordinated an email survey of PEO committee and task force volunteers. Similar surveys were previously conducted in 2011, 2013 and 2017. They were intended to provide the ACV with a means to evaluate the standing of their support of and from PEO volunteers. The surveys are intended to assist all committees in evaluating what works and what needs improvement. They also are intended to find out where we were doing well and where there was room for improvement.

The 2020 Vital Signs Survey was conducted using SurveyMonkey from May 25 to June 25, 2020. There were 140 responses to the survey. The survey was sent to 335 volunteers who occupy 405 positions on PEO's committees and task forces. The 2020 response rate of 34.6% is lower than in the 2017 (36.12%); but higher than the 2013 (30.6%) and 2011 (27.5%) surveys. ACV is concerned about the drop in the response rate. Perhaps volunteers are not responding on behalf of every committee on which they sit. The low response rate is also because of no survey responses from the Executive, Human Resource, OSPE-PEO Joint Relations, Central Election and Search committees.

The 2020 survey was updated to include recommendations collected from the 2017 survey. The addition of more comment boxes and more granularity for responses (E.g.: Sliding Scale) were improvements requested from respondents in the 2017 survey.

In addition, we incorporated two extra committee-focused questions: numbers 36 (Would you recommend others to put their name forward for this committee?) and 37 (Overall, do you feel this committee is effective?). The responses to both questions were 95.80% positive. As well, we added questions 38, 39 and 40 that were related to COVID – 19.



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The attached 2020 Committee Vital Signs Survey Analysis is a summary of the survey demographics and responses. *Appendix A* contains ACV's recommendations pertaining to specific questions and one pertaining to all the committees resulting from the COVID – 19 related questions.

Some of the responses may be directly relevant to your committee or task force. After reading ACV's recommendations, you and your committee may have suggestions that ACV will be pleased to receive at acv@peo.on.ca. This update serves to advise you that ACV will be suggesting that each Committee Chair and Staff Advisor develop a 2020 VSS Plan aimed at addressing the issues that are pertinent to their committee. The next survey is planned for 2023.

Sincerely,

Sean McCann, P.Eng.
Chair - Advisory Committee on Volunteers

APPENDIX A

Question 5: If you have not seen your committee's Terms of Reference, indicate.

29 respondents (22.48%) indicated that they have not seen or "neither agreed or disagreed" about seeing their respective committee's Terms of Reference.

ACV RECOMMENDS THAT Committee Chairs be reminded of the importance of ensuring that all committee members are familiar with the most current Terms of Reference document. This document should be reviewed on an annual basis, when the committee is preparing its annual Work Plan and/or Human Resources (HR) Plan. Any modifications should be submitted to the ACV first and then Council for approval.

Question 15: Additional formal training would improve the way the committee functions.

Please check all types and formats of training you would like to see.

Legal, soft skills (conflict resolution, time-management, project management, etc.), policy training as well as on-boarding/orientation were among the top training types identified by committee volunteers. The majority of volunteers indicated preference for either blended (any combination of self-study, instructor led, in-class, web-based) or strictly in-class/instructor led (workshops, seminars, etc.) training formats.

ACV RECOMMENDS THAT Committee Chairs and Advisors determine what training their committee members would benefit from and develop a training plan. ACV may be able to provide assistance to committees on request.

Question 16: Do you think that Council needs to better understand and support Committees' reports and recommendations?

54.10% of the respondents felt that Council should better understand and support Committees' reports and recommendations.

ACV RECOMMENDS THAT Council be encouraged to continue the practice of inviting Committee Chairs to Council plenary sessions to make presentations about their respective committee's mandate and on-going tasks. Also, ACV RECOMMENDS THAT Councillors be encouraged to attend the annual Committee Chairs Workshop to familiarize themselves with the current committee activities, challenges and successes.

Councillors could also attend committee meetings as guests. This recommendation will be passed on to the CEO & Registrar and PEO President.

Question 17: There should be opportunities for members of various committees to get together to learn from each other and exchange views.

73.56% of the respondents agreed with the above statement.

ACV is considering a proposal to increase the number of volunteer participants to be invited to the Committee Chairs Workshop. ACV is considering producing a webinar or on-line module that allows each committee chair 5 minutes to describe the role of their committee.

ACV RECOMMENDS THAT 1) Volunteer Management incorporate additional information about various committees into the Volunteer Orientation package. 2) Committee volunteers should attend other committee's meeting in order to better understand their work.

Question 20: How can teleconference participation at meetings be made more effective?

A number of comments were received with regards to improving the teleconference experience and now ZOOM during committee meetings, including 'using teleconferencing/ ZOOM tools properly', and 'adhere to protocol for conduct during teleconferences and ZOOM meetings re: identifications, interruptions, etc.'

ACV RECOMMENDS THAT Committee Chairs use ZOOM as their meeting format now and in the future a combination of in-person & ZOOM. Teleconferencing should be eliminated as it is outdated. The Teleconference Guidelines should be updated to reflect the use of ZOOM. The Volunteer Orientation package include an overview of the ZOOM guidelines to ensure committee meetings are more effective and inclusive. Volunteers should be provided with ZOOM training. Volunteers should have the technology required for audio and video participation.

Question 34: Do you feel that your committee is representative of PEO's membership diversity?

73.95% of the respondents felt that their respective committee is representative of PEO's membership diversity. However, many individual committee members identified a number of instances where committee membership may not be as diverse.

ACV RECOMMENDS THAT the survey results and, in particular, comments to this question, be shared with PEO's Equity and Diversity Committee (EDC) with the request that EDC undertake the development of recommendations regarding committee diversity and present its proposal to ACV. It further recommends that each committee review the comments and that they address the concerns raised in their 2020 VSS Action Plan.

Question 35: Discuss additional concerns you may have with committee work or panels.

There were many issues raised by the respondents.

ACV recommends that each committee review their specific committee volunteer comments and that they address the concerns raised in their 2020 VSS Action Plan.

Question 38, 39 and 40: COVID – 19 related questions.

ACV reviewed the responses to all three questions. It is concerned that some committees have not met since March 17, 2020. ACV believes there is no reason why each committee could not find a way to use ZOOM to accommodate their meeting requirements, as well as complaints, discipline and experience interviews. The technology is there, we must embrace it. If your committee has not met since March 17th perhaps you should review the need for it and consider sunsetting it.

ACV recommends that each committee review the responses and develop plans to address them as part of their 2020 VSS Action Plan. We also recommend the development of a ZOOM meeting guideline and a training module. Research should be done to determine if one exists. ACV will coordinate this item.

Questions 41 and 42: Identify issues that should be addressed in this survey in future. (41)
Suggest improvement to the survey itself. (42)

A number of suggestions for improvement of future surveys were made by individual volunteers including suggestions regarding survey questions and structure.

ACV will review all suggestions and consider them when preparing future surveys.

Briefing Note – Discussion

C-536-2.12

ENGINEERS CANADA DIRECTORS REPORT

Purpose: Report and discussion with Engineers Canada Directors.

Prepared by: Dale Power, Secretariat Administrator

Appendix A – Engineers Canada directors update – September 2020 – English and French versions



Engineers Canada directors update September 2020

Black Lives Matter

In the past, we have often highlighted key issues that are impacting our society. In this issue, we are highlighting Black Lives Matter (BLM). In response to the BLM protests which began across North America early this summer, Engineers Canada temporarily delayed launch of its 2020 Awards announcements, joining many other organizations as part of the social media “blackout” to avoid competing with BLM messaging. Engineers Canada employees also subsequently formed a reading group to become more educated on issues of anti-racism and social justice. South of the border, David P. Martini, National Society of Professional Engineers President, released a [statement](#) in response to anti-Black racism and recent violence in the United States.

Engineers Canada Board

From May 21 to May 23, 2020 Engineers Canada hosted its May meetings virtually, which included the Presidents’ Group meeting and [regulator presentations](#), the Board meeting, the annual meeting of Members (AMM), and the induction ceremony. There the Board made several key decisions, including to approve (a) the sub-strategy for operational imperative 6, on actively monitoring, researching, and advising on changes and advances that impact the Canadian regulatory environment and the engineering profession; (b) the change in accreditation criterion 3.4.6, reducing the number of accreditation units (AUs) from 1,950 to 1,850; and (c) twenty-two (22) Board policy updates. The Board also considered the issue of Board size, where they decided to send the Governance Committee’s Report on Board Size to the members for their consideration. Finally, the new President-elect, Danny Chui, was elected. The spring meetings summary is available on the Engineers Canada [website](#).

On June 15, 2020 the Engineers Canada Board of Directors met via webinar to confirm the appointment of members to committees as well as to discuss options to move forward with its strategic planning efforts. Later in the month, Engineers Canada made the decision to host many of its remaining 2020 meetings virtually, including those of most Board committees and the officials groups.

2022-24 Strategic planning

On August 13 and 14, 2020, the Engineers Canada Board held a hybrid virtual/in-person strategic workshop in Banff, Alberta. Its purpose was to confirm the vision statement and select strategic priorities for the draft strategic plan, which had been developed based on input received at the February foresight workshop. A presentation on the plan, along with the strategic planning workshop report, will be distributed with the materials for the October Board meeting, which will be preceded by an information session for the Board, Presidents, CEOs, and CEAB and CEQB representatives. The October information session is intended to familiarize stakeholders with the draft strategic plan before consultations with the regulators begin, later in the Fall.

Accreditation Board

In May, Engineers Canada completed its work with Higher Education & Beyond (HEB), who were contracted to develop the Accountability in Accreditation Evaluation Strategy, and, subsequent to approvals by the CEAB, launched the strategy. We also completed collection of data for the 2020 Enrolment and Degrees Awarded Survey (EDAS), an annual survey that assesses trends in enrolment and degrees awarded over a five-year period. On June 6 and 7, the CEAB met and made accreditation decisions for programs that received visits in the 2019/2020 cycle. In July, the CEAB kicked off consultation on its 2021 work plan and launched four task forces to address, respectively, student learning in the age of COVID, virtual visits, 30 by 30, and the Policy and Procedures Committee’s terms of reference. These groups and other CEAB committees held meetings several times over the summer. In August, the Accreditation Board’s Policies and Procedures Committee met to approve the 2021/2022 visit cycle documentation, to approve the consultation plan on the interpretive statement on licensure (to make adjustments regarding the distribution of AUs within a single course), to consider new tools to support consistent accreditation decisions, and to receive updates on the work of the CEAB’s working groups.

In June, Washington Accord signatories held an online workshop focused on online teaching-learning, assessment of learning and virtual accreditation due to the COVID-19 disruption. Engineers Canada representatives also attended the International Engineering Alliance's virtual meetings in July.

Qualifications Board

Task forces of the CEQB were active over the summer. In May, the Qualifications Board's Task Force on Software Engineering received a presentation from OIQ on Quebec's engineering act and particularly the area of software engineering. In June the Task Force on Diversity and Inclusion kicked off, and the Syllabus Committee also met for a presentation on "Accreditation-aligned Quantitative Assessment (AQA)", a proposed new approach for assessing non-CEAB academic qualifications. Finally, the Qualifications Board met, via webinar, on July 31, 2020, to approve the 2021 work plan priorities. These will be sent to the Engineers Canada Board for review in October and final approval in December.

Government relations

Due to the uncertainty regarding hosting events with parliamentarians and public servants in the midst of COVID-19, we have decided to cancel our Hill Day for 2020, with plans to revisit hosting a Hill Day in 2021. We submitted regulator-reviewed comments to several federal government initiatives over the summer, including [comments](#) to the House of Commons Standing Committee on Industry, Science and Technology (INDU) regarding their study on the Canadian response to the COVID-19 pandemic; an [issue statement](#) regarding the role of engineers in Canada's long-term economic recovery post-COVID-19; and [recommendations](#) to the House of Commons Standing Committee on Finance regarding the pre-budget consultations in advance of the 2021 federal budget.

Affinity programs

Over the summer, Engineers Canada representatives led several supplier meetings, covering key topics such as 2019 reporting, competitive summaries, marketing, program enhancements, and program performance reviews. In May, we held two supplier reporting meetings virtually: one with affinity partner Manulife and our independent advisor AON, and the other with Canada Life and our independent advisor AON. In June we met with TD Insurance (TDI), for a supplier reporting meeting that included our independent advisor RSM, and participated in TDI's Affinity Partner Advisory Meeting

where TDI shared business insights with clients as well as sought clients' perspectives with a theme of "Coping with COVID-19: Affinity Partnership Impacts". Also of note, as of July 1, 2020, we have a new provider for Directors and Officers (D&O) and Errors and Omissions (E&O) insurance coverage for Engineers Canada and our participating regulators; our new provider will provide increased coverage at a decreased cost. Finally, our sponsored program with UPS will now provide participants with an increased discount of 50% off published rates for their shipping needs.

Diversity

Over the summer, our SP3 work (Recruitment, retention and professional development of women in engineering), progressed through meetings of our 30 by 30 K-12 and post-secondary Champions working groups. In addition to these meetings, we concluded an RFP process for the 30 by 30 brand engagement and communications strategy and announced [Halmyre](#) as the successful bidder. A [second RFP](#), for a "Gender-based analysis of national engineering licensure assistance and engineering employer awareness programs" was released with a deadline of August 31.

In addition to SP3 work, we also made progress on OP9 (Promote diversity and inclusion in the profession that reflects Canadian society), meeting with Chartered Professional Accountants of British Columbia to discuss our sub-strategy on Indigenous access to engineering, and attending a Decolonizing and Indigenizing Engineering Education Network information sharing meeting with multiple other organizations. This summer Engineers Canada also finalized a [land acknowledgement guide](#) for staff and volunteers and all staff completed the 4 Seasons of Reconciliation Indigenous awareness training.

Outreach

In late May, we distributed the National Engineering Month (NEM) 2020 Report to the NEM organizing committee. The report highlights lessons learned and growth opportunities, and identifies relevant outreach and engagement trends and recommendations for the organization and implementation of NEM 2021. Subsequently, in June, we met with six regulator representatives regarding next steps to implement the report recommendations. Additionally, we met virtually over the summer with the Chartered Professional Accountants of Canada (CPA Canada), to discuss their recent work.

Awards

On June 11, 2020 we launched a promotion for our [2020 Engineers Canada Awards](#) recipients. This year's campaign featured posts on our social media channels as well as those of our recipients, in addition to social media advertising, advertising on CBC's digital platforms, and earned media outreach. As a part of this, we released short video segments from each recipient, recorded through video calls. 2020 recipients are to be honoured face-to-face at our 2021 Awards Gala.

Office reopening

On August 21, 2020, Engineers Canada held an information session for staff about the re-opening of our office on September 8, 2020. Staff will be given the choice of returning to the office at that time, or of continuing to work from home. Our Emergency Response Team has done significant work to ensure that our offices remain safe and welcoming for all staff who feel comfortable returning at this time.



Compte rendu à l'intention des administrateurs et administratrices d'Ingénieurs Canada Septembre 2020

Black Lives Matter

Nous soulignons souvent des enjeux importants ayant des répercussions dans notre société. En réaction aux manifestations du mouvement *Black Lives matter* (BLM) qui ont commencé en Amérique du Nord au début de l'été, Ingénieurs Canada a temporairement retardé le lancement de ses annonces des prix 2020 pour se joindre à de nombreux autres organismes dans le cadre des médias sociaux en noir, initiative visant à laisser la place aux messages de BLM sur les réseaux sociaux. Les employés d'Ingénieurs Canada ont formé par la suite un groupe de lecture afin de s'informer sur des enjeux comme l'antiracisme et la justice sociale. Au sud de la frontière, David P. Martini, président de la National Society of Professional Engineers, a publié une [déclaration](#) en réaction au racisme envers les Noirs et aux violences récentes qui ont éclaté aux États-Unis.

Conseil d'Ingénieurs Canada

Ingénieurs Canada a tenu des réunions virtuelles du 21 au 23 mai dernier, dont la réunion du Groupe des présidents et les [présentations des organismes de réglementation](#), la réunion du conseil, l'assemblée annuelle des membres (AAM) et la cérémonie d'intronisation. Le conseil y a pris plusieurs décisions importantes, notamment l'approbation de : a) la sous-stratégie de l'Impératif opérationnel 6 (S'employer activement à faire un suivi, à mener des recherches et à fournir des conseils en ce qui concerne les changements et les progrès qui ont une incidence sur l'environnement réglementaire et la profession d'ingénieur au Canada); b) la modification de la norme d'agrément 3.4.6, réduisant le nombre d'unités d'agrément (UA) de 1950 à 1850; et c) 22 mises à jour des politiques du conseil. Le conseil s'est également penché sur la question de sa taille; il a décidé de soumettre à l'examen des membres le rapport que le Comité sur la gouvernance a rédigé sur cette question. Enfin, Danny Chui a été élu au poste de président élu. Le compte rendu sommaire des réunions du printemps est disponible dans le [site Web](#) d'Ingénieurs Canada.

Le conseil d'Ingénieurs Canada s'est réuni par webinaire pour valider les nominations de membres de comités, ainsi que pour discuter des options permettant de faire progresser ses efforts de planification stratégique. Plus tard au cours du mois, Ingénieurs Canada a pris la décision de tenir virtuellement un bon nombre de ses réunions restantes en 2020, dont celles de la plupart des comités du conseil et des groupes de responsables.

Planification stratégique 2022-2024

Les 13 et 14 août, le conseil d'Ingénieurs Canada a tenu un atelier stratégique hybride (c'est-à-dire virtuel et en personne) à Banff, en Alberta. L'atelier visait à valider l'énoncé de vision et à sélectionner les priorités du prochain plan stratégique, qui avaient été élaborées sur la base des commentaires reçus lors de l'atelier de prospective de février dernier. Une présentation sur le plan ainsi que le rapport de l'atelier de planification stratégique seront distribués en même temps que le cahier de travail de la réunion d'octobre du conseil, réunion qui sera précédée d'une séance d'information à l'intention du conseil, des présidents, des chefs de direction, et des représentants du Bureau d'agrément et du Bureau des conditions d'admission. Cette séance d'information permettra aux parties prenantes de se familiariser avec l'ébauche de plan stratégique avant le début des consultations auprès des organismes de réglementation, plus tard cet automne.

Bureau d'agrément

En mai, Ingénieurs Canada a terminé son travail de collaboration avec la firme Higher Education and Beyond (HEB), dont les services avaient été retenus pour élaborer la stratégie d'évaluation de la responsabilité en matière d'agrément. Cette stratégie a été lancée après avoir été approuvée par le Bureau d'agrément (BCAPG). Nous avons également terminé la collecte de données pour l'Enquête 2020 sur les inscriptions et les diplômes décernés, une enquête annuelle qui a pour but d'évaluer les tendances en ce qui a trait aux inscriptions et aux diplômes décernés au cours d'une période de cinq ans. Les 6 et 7 juin, le BCAPG s'est réuni et a pris des décisions d'agrément pour les programmes ayant fait

l'objet de visites au cours du cycle 2019-2020. En juillet, le BCAPG a lancé des consultations sur son plan de travail 2021 et a formé quatre groupes de travail afin d'aborder respectivement l'apprentissage des étudiants à l'ère de la COVID-19, les visites virtuelles, l'initiative 30 en 30 en plus du mandat du Comité des politiques et des procédures. Ces groupes et d'autres comités du BCAPG se sont réunis plusieurs fois au cours de l'été. En août, le Comité des politiques et des procédures s'est réuni pour approuver la documentation du cycle de visites 2021-2022, approuver également le plan de consultation sur l'Énoncé d'interprétation sur les attentes et les exigences en matière de permis d'exercice (visant à faire des ajustements concernant la répartition des UA dans un même cours), examiner de nouveaux outils pour favoriser la cohérence des décisions d'agrément, et prendre connaissance des comptes rendus sur les travaux des groupes de travail du Bureau d'agrément.

En juin, les signataires de l'Accord de Washington ont tenu un atelier virtuel portant sur l'enseignement et l'apprentissage en ligne, l'évaluation de la formation et l'agrément virtuel attribuable aux perturbations liées à la crise de la COVID-19. Des représentants d'Ingénieurs Canada ont également assisté aux réunions virtuelles de l'International Engineering Alliance en juillet.

Bureau des conditions d'admission

Les groupes de travail du Bureau des conditions d'admission (BCCAG) ont été actifs au cours de l'été. En mai, le groupe de travail sur le génie logiciel a assisté à une présentation de l'OIQ sur la *Loi sur les ingénieurs* au Québec, plus particulièrement en ce qui concerne le secteur du génie logiciel. En juin, le Groupe de travail sur la diversité et l'inclusion a tenu sa première réunion et le Comité des programmes d'examens s'est également réuni pour une présentation sur l'évaluation quantitative harmonisée avec l'agrément, une nouvelle approche proposée pour l'évaluation de la formation universitaire non agréée par le BCAPG. Enfin, le BCCAG s'est réuni dans le cadre d'un webinaire le 31 juillet afin d'approuver les priorités du plan de travail 2021. Ces priorités seront soumises au conseil d'Ingénieurs Canada pour examen en octobre et approbation finale en décembre.

Relations gouvernementales

En raison de l'incertitude entourant la tenue d'événements avec des parlementaires et des fonctionnaires en cette période de pandémie, nous avons décidé d'annuler notre Journée sur la Colline parlementaire de 2020, mais nous envisageons d'en organiser une en 2021. Au cours de l'été, nous avons

présenté des commentaires, préalablement soumis à l'examen des organismes de réglementation, en réponse à plusieurs initiatives gouvernementales, notamment : des [commentaires](#) au Comité permanent de l'industrie, des sciences et de la technologie (INDU) de la Chambre des communes concernant son étude sur la réaction canadienne à la pandémie de COVID-19; un [énoncé d'enjeux](#) concernant le rôle des ingénieurs dans la reprise économique à long terme du Canada après la COVID-19; et des [recommandations](#) au Comité permanent des finances de la Chambre des communes concernant les consultations prébudgétaires en vue du budget fédéral 2021.

Programmes d'affinité

Au cours de l'été, des représentants d'Ingénieurs Canada ont organisé avec des fournisseurs plusieurs réunions portant sur des sujets importants, comme les rapports, les résumés sur la concurrence, le marketing, les améliorations de programmes et les évaluations du rendement des programmes de 2019. En mai, nous avons tenu deux réunions virtuelles de présentation de rapports des fournisseurs : une avec notre partenaire affinitaire Manuvie et notre conseiller indépendant AON, et l'autre avec la Canada Vie et notre conseiller indépendant AON. En juin, nous avons rencontré TD Assurance pour une réunion de présentation de rapports avec notre conseiller indépendant RSM et avons participé à la réunion consultative des partenaires affinitaires de TD Assurance, au cours de laquelle TD a fait part de ses perspectives d'affaires avec les clients et a sollicité leurs points de vue sur le thème « Faire face à la COVID-19 : répercussions sur les partenariats affinitaires ». À noter également que, depuis le 1^{er} juillet, nous avons un nouveau fournisseur pour l'assurance responsabilité des administrateurs et dirigeants et contre les erreurs et omissions, qui couvre Ingénieurs Canada et ses organismes de réglementation participants; notre nouveau fournisseur offrira une couverture accrue à un coût moindre. Enfin, notre programme avec UPS offrira désormais aux participants une remise améliorée de 50 % sur les tarifs réguliers pour leurs besoins d'expédition.

Diversité

Au cours de l'été, nos travaux sur la PS3 (Recrutement, maintien et développement professionnel des femmes dans la profession d'ingénieur) ont progressé grâce à des réunions de nos groupes de travail de champions 30 en 30 sur les jeunes des écoles primaires et secondaires et les étudiants au postsecondaire. En plus de ces réunions, nous avons terminé le processus de demande

de propositions pour la stratégie d'engagement et de communication pour la marque 30 en 30 et avons annoncé que le soumissionnaire retenu était [Halmyre](#). Une [deuxième demande de propositions](#) pour « la réalisation d'une analyse comparative, axée sur le genre, des programmes nationaux d'aide à l'obtention du permis d'exercice et de sensibilisation des employeurs » a été publiée; la date limite de réponse à cette demande de propositions a été établie au 31 août.

En plus des travaux sur la PS3, nous avons également fait progresser l'IO9 (Promouvoir au sein de la profession une diversité et une inclusion qui reflètent celles de la société canadienne), en rencontrant des comptables professionnels agréés de la Colombie-Britannique afin de discuter de notre sous-stratégie sur l'accès des Autochtones au génie et en participant à la réunion d'information du Réseau pour la décolonisation et l'autochtonisation de la formation en génie avec plusieurs autres organismes. Cet été, Ingénieurs Canada a également parachevé un [guide sur la reconnaissance des Premières Nations et des territoires ancestraux](#) pour le personnel et les bénévoles, et tous les employés ont suivi la formation de sensibilisation aux questions autochtones *4 Seasons of Reconciliation*.

Diffusion

Fin mai, nous avons distribué le rapport du Mois national du génie (MNG) 2020 au comité organisateur du MNG. Le rapport met en évidence les leçons retenues et les possibilités de croissance, cible les tendances pertinentes en matière de sensibilisation et de mobilisation, et formule des recommandations pour l'organisme et la mise en œuvre du MNG 2021. Par la suite, en juin, nous avons rencontré six représentants des organismes de réglementation au sujet des

prochaines étapes de mise en œuvre des recommandations du rapport. De plus, au cours de l'été, nous avons rencontré virtuellement des représentants de CPA Canada (Comptables professionnels agréés Canada) pour discuter des récents travaux de leur organisme.

Prix

Le 11 juin, nous avons lancé la campagne de promotion des lauréates et lauréats des [Prix 2020 d'Ingénieurs Canada](#). La campagne de cette année comprenait des publications sur nos réseaux sociaux et sur ceux de nos lauréats, de la publicité sur les réseaux sociaux et les plateformes numériques de la CBC, ainsi que de la médiatisation méritée. À cet effet, nous avons publié de courts segments vidéo de chaque lauréat, enregistrés lors d'appels vidéo. Les lauréats 2020 seront célébrés en personne dans le cadre de notre gala de remise des prix 2021.

Réouverture des bureaux

Le 21 août, Ingénieurs Canada a tenu une séance d'information à l'intention du personnel au sujet de la réouverture de ses bureaux, prévue le 8 septembre. Les employés auront alors le choix de revenir au bureau ou de continuer de faire du télétravail. Notre équipe d'intervention d'urgence s'est activée pour s'assurer que nos bureaux demeurent sécuritaires et accueillants pour tous les employés qui souhaiteront revenir à ce moment-là.

Briefing Note – Decision

C-536-3.0

CONSENT AGENDA

Purpose: To approve the items contained in the consent agenda

Motion(s) to consider: (requires a simple majority of votes cast to carry)

That the consent agenda be approved.

Prepared by: Dale Power, Secretariat Administrator

Routine agenda items that may be approved without debate are included in a consent agenda and may be moved in a single motion. However, the minutes of the meeting will reflect each item as if it was dealt with separately. Including routine items on a consent agenda expedites the meeting.

Items included on the consent agenda may be removed and dealt with separately if they contain issues or matters that require review.

Please review the minutes ahead of time for errors or omissions and advise Dale Power (416-224-1100, extension 1130 or dpower@peo.on.ca) if there are any required revisions prior to the meeting so that the minutes, when presented, may be considered within the consent agenda.

The following items are contained in the consent agenda:

- 3.1 Minutes – 534 Council meeting – May 2020
- 3.2 Minutes – 535th Council meeting – June 2020
- 3.3 Approval of CEDC Applications
- 3.4 Changes to the 2020 Committees and Task Forces Membership Roster
- 3.5 Revised 30 by 30 Task Force End of Term

Briefing Note - Decision

C-536-3.1

OPEN SESSION MINUTES – 534th Council Meeting – May 30, 2020 and 534th Council Meeting – June 19, 2020

Purpose: To record that the minutes of the open sessions of the 534th and 535th meetings of Council accurately reflect the business transacted at those meetings.

Motion to consider: (requires a simple majority of votes cast to carry)

That the minutes of the 534th meeting of Council, held May 30, 2020, and 534th meeting of Council, held June 19, 2020, as presented to the meeting at C-536-3.1, Appendices A and B, accurately reflect the business transacted at that meeting.

Prepared by: Dale Power, Secretariat Administrator

1. Need for PEO Action

In accordance with best business practices, Council should record that minutes of an open session of a meeting of Council accurately reflect the business transacted at a meeting.

2. Current Policy

Section 25(1) of By-Law No. 1 states that meetings of PEO are to be governed by *Wainberg's Society Meetings*. Rule 27.5 of *Wainberg's* states that "There is no legal requirement to have minutes verified, but it is considered good practice. The motion does not by itself ratify or adopt the business transacted; it merely verifies the minutes as being correct [a correct record of the discussions held and decisions made at the meeting]."

3. Appendices

- Appendix A - Minutes – 534th Council open session meeting – May 30, 2020
- Appendix B - Minutes – 535th Council open session meeting – June 19, 2020

Minutes

C-536-3.1
Appendix A

The 534TH MEETING of the COUNCIL of PROFESSIONAL ENGINEERS ONTARIO (PEO) was held via videoconference on Saturday, May 30, 2020, at 2:00 p.m.

Present:

- N. Hill, P.Eng., Past President
- M. Sterling, P.Eng., President and Council Chair
- A. Arenja, P.Eng., Lieutenant Governor-in-Council Appointee
- S. Ausma, P.Eng., Councillor-at-Large
- C. Bellini, P.Eng., President-Elect
- P. Broad, P.Eng., Western Region Councillor
- R. Brunet, P.Eng., Lieutenant Governor-in-Council Appointee
- D. Campbell, P.Eng., Vice President
- M. Chan, P.Eng., Councillor-at-Large
- C. Chiddle, P.Eng., Eastern Region Councillor
- P. Cushman, P.Eng., East Central Region Councillor
- L. Cutler, P.Eng., Lieutenant Governor-in-Council Appointee
- Q. C. Jackson Kouakou, Barrister and Solicitor, Lieutenant Governor-in-Council Appointee
- W. Kershaw, P.Eng., Western Region Councillor
- L. MacCumber, P.Eng., West Central Region Councillor
- L. Notash, P.Eng., Councillor-at-Large
- I. Olukiyesi, P.Eng., Lieutenant Governor-in-Council Appointee
- L. Roberge, P.Eng., North Region Councillor
- A. Sinclair, P.Eng., East Central Region Councillor
- R. Subramanian, P.Eng., Northern Region Councillor
- S. Sung, Lieutenant Governor-in-Council Appointee
- W. Turnbull, P.Eng., West Central Region Councillor
- R. Walker, P.Eng., Eastern Region Councillor

Regrets: T. Bruyere, P.Eng., Lieutenant Governor-in-Council Appointee

Staff:

- D. Abrahams, General Counsel
- E. Chor, Research Analyst, Secretariat
- B. Ennis, P.Eng., Director, Policy and Professional Affairs
- M. Farag, P.Eng., Manager, Admissions
- L. Latham, P.Eng., Deputy Registrar, Regulatory Compliance
- R. Martin, Manager, Secretariat
- C. Mehta, Director, Finance
- B. St. Jean, Senior Executive Assistant
- M. Wehrle, Director, Information Technology
- J. Zuccon, P.Eng., CEO and Registrar

Guests:

- D.A. Brown, Governance Solutions Inc.
- D.L. Brown, Governance Solutions Inc.
- D. Chui, P.Eng., PEO Director, Engineers Canada

A. Kapur, Parliamentary Services
K. Reid, Engineers Canada Director
C. Sadr, P.Eng., PEO Director, Engineers Canada

Council convened at 2:00 p.m. on Saturday, May 30, 2020.

CALL TO ORDER

Notice having been given and a quorum being present, Past President Hill called the meeting to order at 2:04 p.m.

Past President Hill noted that, per Section 26 of the PEO bylaws, Council or any properly constituted committee of Council may hold meetings with the prior consent of the majority of Council members by telephone, conference, electronic, or other communication facilities, provided all persons participating in the meeting can communicate adequately with each other.

A virtual vote was held and a majority of Council consented to proceed to hold the meeting electronically.

**12259
APPROVAL OF AGENDA**

Moved by President Sterling, seconded by Councillor Sinclair:

That:

- a) The agenda, as presented to the meeting at C-534-1, Appendix A, be approved as presented; and**
- b) The Chair be authorized to suspend the regular order of business.**

CARRIED

**12260
SPECIAL RULES OF ORDER**

Section 25(1) of Bylaw No. 1 requires that all meetings of the association are to be governed by *Wainberg's Rules of Order*. These rules may be amended by passing *Special Rules of Order*, which supersede *Wainberg's* and remain in effect only until the close of business at the next annual general meeting.

Adopting *Special Rules* provides guidance on how to deal with certain situations that arise during meetings where PEO convention varies from the rules contained in its parliamentary authority, *Wainberg's*, or on which *Wainberg's* is silent.

Adopting *Special Rules* also provides consistency on how such matters may be handled at all meetings of the association.

Section 25(3) of Bylaw No. 1 requires that, at the first meeting of Council following the annual general meeting, all *Special Rules*, which were in force immediately before the close of business at the annual general meeting, are to be presented to Council for adoption and/or amendment, if it so wishes. Consequently, Council may

approve the *Special Rules* for the next Council year at this time.

General Counsel Abrahams presented proposed amendments to the *Special Rules*. The Council agreed to retain the existing rules with the following amendments:

Moved by President Sterling, seconded by Councillor Notash:

That the *Special Rules of Order*, as presented to the meeting at C-534-2, Appendix A, be amended to reduce election speeches from three minutes to two minutes.

CARRIED

Motion by Councillor Notash, seconded by Councillor MacCumber:

That the *Special Rules of Order* voting procedures, as presented to the meeting at C-534-2, Appendix A, be amended to align with the rules of engagement for virtual meetings.

CARRIED

Moved by Councillor Olukiyesi, seconded by Councillor Subramanian:

That the *Special Rules of Order*, presented to the meeting at C-534-2, Appendix A, be approved as amended effective immediately and remain in effect until the close of business at the 2021 annual general meeting.

CARRIED

[Secretariat Note: The above motion required a two-thirds majority of votes cast to carry].

It was noted that Council may amend the *Special Rules* at any time.

**12261
APPOINTMENT OF COUNCIL MEETING
CHAIR**

Past President Hill advised that President Sterling had indicated her willingness to serve as Council Meeting Chair and asked for further nominations. None being received, she declared nominations closed.

Moved by Councillor Kershaw, seconded by Councillor Sinclair:

That Council approve the acclaimed appointment of President M. Sterling, P.Eng., as Council Meeting Chair for the 2020-2021 Council year or until her successor is appointed.

CARRIED

Past President Hill turned the gavel over to President Sterling as the newly elected Council Meeting Chair. President Sterling introduced

Parliamentarian Kapur.

**12262
APPOINTMENT OF REGIONAL
COUNCILLORS COMMITTEE CHAIR**

President Sterling stated that Council was being asked to approve the chair of the regional councillors committee (RCC) for the ensuing Council year in accordance with the committees and task forces policy.

Moved by Councillor MacCumber, seconded by Councillor Roberge:

That Councillor R. Subramanian, P.Eng., be appointed as Chair of the regional councillors committee effective immediately, to hold office until the close of business at the 2021 annual general meeting.

CARRIED

**12263
APPOINTMENT OF VICE PRESIDENT**

President Sterling stated that Section 3(1)2 of Regulation 941 under the *Professional Engineers Act* requires that Council appoint a vice president from among its Councillors who are members of the Association, at a meeting to be held after the close of business and on the day of the annual general meeting of members or within thirty days thereafter. Nonmember lieutenant governor-in-council appointees were ineligible to serve as vice president under this regulation.

President Sterling announced the names of Councillors who had indicated their willingness to serve as vice president (appointed). President Sterling asked for further nominations, at which time Councillor Notash submitted her name. When the final list of nominations had been determined, the Chair declared the nominations closed. The remaining candidates then addressed the meeting.

An electronic vote was then conducted to select the vice president.

Moved by Councillor Ausma, seconded by President-Elect Bellini:

That Councillor A. Sinclair, P.Eng., be appointed as Vice President for the 2020-2021 Council year.

CARRIED

**12264
APPOINTMENT OF COUNCILLORS TO
EXECUTIVE COMMITTEE**

Section 28(1)(e) of Regulation 941 under the *Professional Engineers Act* requires that Council appoint one or more other members of Council, in addition to the president, president-elect, immediate past president, and the two vice presidents, to serve on the executive committee.

Section 28(1.1) of Regulation 941 requires that at least one member appointed by the Lieutenant Governor be appointed to the

executive committee. Appointments are to be made in accordance with the process approved by Council at its September 2016 meeting for Board Committee appointments and in accordance with the *Special Rules*.

Moved by Councillor Ausma, seconded by Councillor Roberge:

That Council appoint two additional Council members to the executive committee for the 2020-2021 Council year, at least one (1) of whom will be a Lieutenant-Governor appointee (LGA).

An amendment to the motion was proposed.

Moved by Councillor Notash, seconded by Councillor Subramanian:

First Amendment: That Council appoint three additional Council members to the executive committee for the 2020-2021 Council year, at least one (1) of whom will be a Lieutenant-Governor appointee (LGA).

Following further discussion, an amendment to the amended motion was proposed.

Moved by Councillor Cushman, seconded by Councillor Turnbull:

Second Amendment: That Council appoint five additional Council members to the executive committee for the 2020-2021 Council year, at least one (1) of whom will be a Lieutenant-Governor appointee [LGA].

DEFEATED

President Sterling announced a vote on the original amendment.

Moved by Councillor Notash, seconded by Councillor Subramanian:

Amendment: That Council appoint three additional Council members to the executive committee for the 2020-2021 Council year, at least one (1) of whom will be a Lieutenant-Governor appointee (LGA).

CARRIED

A vote was then conducted on the original motion, as amended.

Moved by Councillor Ausma, seconded by Councillor Roberge:

That Council appoint three additional Council members to the executive committee for the 2020-2021 Council year, at least one (1) of whom will be a Lieutenant-Governor appointee (LGA).

CARRIED

President Sterling announced the names of the Councillors who had indicated their willingness to serve on the executive committee and asked for further nominations. Councillor Sung removed his name of the list of nominees, and Councillor Sinclair was removed as Elected Vice President. Councillor Notash and Councillor Broad declared their nominations. When the final list of nominations had been determined, President Sterling declared the nominations closed. The remaining candidates then addressed the meeting.

In keeping with the procedures for appointing Councillors to Board positions, President Sterling advised that voting would be conducted electronically, in accordance with Special Rule 4, and that the LGA Councillor with the highest number of votes would be selected.

An electronic vote was then conducted to select three Councillors to serve on the executive committee.

Councillor A. Arenja, P.Eng., LGA; Councillor L. Cutler, P.Eng., LGA; and Councillor M. Chan, P.Eng., were appointed as members of the executive committee for the 2020-2021 Council year.

12265

APPOINTMENT TO HUMAN RESOURCES COMMITTEE

President Sterling announced the names of Councillors who had indicated their willingness to serve on the human resources committee and asked for further nominations. Councillor Chiddle, Councillor Sung, and Councillor Arenja removed their names from the list of nominees. When the final list of nominations had been determined, President Sterling declared the nominations closed. The remaining candidates then addressed the meeting.

In keeping with the procedures for appointing Councillors to the human resources committee, President Sterling advised that voting would be conducted electronically in accordance with Special Rule 4.

An electronic vote was then conducted to select the two members of the human resources committee for the 2020-2021 Council year.

Councillor W. Turnbull, P.Eng., and Councillor L. Roberge, P.Eng., were appointed as members of the human resources committee for the 2020-2021 Council year.

12266

APPOINTMENT TO BOARD COMMITTEES

Annually, Council appoints the requisite number of Councillors to board committees and representatives to the OSPE-PEO joint relations committee.

Appointments are to be made in accordance with the process approved by Council at its September 2016 meeting for Board

Committee appointments and the *Special Rules*. The human resources committee met and made its recommendations, which were provided to Council. In determining its recommendations, the human resources committee reviewed the submitted board committee preferences of Councillors, their respective backgrounds, the need to balance committee continuity with succession planning, Councillor workloads, Councillor involvement with other committees and external appointments, as well as committee terms of reference.

Moved by Past President Hill, seconded by Councillor Subramanian:

That the finance committee, composed of Councillor A. Arenja, P.Eng.; Councillor C. Chiddle, P.Eng.; Councillor L. Cutler, P.Eng.; and Councillor A. Sinclair, P.Eng.; be appointed for the 2020-2021 Council year, as recommended by the human resources committee.

That the audit committee, composed of Councillor R. Brunet, P.Eng.; Councillor M. Chan, P.Eng.; Councillor L. Roberge, P.Eng.; and Councillor S. Sung; be appointed for the 2020-2021 Council year, as recommended by the human resources committee.

That the legislation committee, composed of Councillor S. Ausma, P.Eng.; Councillor C. Chiddle, P.Eng.; Councillor W. Kershaw, P.Eng.; Councillor L. MacCumber, P.Eng.; and Councillor S. Sung; be appointed for the 2020-2021 Council year, as recommended by the human resources committee.

That the OSPE-PEO joint relations committee, composed of Vice President D. Campbell, P.Eng., and Councillor L. Roberge, P.Eng., be appointed for the 2020-2021 Council year, as recommended by the human resources committee.

CARRIED

**12267
COUNCILLOR ITEMS**

No Councillor informational items were brought forward.

There being no further business, the meeting concluded.

These minutes consist of seven pages and minutes 12208 to 12216 inclusive.

M. Sterling, P.Eng., Chair

R. Martin, Manager, Secretariat

Minutes

C-536-3.1
Appendix B

The 535TH MEETING of the COUNCIL of PROFESSIONAL ENGINEERS ONTARIO (PEO) was held via teleconference on Friday, June 19, 2020, at 9:00 a.m.

- Present:**
- M. Sterling, P.Eng., President and Council Chair
 - A. Arenja, P.Eng., Lieutenant Governor-in-Council Appointee
 - S. Ausma, P.Eng., Councillor-at-Large
 - C. Bellini, P.Eng., President-Elect
 - P. Broad, P.Eng., Western Region Councillor
 - R. Brunet, P.Eng., Lieutenant Governor-in-Council Appointee
 - T. Bruyere, P.Eng., Lieutenant Governor-in-Council Appointee
 - D. Campbell, P.Eng., Vice President
 - M. Chan, P.Eng., Councillor-at-Large
 - C. Chiddle, P.Eng., Eastern Region Councillor
 - P. Cushman, P.Eng., East Central Region Councillor
 - L. Cutler, P.Eng., Lieutenant Governor-in-Council Appointee
 - A. Dryland, CET, Lieutenant Governor-in-Council Appointee
 - N. Hill, P.Eng., Past President
 - W. Kershaw, P.Eng., Western Region Councillor
 - L. MacCumber, P.Eng., West Central Region Councillor
 - L. Notash, P.Eng., Councillor-at-Large
 - I. Olukiyesi, P.Eng., Lieutenant Governor-in-Council Appointee
 - L. Roberge, P.Eng., North Region Councillor
 - A. Sinclair, P.Eng., East Central Region Councillor
 - R. Subramanian, P.Eng., Northern Region Councillor
 - S. Sung, Lieutenant Governor-in-Council Appointee
 - W. Turnbull, P.Eng., West Central Region Councillor
 - R. Walker, P.Eng., Eastern Region Councillor
- Regrets:**
- Q. C. Jackson Kouakou, Barrister and Solicitor, Lieutenant Governor-in-Council Appointee
- Staff:**
- J. Zuccon, P.Eng., CEO and Registrar
 - D. Abrahams, General Counsel
 - B. Ennis, P.Eng., Director, Policy and Professional Affairs
 - L. Holden, Director, Human Resources
 - R. Martin, Manager, Secretariat
 - M. Wehrle, Director, Information Technology
- Guests:**
- D.A. Brown, Governance Solutions Inc.
 - D.L. Brown, Governance Solutions Inc.
 - H. Brown, CEO, Brown & Cohen
 - D. Carlos, Former PEO Councillor
 - D. Chui, P.Eng., PEO Director, Engineers Canada
 - B. Matthews, CEO, Consulting Engineers of Ontario

L. Lukinuk, Parliamentarian
S. Perusa, Ontario Society for Professional Engineers
K. Reid, Engineers Canada Director
C. Sadr, P.Eng., PEO Director, Engineers Canada

Council convened at 9:00 a.m. on Friday, June 19, 2020.

CALL TO ORDER

Notice having been given and a quorum being present, M. Sterling called the meeting to order at 9:00 a.m.

M. Sterling conducted an attendance roll call. The new Councillors, the re-elected Councillors, the parliamentarian, the guest representatives from Engineers Canada, and the other distinguished guests were welcomed.

M. Sterling reviewed the virtual meeting procedures and the updated Council agenda format.

A virtual vote was held and a majority of Council consented to proceed to hold the meeting electronically.

**12217
APPROVAL OF AGENDA**

The agenda was presented. Item 3.4 was removed from the consent agenda as it required a two-thirds majority vote, and Items 5.6 and 5.10 were consolidated under Item 5.10.

Moved by R. Walker, seconded by R. Subramanian:

That:

- a) The agenda, as presented to the meeting at C-535-1.2, Appendix A, be approved as amended; and**
- b) The Chair be authorized to suspend the regular order of business.**

CARRIED

**12218
CONFLICTS OF INTEREST**

No conflicts of interest were declared. M. Sterling advised that PEO was in the process of creating conflict of interest documentation as part of the governance road map. L. Notash requested clarification regarding the voting rules for the Council Chair. M. Sterling advised that, under *Wainberg's Rules of Order*, the Chair is allowed a vote but should vote last to ensure there is no suggestion of bias. If the Chair desired to speak on a motion, the Chair would pass the gavel to another Councillor for that period.

**12219
PRESIDENT'S REPORT**

M. Sterling thanked the staff of PEO for their hard work during the COVID-19 period, including the management of a virtual AGM and

the virtual onboarding of new Councillors.

Moved by D. Campbell, seconded by A. Arenja:

That all PEO staff be thanked for their hard work in pivoting and being agile during the coronavirus pandemic to deliver an excellent AGM.

CARRIED

M. Sterling presented the theme for the year ahead for Council's consideration: reimagining PEO together. It was noted that the transformation of PEO had three facets: operational transformation, using the action plan resulting from the external regulatory performance review; the governance road map, using governance best practices; and the long-term vision encompassing the current environment of rapid technological change and transformation.

M. Sterling stated that these three priorities needed to be addressed in parallel to move forward in a timely manner. Visioning work had begun through a virtual volunteer leadership conference held during the week of June 8, 2020. There were over 100 participants from all areas of the organization. The discussion was facilitated by external partners Engineering Change Lab, MaRS Discovery District, and Engineers Canada, among others. There was a high rate of participation by attendees and excitement around the virtual visioning exercise.

Key takeaways included: the importance of a deeper understanding of the scope of the practice of professional engineering; the role of standards and guidelines in the long-term vision; and how the increasing awareness of partners, such as government, the public, and industry, was important in helping the public understand what to expect from licence and certificate holders.

It was noted that the longer-term vision needs to address issues such as making regulation more effective, creating a vision that responds to rapid change, increasing public engagement, recognizing the importance of collaboration, emphasizing diversity and inclusion, and ensuring that the priorities of the action plan and governance road map are maintained.

M. Sterling requested that Councillors think about how PEO deals with the "bleed" between practices across Canada and internationally, which stakeholders PEO should be engaging with, and how PEO will create a visioning process that is agile and continuous. The floor was opened for questions and comments from Councillors.

I. Olukiyesi inquired as to when the Council would receive a report from the conference. M. Sterling indicated that the volunteer leadership conference planning committee would be issuing a report by July 3, 2020. M. Sterling stated that she would also share her Council presentation with the Councillors.

12220
CEO/REGISTRAR'S REPORT

J. Zuccon provided an update on the operational review, the organizational review, governance, and the operations of PEO. The full report was included in the council agenda package. The many activities of PEO were reviewed, including HR, IT, licensing, finance, and the national professional practice exam. The new Director of HR, L. Holden, was introduced.

There was a break from 10:30 a.m. to 10:50 a.m.

J. Zuccon resumed his presentation, discussing a variety of matters including the COVID-19 response, complaints, tribunals, and hearings. J. Zuccon closed his report by stating that the first entirely digitally produced issue of the Engineering Dimensions journal was published for May/June 2020.

M. Sterling invited questions and comments on the CEO/Registrar's report.

L. Notash stated that she was pleased that PEO was allowing applicants who did not originally pass one or both of the PPE exams to have a second opportunity. L. Notash also stated that would it be helpful to know how the ARC and ERC would be able to provide feedback regarding modifications to the licensing processes. J. Zuccon advised that, once PEO had analyzed significant amounts of data, the matter would be discussed with the ARC and ERC.

P. Cushman asked J. Zuccon why the HR Director would be reporting directly to him. J. Zuccon stated that the organizational structure review recommended that configuration to allow greater coordination during that transitional period at PEO.

L. Notash asked for additional information regarding the PEAK program learning management system platform. B. Ennis advised that an RFP process for a new learning management system platform had been conducted and a new platform was adopted.

L. Notash asked why the equity and diversity committee had not been meeting recently. J. Zuccon stated that the equity and diversity committee appeared to have chosen to defer their meeting until September 2020.

N. Hill asked how the new HR Director would be integrated into PEO

and how she would help PEO and Council achieve their objectives. J. Zuccon stated that L. Holden's professional background aligned with the work of PEO; therefore, she would be able to be effective immediately. The objective of the HR Director position was to help build capacity and to support and drive the changes that PEO required.

12221
EXECUTIVE COMMITTEE REPORT

No report was presented.

12222
2021 ELECTION MATTERS

N. Hill presented a motion to make incremental improvements to the election process. Councillors discussed the following:

- Nominee addresses should remain confidential; R. Martin confirmed that the nomination forms were used internally to confirm the validity of the nominee.
- PEO should enforce the election procedures; N. Hill advised that, if election rules were not followed, candidates were advised and asked to correct the matter. The governance review may mandate the editing and fact-checking of nomination content going forward.
- The election process may be too Toronto-centric; N. Hill stated that PEO is inclusive and candidates may join debates virtually from outside Toronto.
- PEO should prequalify candidates based on their governance experience and skills; M. Sterling stated that the governance road map would address that issue.
- How long candidate materials kept in the PEO database; R. Martin noted that public materials were kept indefinitely.
- Webcast technology should be adopted for the candidate debates.
- There should be retention periods for election records; M. Sterling stated that the matter would be reviewed by the central elections search committee.
- Whether Section 14.1 of the regulation, regarding nominations, would be amended prior to the opening of the 2020 nomination period and whether it would be reviewed by the legislation committee; J. Zuccon noted that the matter would be reviewed by staff.
- Fact-checking regarding candidates should occur and PEO should curtail personal attacks between candidates.
- PEO elections should adhere to rules similar to those used by Elections Canada.
- The type of volunteer training for candidates was unclear; N. Hill advised that the training was a government-mandated program for all volunteers.

M. Sterling called the question.

Moved by N. Hill, seconded by S. Ausma:

That Council, with respect to the 2021 Council election:

- a) **Approve the recommendations contained in the 2020 central election and search committee issues report, as presented to the meeting at C-535-2.4, Appendix A;**
- b) **Approve the 2021 voting procedures, as presented to the meeting at C-535-2.4, Appendix B;**
- c) **Approve the 2021 election publicity procedures, as presented to the meeting at C-535-2.4, Appendix C;**
- d) **Approve the 2021 nomination form, as presented to the meeting at C-535-2.4, Appendix D;**
- e) **Approve the 2021 nomination acceptance forms for president-elect, vice president, councillor-at-large, and regional councillor, as presented to the meeting at C-535-2.4, Appendix E,**
- f) **Appoint the regional election and search committees (RESC) for each region,**
- g) **Appoint the junior regional councillor in each region (L. Roberge, P.Eng.; C. Chiddle, P.Eng.; P. Cushman, P.Eng.; P. Broad, P.Eng.; and L. MacCumber, P.Eng.) as Chairs of the RESC for their region.**

CARRIED

**12223
AGM SUBMISSIONS FOLLOW-UP**

There were no questions or comments on the matter.

**12224
ENGINEERS CANADA DIRECTORS
REPORT**

D. Chui addressed the Council regarding the coordination of the work of PEO and Engineers Canada. D. Chui noted the PEO representatives on the Engineers Canada board, their committee and sub-board assignments, and the four major initiatives underway as part of the strategic plan. The Engineers Canada board was at work on its 2022 to 2024 strategic plan.

C. Bellini stated that PEO had an opportunity to contribute to the harmonization of the regulation of engineering across Canada as it underwent its own change initiatives. L. MacCumber encouraged PEO to adopt the national standards previously prepared by Engineers Canada, such as the climate change and sustainability guidelines.

**12225
PROPOSED BYLAW AMENDMENT:
ELECTRONIC MEETINGS**

L. MacCumber presented a motion that would remove the need for Council to consent to hold electronic meetings at the start of each meeting.

L. Notash asked why the goal of the motion could not be

accomplished through the passage of a special rule each year. D. Abrahams stated that a bylaw amendment would apply to Council and the committees of Council. The bylaw already permits Council and its committees to meet electronically; however, the methodology was cumbersome. The bylaw update would allow greater flexibility for Council and its committees to shift from in-person to virtual meetings when necessary.

W. Kershaw requested clarification on the conditions that would allow for a virtual meeting to be held, and asked who would determine when virtual meetings were appropriate. D. Abrahams advised that the bylaw was worded to place that decision in the hands of Chairs. The motion delineated some circumstances that would allow for the calling of virtual meetings, such as a pandemic, an ad hoc or emergency meeting, or poor weather conditions.

P. Cushman suggested that the motion be amended to a special rule, as that would allow time to review the outcome of the change before the passage of a permanent bylaw. L. Lukinuk stated that Council may vote on the amendment as presented. Following the vote, the matter could be returned to Council for further consideration.

W. Turnbull expressed concern that the bylaw would restrict committees from meeting remotely, unless there were special circumstances. D. Abrahams stated that the bylaw would allow all meetings to be held virtually if desired.

Moved by L. MacCumber, seconded by D. Campbell:

To amend Bylaw No. 1 to replace the current wording of Section 26 with the new wording set out in C-535-3.4, Appendix A.

CARRIED

There was a lunch break from 12:00 p.m. to 1:00 p.m.

Wainberg's Rules of Order for Amendments to Motions: L. Notash requested clarification regarding the appropriate opportunities to introduce an amendment to a motion. L. Lukinuk stated that, as a bylaw amendment was a main motion, any amendments must remain within the scope of the motion as presented. Council may not suggest another motion. P. Cushman requested that L. Lukinuk provide the pertinent *Wainberg's Rules of Order* section number stating the above, citing a specific passage regarding friendly motions. L. Lukinuk confirmed that the rule referred to was pertinent to amendments, not the consideration of main motions.

12226
CONSENT AGENDA

M. Sterling introduced the discussion of the consent agenda. L. Notash requested that her name be removed from the minutes of April 24, 2020, as she was not in attendance at the Council meeting.

Moved by R. Subramanian, seconded by R. Walker:

To approve the consent agenda. The following items were approved:

- 3.1 Minutes of the 532nd and 533rd Council meetings, as amended**
- 3.2 Guideline – Providing Reports on Mineral Projects**
- 3.3 Guideline – Environmental Site Assessment, Remediation, and Management**
- 3.5 Changes to the 2020 Committees and Task Force Membership Roster**

CARRIED

12227
MINUTES – 532ND COUNCIL MEETING, MARCH 20, 2020, AND 533RD COUNCIL MEETING, APRIL 24, 2020

That the minutes of the 532nd meeting of Council, held March 20, 2020, and the 533rd meeting of Council, held April 24, 2020, as presented to the meeting at C-535-3.1, Appendices A and B, accurately reflect the business transacted at those meetings, as amended.

CARRIED

12228
GUIDELINE – PROVIDING REPORTS ON MINERAL PROJECTS

That Council:

- a) Approve the publication of the guideline providing reports on mineral projects, as presented to the meeting at C-535-3.2, Appendix A**
- b) Direct the Registrar to publish the guideline and notify members and the public of its publication through usual PEO communications**
- c) Stand down the PSC subcommittee which prepared the providing reports on mineral projects guideline.**

CARRIED

12229
GUIDELINE – ENVIRONMENTAL SITE ASSESSMENT, REMEDIATION, AND MANAGEMENT

That Council:

- a) Approve the publication of the environmental site assessment, remediation, and management, as presented to the meeting at C-535-3.3, Appendix A**
- b) Direct the Registrar to publish the guideline and notify members and the public of its publication through usual PEO communications**
- c) Stand down the PSC subcommittee which prepared the environmental site assessment, remediation, and**

management guideline.

CARRIED

**12230
CHANGES TO THE 2020 COMMITTEES
AND TASK FORCE MEMBERSHIP ROSTER**

That Council approve the changes to the 2020 PEO committees and task forces membership roster, as presented to the meeting at C-535-3.5, Appendix A.

CARRIED

**12231
PSC UPDATE ON COORDINATING
LICENSED PROFESSIONAL (CLP) JOINT
SUBCOMMITTEE**

There was no discussion of this informational item.

**12232
NEW BUSINESS**

M. Sterling invited Councillors to bring forward any new business for discussion.

Wainberg's Rules of Order: W. Kershaw inquired about the process required to adopt a more modern rules of order. M. Sterling stated that the matter was under consideration through the governance road map process. The next step would be the discussion of the matter at the executive committee, drawing on the expertise of L. Lukinuk.

L. Notash requested that the *Wainberg's Rules of Order* summary for Councillors be updated to include all of the relevant rules required for Council meetings. M. Sterling confirmed that the summary would be updated.

Gender-Neutral Language: L. Notash requested that all Council documents use gender-neutral language. M. Sterling reinforced the comment and stated that the J. Zucco would take the matter under advisement.

Appeal of Electronic Meeting Bylaw Amendment: P. Cushman requested to appeal the bylaw amendment. L. Lukinuk stated that it was not possible, as a point of order or appeal was not raised at the time of the breach. M. Sterling confirmed that Council would adhere to the advice of L. Lukinuk.

Process Focus: A. Sinclair and A. Arenja stated that there was a significant focus on process in the meeting. Councillors were encouraged to focus on their intended outcomes and objectives when discussing procedural matters.

**12233
IN-CAMERA**

Moved by R. Subramanian, seconded by I. Olukiyisi:

To enter the in-camera portion of the meeting.

CARRIED

The staff and guests left the meeting.

While in camera, Council:

- a. Verified the in-camera minutes from 532nd meeting of Council, held March 20, 2020, and the 533rd meeting of Council, held April 24, 2020
- b. Appointed the central election and search committee members
- c. Received legal updates, including decisions and reasoning, from J. Zuccon
- d. Received a human resources committee update from the HRC Chair
- e. Discussed the 2021 AGM
- f. Considered any Councillor violations of the anti-workplace harassment and anti-workplace violence policies, if any
- g. Discussed Councillor items, if any
- h. Confirmed the CEO/Registrar's objectives for 2020/2021.

There being no further business, the meeting concluded.

These minutes consist of ten pages and Items 12217 to 12233 inclusive.

M. Sterling, P.Eng., Chair

R. Martin, Manager, Secretariat

Briefing Note – Information

C-536-3.2

Legislation Committee Workplan for 2020-2021

Purpose: To review the Legislation Committee workplan for 2020-2021

No motion required

Prepared by: A. Tapp, Policy Analyst

1. Status Update

- The Legislation Committee (LEC) approved the following workplan for 2020-2021 at its meeting on July 24th, 2020. The workplan is attached as **Appendix A** to this Briefing Note.

2. Background

- Under the Committees and Task Forces Policy (Committees/Task Forces Operations, Item 3), each committee / task force is to prepare an annual work plan and human resources plan for the following year by September 30 each year. Since the Legislation Committee is a board committee, its calendar year is the same as Council's, hence this workplan is produced earlier.
- One of the roles of Council, as identified in the Committees and Task Forces Policy (Role of Council, Item 3), is to approve committee/task force mandates, Terms of Reference, annual work plans, and annual human resources plans. The Legislation Committee (LEC) has submitted its work plan for Council approval.

WORK PLAN – 2020/2021

LEGISLATION COMMITTEE (LEC)

Approved by Committee: July 24, 2020		Review Date: June 2020	
Approved by Council: September XX, 20XX		Approved Budget: TBD	
Mandate [as approved by Council]:	Section 30(1) of By-Law No. 1 grants Council the power to appoint the Legislation Committee. The Legislation Committee had been dormant for some time. By Resolution dated May 8, 2009, Council appointed the Legislation Committee. To provide oversight and guidance to matters pertaining to PEO's Act, Regulations and By-Laws. This will include, but not be limited to: (i) acting as custodian for PEO legislation, identifying PEO policies, rules and operational issues which touch on or affect PEO legislation, and providing guidance as to which of these should be put into legislation; ii) overseeing draft changes to PEO legislation; and (iii) keeping Council apprised of relevant external legislative initiatives and changes which may affect PEO legislation.		
Terms of Reference [Key duties]:	In support of its mandate, the Legislation Committee will include among its duties: (i) acting as custodian for PEO legislation, identifying PEO policies, rules and operational issues which touch on or affect PEO legislation, and providing guidance as to which of these should be put into legislation; (ii) overseeing draft changes to PEO legislation which have not been assigned to another Committee or Task Force; and (iii) keeping Council apprised of relevant external legislative initiatives and changes which may affect PEO legislation.		
Equity and Diversity Awareness	1. <i>Was the E & D module reviewed in order to have tasks and activities align with the E&D Policies?</i> YES 2. <i>Is each task/activity being done in an equitable manner and engaging diverse groups?</i> YES 3. <i>Are there any barriers to information dissemination, human resources, physical space, and cultural differences?</i> NO		
Tasks, Outcomes and Success Measures:	Task/Activities:	Outcomes Success measures	Due date:
	2019-20 Priority Tasks:		
	Source: Council		
	1. Regulation Changes – External Regulatory Performance Review	Draft Regulations sent to Council for approval	April 2021

	2. Act Changes – External Regulatory Performance Review	Act change proposal sent to Council	April 2021
	3. Regulation Changes – Radiohead Coroner's Inquest Recommendations	Draft Regulations sent to Council for approval	April 2021
	4. Regulation Changes – Academic & Examinations	Draft Regulations sent to Council for approval	April 2021
	5. In accordance with the Regulatory Policy Protocol approved by Council, review all referred policy proposals that involve authority from the Act, Regulations or By-Laws, and provide regulatory impact analysis and recommendations to Council pursuant.	Regulatory impact analyses completed and forwarded to Council for policy determination.	Ongoing
	Source: Legislation Committee		
	6. By-Law Restructuring	Draft proposal for Council on restructuring By-law No.1 into separate functional by-laws	April 2021
	7. Offer training to PEO Statutory committees on Act/Regulation Change Processes and Requirements and LEC's role in it	Training and presentations offered and accepted. Training on the LEC's role will also be attempted as part of the Committee's presentation of proposals at future Council meetings.	April 2021
	8. Maintain an up-to-date regulatory issues (Act/Reg/By-Law change proposals) log and provide annual update to Council	Issues log maintained and provided annually to Council	September 2020
	9. Prepare an annual Work Plan and Human Resources Plan in accordance with the Committees and Task Forces Policy.	Annual Work Plan drafted for Council approval; HR plan developed, if necessary.	September 2020
	10. Future Act Changes	Future Act changes as required	Varies
	Source: Licensing Committee		
	11. New Regulations- LIC Recommendations	Draft Regulations sent to Council for approval	April 2021
	12. Complete review of outstanding changes to Regulation 941 for compliance with Council-approved policy	Policy clarifications from Licensing Policy Committee reviewed and recommendations made to	Ongoing

	motions and evidence-based policy development, and provide feedback to the Attorney General and Council pursuant.	Council	
	Source: Regional Councillors Committee		
	13. Review by-law change proposals from RCC	Provide legislative analysis to RCC and arrange for legal drafting and presentation to Council	April 2021
	Source: Central Election and Search Committee		
	14. Regulation Changes – Prior Council Experience	Draft Regulations sent to Council for approval	April 2021
	Source: Ontario Government		
	15. Deal with any residual/remaining issues resulting from Bill 68, including proclamation of outstanding sections (Provisional Licence, <i>Not for Profit Corporations Act</i> changes)	Proclamation dates scheduled with Ministry of the Attorney General.	Ongoing (but by Dec. 2020)
	16. Monitor government opportunities to resolve Ontario legislation that conflicts with the authority or provisions of the <i>Professional Engineers Act</i> or its Regulations	Staff to identify opportunities when conflicting Acts or Regulations are proposed for amendment to contact each Ministry, identifying the conflicting provisions and requesting satisfactory resolution.	Ongoing
	Q2: <i>The multi-cultural calendar was considered when scheduling the workshop date.</i>	Calendar considered.	July 2020
	Q3: <i>Persons with disabilities and food allergies were appropriately accommodated.</i>	Accommodations successfully addressed, where necessary.	Each LEC meeting
Inter-Committee Collaboration:	The Committee will liaise with any Committee or Task Force that provides it with work for comment. It will also liaise with any Committee it deems necessary, where such Committee is involved with PEO legislation, etc.		
Stakeholders:	Council and the Attorney General of Ontario; PEO Statutory Committees (Academic Requirements Committee; Experience Requirements Committee; Registration Committee; Complaints Committee; Discipline Committee); and advisory committees (for example, Professional Standards Committee), as needed on specific issues.		

CONSULTING ENGINEER DESIGNATION APPLICATIONS

Purpose: Under Section 61(2) of Regulation 941 under the *Professional Engineers Act*, the Consulting Engineer Designation Committee (CEDC) may make recommendations to Council in respect of all matters relating to application for designation as a consulting engineer. The CEDC is recommending that Council approve the following motions.

Motion(s) for Council to consider: (requires a simple majority of votes cast to carry)

1. That Council approve the exemption from examinations and the applications for designation as Consulting Engineer as presented to the meeting at C-536-3.3, Appendix A, Section 1.
2. That Council approve the applications for re-designation as Consulting Engineer as presented to the meeting at C-536-3.3, Appendix A, Section 2.
3. That Council grant permission to use the title “Consulting Engineers” (or variations thereof) to the firms as presented to the meeting at C-536-3.3, Appendix A, Section 3.

Prepared by: Ian Daniels, P.Eng, Registration Officer and Imelda Suarez, Staff Support
Moved by: Christian Bellini, P.Eng.

1. Need for PEO Action

Council needs to accept the recommendations of the Consulting Engineer Designation Committee (CEDC) with respect to the applications submitted for its consideration before the applicants are informed of the PEO’s decision with respect to their application.

2. Proposed Action / Recommendation

That Council approve/deny the applications for designation and redesignation.

3. Next Steps (if motion approved)

The applicants will be advised of Council’s decision with respect to their applications.

4. Peer Review & Process Followed

Process Followed	All applications were reviewed by PEO staff, the Regional Subcommittees of CEDC and later approved by CEDC on August 28, 2020.
Council Identified Review	Not applicable. Required by Regulation.
Actual Motion Review	As stated under above process.

5. Appendices

- Appendix A – Report of the Consulting Engineer Designation Committee
- Appendix B – Legal Implications

To the 536th Meeting of the Council of
Professional Engineers Ontario

REPORT OF THE CONSULTING ENGINEER DESIGNATION COMMITTEE

Chair: Steve van der Woerd, P.Eng.

- 1. The Committee has reviewed the following applications for DESIGNATION and recommends to Council that these 10 applicants be exempted from examinations pursuant to Section 56(2) of O.Reg.941 and that they be considered for DESIGNATION AS CONSULTING ENGINEER, having met the requirements pursuant to Section 56(1) of O.Reg.941:**

#	P.Eng.	Company Name	Address	Licence #
1.1	Bolivar, Bryan	Skelton Brumwell & Associates Inc.	107-93 Bell Farm Rd, Barrie ON, L4M 5G1	100017673
1.2	Burgess, Denise	Comcor Environmental Ltd.	12-32- Pinebush Rd, Cambridge ON, N1T 1Z7	90563446
1.3	DeVries, Ryan	B.M. Ross and Associates Ltd.	62 North St, Goderich ON, N7A 2T4	100183886
1.4	Ensuncho, Lucilla	Masongsong Associates Engineering Ltd.	201-7800 Kennedy Rd, Markham ON, L3R 2C7	100086571
1.5	Hilborn, Joshua	Centex Engineering & Development Inc.	7-265 Hanlon Creek Blvd, N1C 0A1	100126571
1.6	Lonergan, Michael	Lonergan Engineering Inc.	4 Industrial Pkwy S, Aurora ON, L4G 3W1	100152751
1.7	McFarlane, Shaun	Moffatt& Nichol	208-880 H Street, Anchorage AK, 99501	30365803
1.8	Smits, David	Induspec	106-34 Commerce Cres, North Bay ON, P1A 0B4	90277013
1.9	Tang, Bernadette (Renee)	CPE Structural Consultants Ltd.	49A Lesmill Rd, North York ON, M3B 2T8	100070345
1.10	Vis, Jonathan	Lassing Dibben Consulting Engineers	67B Plant St, Batawa ON, K0K 1E0	100182572

- 2. The Committee has reviewed the following applications for REDESIGNATION and recommends to Council that these 24 applicants be granted REDESIGNATION AS CONSULTING ENGINEER, having met the requirements pursuant to Section 57(2) of O.Reg.941:**

#	P.Eng.	Company Name	Address	Licence #
2.1	Andronowski, Maximilian	Andronowski & Associates Ltd.	6-350 Speedvale Ave W, Guelph ON, N1H 7M7	1085018
2.2	Blakey, Steven	The Greer Galloway Group Inc.	1620 Wallbridge-Loyalist Rd, Belleville ON, K8N 4Z5	4130506
2.3	Bruni, Bruno	BNB + Associates Engineering Inc.	156 Codsell Ave, Toronto ON, M3H 3W6	5766019
2.4	Buckrell, Miles	IFAB Engineering Partners Ltd.	201-225 Pinebush Rd, Cambridge ON, N1T 1B9	90220880
2.5	Burn, Geoffrey	Associated Engineering (Ontario) Ltd.	300-509 Glendale Ave E, Niagara-on-the-Lake ON, L0S 1J0	6145015
2.6	Cairns, Stephen	A2S Consulting Engineers	201-289 Cedar St, Sudbury ON, P3B 1M8	90563222
2.7	Caldwell, Neil	Jp2g Consultants Inc.	410-1150 Morrison Dr, Ottawa ON, K2H 8S9	90328311
2.8	Cazzola, Edward	Atkinson Engineering Inc.	786 King St E, Hamilton ON, L8M 1A6	7245301
2.9	Clark, John (Jay)	Skelton Brumwell & Associates Inc.	107-93 Bell Farm Rd, Barrie ON, L4M 5G1	8474603
2.10	Desai, Vipul	DCL Engineering Ltd.	11-5650 Tomken Rd, Mississauga ON, L4W 4P1	100034577
2.11	Dwight, Andrea	Blue Sky Energy Engineering & Consulting Inc.	4826 Derrydown Dr, Mississauga ON, L5M 7J7	90366659
2.12	Dyck, David	D.R. Dyck Associates Ltd.	1244 Grange Rd, Oakville ON, L6H 1P7	12660502
2.13	Filipov, Robert	Amico Engineering Inc.	400-2199 Blackacre Dr, Oldcastle ON, N0R 1L0	90248741
2.14	Galas, Mark	Lawrence, Fleming & Assoc Ltd.	204-6625 Tomken Rd, Mississauga ON, L5T 2C2	15366503
2.15	Little, Steven	Able Engineering Inc.	20 Densly Ave, Toronto ON, M6M 2R1	90485830
2.16	Matich, Miroslav	MAJM Corporation Ltd.	79 Bywood Dr, Etobicoke ON, M9A 1M2	29625019
2.17	Matthews, Ryan	J.L. Richards & Associates Ltd.	1565 Carling Ave, Ottawa ON, K1Z 8R1	90455742
2.18	Mitchell, Gerald	Peto MacCallum Ltd.	16 Franklin St S, Kitchener ON, N2C 1R4	32057507
2.19	Palin, Christopher	CPE Structural Consultants Ltd.	49A Lesmill Rd, North York ON, M3B 2T8	100055726
2.20	Savoldelli, Mauro	Edilesse Ltd.	1253-225 The East Mall, Etobicoke ON, M9B 0A9	40808503

2.21	Schachter, Nathan	Cimentec Engineering Ltd.	70 Reding Rd, Ancaster ON, L9G 1M8	40890014
2.22	Shad, Houshang	Shad & Associates Inc.	9-83 Citation Drive, Vaughan ON, L4K 2Z6	100014014
2.23	Soudack, Sigmund	Sigmund Soudack & Associates Inc.	402-1220 Sheppard Ave E, North York ON, M2K 2S5	43703016
2.24	Venneri, Frank	Venneri Consulting Engineers Ltd.	1-1170 Sheppard Ave W, North York ON, M3K 2A3	48032015

3. The Committee recommends to Council that the following **2 FIRMS** be granted **PERMISSION TO USE THE TITLE “CONSULTING ENGINEERS”** (or variations thereof), having met the requirements pursuant to Section 68 of O.Reg.941:

#	Company Name	Address	Designated Consulting Engineer (s)
3.1	Kondratas Kisil Consulting Inc.	1605-45 Wynford Heights Cres, Toronto ON, M3C 1L3	Harry Kondratas, P.Eng.
3.2	N.A. Engineering Associates Inc.	2-107 Erie St, Stratford ON, N5A 2M5	Nick Aroutzidis, P.Eng. and Larry Walton, P.Eng.

CONSULTING ENGINEER DESIGNATION APPLICATIONS

Legal Implications/Authority

1. Pursuant to Section 56(2), Council has the authority to exempt an applicant from any of the examinations required by section 56(1) to be taken by an applicant for a Consulting Engineer Designation if Council is satisfied that the applicant has appropriate qualifications.

Pursuant to Section 56(1) Council **shall** designate as a Consulting Engineer every applicant for the Designation who meets the requirements set out in Section 56(1)(a-d). As a result there does not appear to be any discretion for Council to refuse applicants who meet the requirements.

2. Pursuant to Section 57(2) Council **shall** redesignate as a consulting engineer every applicant who meets the requirements of section 57(2) (a-c). As a result there does not appear to be any discretion for Council to refuse applicants who meet the requirements.

Briefing Note – Decision

CHANGES TO THE 2020 COMMITTEES AND TASK FORCES MEMBERSHIP ROSTER

Purpose: To approve changes to Sections 1 (Board Committees) and 2 (Other Committees Reporting to Council) of the *2020 PEO Committees and Task Forces Membership Roster*.

Motion(s) to consider: (requires a simple majority of votes cast to carry)

That Council approve changes to the *2020 PEO Committees and Task Forces Membership Roster* as presented to the meeting at C-536-3.4, Appendix A.

Prepared by: Viktoria Aleksandrova – Committee Coordinator

Moved by: President-elect Bellini, P.Eng.

1. Need for PEO Action

It is the role of Council to approve annual rosters of committee members under the Committees and Task Forces Policy (Role of Council, Item 4) and authorize the membership of those volunteers who formally participate on its behalf through membership on committees and task forces. Furthermore, Council is asked to approve volunteer members of committees and task forces in accordance with PEO's insurance policy requirements.

Council approved the *2020 PEO Committees and Task Forces Membership Roster* at the November 15, 2019 meeting.

Appendix A sets out changes to the Section 1 (Board Committees) and 2 (Other Committees Reporting to Council) of the approved Roster that require Council approval at this time, including new appointments, elections of Chairs/Vice Chairs and resignations.

2. Proposed Action / Recommendation

Approve the changes to the *2020 PEO Committees and Task Forces Membership Roster*.

3. Next Steps (if motion approved)

- The newly appointed and re-appointed members will be notified accordingly.
- The updated *2020 PEO Committee and Task Force Membership Roster* will be posted on PEO's website.

4. Policy or Program contribution to the Strategic Plan

The motion regarding Changes to the *2020 PEO Committees and Task Forces Membership Roster* is related to Objective 9 in the 2018-2020 Strategic Plan.

5. Peer Review & Process Followed

Process Followed	Committees and Task Forces Policy – Role of Council Item 4: Approve the annual roster of committee members.
Actual Motion Review	N/a

6. Appendices

- Appendix A – Changes to the *2020 PEO Committees and Task Forces Membership Roster*.

**Changes to the 2020 PEO Committees and
Task Forces Membership Roster**

536th Council Meeting

**C-536-3.4
Appendix A**

New appointments:

First/Last Name	Term / Compliance [per Terms of Reference]	Committee / Task Force Position
Karen Dennison, P.Eng.	September 25 – December 31, 2020	Complaints Committee (COC) member
Santosh Gupta, P.Eng.	September 25 – December 31, 2020	Consulting Engineer Designation Committee (CEDC) member
Luc Roberge, P.Eng.	September 25 – December 31, 2020	Finance Committee (FIC) - Investment subcommittee (HRC representative) Licensing Committee (LIC) (RCC representative) Volunteer Leadership Conference Planning Committee (RCC representative)
Wayne Kershaw, P.Eng.	September 25 – December 31, 2020	Licensing Committee (LIC) (LEC representative) Volunteer Leadership Conference Planning Committee (RCC representative)
Christian Bellini, P.Eng.	September 25 – December 31, 2020	Volunteer Leadership Conference Planning Committee (EXE representative)
Márta Ecsedi, P.Eng.	September 25 – December 31, 2020	Volunteer Leadership Conference Planning Committee (ACV representative)
Eric Nejat, P.Eng.	September 25 – December 31, 2020	Volunteer Leadership Conference Planning Committee (ACV representative)

Changes to the Roster – election of Chairs/Vice Chairs and other:

First/Last Name	Term / Compliance [per Terms of Reference]	Committee / Task Force
Michael Chan, P.Eng.	September 25 – Council term end	Discipline Committee (DIC) – member appointed under Section 27(1).1 (elected member of Council)
Lorne Cutler, P.Eng.	1-year term [2 nd term / full compliance]	Finance Committee (FIC) - Chair
Arthur Sinclair, P.Eng.	1-year term [1 st term / full compliance]	Finance Committee (FIC) – Vice Chair
Lisa MacCumber, P.Eng.	1-year term [2 nd term / full compliance]	Legislation Committee (LEC) – Chair
Sandra Ausma, P.Eng.	1-year term [1 st term / full compliance]	Legislation Committee (LEC) – Vice Chair
Ramesh Subramanian, P.Eng.	1-year term [1 st term / full compliance]	Regional Councillors Committee (RCC) – Chair
Randy Walker, P.Eng.	1-year term [1 st term / full compliance]	Regional Councillors Committee (RCC) – Vice Chair
Richard Kamo, P.Eng.	1-year term [1 st term / full compliance]	Consulting Engineer Designation Committee (CEDC) – Northern Subcommittee Chair
Vicki Hilborn, P.Eng.	September 25 – December 31, 2020	Advisory Committee on Volunteers (ACV) – Volunteer profile subcommittee
Lisa Lavery, P.Eng.	September 25 –	Advisory Committee on Volunteers (ACV) –

**Changes to the 2020 PEO Committees and
Task Forces Membership Roster**

536th Council Meeting

	December 31, 2020	Volunteer profile subcommittee
Sean McCann, P.Eng.	September 25 – December 31, 2020	Advisory Committee on Volunteers (ACV) – Volunteer profile subcommittee
Eric Nejat, P.Eng.	September 25 – December 31, 2020	Advisory Committee on Volunteers (ACV) – Volunteer profile subcommittee
Nick Shelton, P.Eng.	September 25 – December 31, 2020	Advisory Committee on Volunteers (ACV) – Volunteer profile subcommittee
Michael Wesa, P.Eng.	September 25 – December 31, 2020	Advisory Committee on Volunteers (ACV) – Workshop Planning subcommittee

Resignations/Retirements:

First/Last Name	Service Dates	Committee / Task Force
Tomiwa Olukiyesi P.Eng.	2018 - 2020	Enforcement Committee (ENF) – Council Liaison
Marisa Sterling, P.Eng.	2019 - 2020	Volunteer Leadership Conference Planning Committee (EXE representative)
Guy Boone, P.Eng.	2018 - 2020	Volunteer Leadership Conference Planning Committee (RCC representative) – Vice Chair
Arthur Sinclair, P.Eng.	2019 - 2020	Volunteer Leadership Conference Planning Committee (RCC representative)

Briefing Note – Decision

C-536-3.5
REVISED 30 by 30 TASK FORCE END OF TERM

Purpose: To extend the 30 by 30 Task Force term by one additional year to 31 December 2021.

Motions to consider: (requires a simple majority of votes cast to carry)

1. **That Council approves the extension of the 30 by 30 Task Force by one additional year to 31 December 2021 with funding in the amount of \$10,000.**

Prepared by: Tracey Caruana, P.Eng., Manager, Engineering Intern Programs

Moved by: President-Elect, Christian Bellini, Vice Chair, PEO 30 by 30 Task Force

1. Need for PEO Action

The original 30 by 30 Task Force term was for two years. The Task Force was launched June 2018 and was scheduled to end June 2020. At the March 2020 Council meeting, the Council approved the extension of the Task Force for an additional six months to 31 December 2020. In addition, Council approved the establishment of an annual check in meeting with key stakeholders to track metrics, starting in 2020, until the 30% goal is reached in 2030. The metrics gathered from the annual meetings will feed into the annual reporting to PEO Council, starting at its November 2020 meeting.

Since the start, the 30 by 30 Task Force has accomplished many activities, including establishing metrics which are to be presented on an annual basis to track progress toward the 30 by 30 goals, and creating awareness and action planning amongst stakeholder groups. In 2019, the Task Force delivered on its mandate in less than half of its allocated budget.

Due to COVID-19, the Task Force has only spent 16% of its 2020 budget to date. This is due in large part to the pandemic and having to defer engagement of key stakeholders, especially employers, for several months and not being able to hold in person sessions.

Of particular importance will be the level of participation at PEO's inaugural annual check in scheduled for this September. Because of the disruption caused by COVID-19, it is anticipated that the number of participants will not be as high and the metrics may not be as representative as originally planned. Since this annual check in is key to the success in sustaining the 30 by 30 and tracking progress over the next 10 years towards achieving the 30% goal, it is imperative that this event be well established.

The Task Force has therefore determined that in order to effectively establish and transition the 30 by 30 work so that it continues once the Task Force is disbanded, that an additional one year is needed in its term limit. More specifically, the additional year will give the Task Force the opportunity to:

1. Support Chapters in hosting their Awareness Sessions in their geographic areas to build on the Task Force's initial launch of the 30 by 30.
2. Ensure establishment of the PEO annual check in during 2021 on the progress being made by key stakeholders along the pathway to licensure – universities, employers of engineers, PEO as the Regulator and women engineering graduates – by supporting the annual meeting in September 2021. These check ins will continue until 2030 where metrics gathered from the yearly September meeting will feed into the annual reporting to PEO Council at its November meeting. After 2021, PEO staff will continue to organize the annual check ins.

The Task Force would like to request similar funds to previous years for the 2021 budget in the amount of \$10,000.

Therefore, Council is being asked to extend the term of the 30 by 30 Task Force by one additional year from January 1 2021 to December 31 2021 with a budget of \$10,000, in order to ensure the ownership transfer to the appropriate stakeholders and sustainability of the 30 by 30 initiative until 2030.

2. Proposed Action / Recommendation

It is recommended that Council approve the following motions:

1. *That Council approves the extension of the 30 by 30 Task Force by one additional year to 31 December 2021 with a budget of \$10,000.*

3. Next Steps (if motion approved)

The 30 by 30 Task Force will operate until 31 December 2021 after which it will be stood down. During the one year extension, the 30 by 30 Task Force will continue to work with the chapters in hosting their own 30 by 30 Awareness Sessions, and will develop the annual check in meeting, ideally in person, in 2021 for reporting of metrics to PEO Council at its November 2021 meeting.

4. Policy or Program contribution to the Strategic Plan

The creation of the 30 by 30 Task Force and 30 by 30 PEO Action Plan is related to Strategic Objective 8 in the 2018-2020 Strategic Plan.

5. Financial Impact on PEO Budgets (for five years)

Additional 2021 funding is requested to be included in the 2021 budget.

	Operating	Capital	Explanation
Current to Year End	\$10,000	\$	Funded from Surplus Fund (Council discretionary funds) as approved by Council February 2, 2018
2021	\$10,000	\$	Funding for 2021 Note that the actual financial impact to PEO is significantly less than this due to the fact that only a fraction of this year's budget will actually be spent
2 nd Year until 2030	\$5,000 maximum	\$	As approved at the March 2020 Council Meeting

6. Peer Review & Process Followed

Process Followed	<p>Terms of Reference:</p> <ul style="list-style-type: none"> February 2020 – revised 30 by 30 Task Force Terms of Reference submitted to the Advisory Committee on Volunteers (ACV) for peer review on February 25, 2020 meeting August 2020 – revised 30 by 30 Task Force Terms of Reference submitted to the Advisory Committee on Volunteers (ACV) for peer review on August 27, 2020 meeting
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Council Identified Review	<p>The original 30 by 30 Terms of Reference was approved at the 516th meeting of Council on February 2, 2018.</p> <p>In accordance with the Committee and Task Force Policy – Reference Guide (Sections 2.5 and 3.2), the revised 30 by 30 Terms of Reference was submitted to the Advisory Committee on Volunteers (ACV) for peer review on August 9, 2018.</p> <p>The revised 30 by 30 Terms of Reference was approved at the 520th meeting of Council on September 21, 2018.</p> <p>In accordance with the Committee and Task Force Policy – Reference Guide (Sections 2.5 and 3.2), the revised 30 by 30 Terms of Reference was submitted to the Advisory Committee on Volunteers (ACV) for peer review on February 25, 2020. ACV approved the submission to Council to revise the Terms of Reference on March 2, 2020.</p> <p>The revised 30 by 30 Terms of Reference was approved at the 532nd meeting of Council on March 20, 2020.</p> <p>In accordance with the Committee and Task Force Policy – Reference Guide (Sections 2.5 and 3.2), the revised 30 by 30 Terms of Reference was submitted to the Advisory Committee on Volunteers (ACV) for peer review on August 27, 2020. ACV approved the submission to Council to revise the Terms of Reference on August 27, 2020.</p>
Actual Motion Review	<p>February 2, 2018 – 516th Council Meeting <i>That Council:</i></p> <ul style="list-style-type: none"> <i>a) approve the 30 by 30 Terms of Reference as presented to the meeting and amended at C-516-2.13, Appendix A, and</i> <i>b) approve a \$20,000 annual budget for the two-year term of the Task Force.</i> <p>September 21, 2018 – 520th Council Meeting</p> <ul style="list-style-type: none"> <i>1. That Council approves the revised 30 by 30 Task Force Terms of Reference as presented to the meeting at C-520-2.10, Appendix A.</i> <i>2. That Council approves the 30 by 30 PEO Action Plan as presented to the meeting at C520-2.10, Appendix C</i> <p>March 20, 2020 – 532nd Council Meeting</p> <ul style="list-style-type: none"> <i>1. That Council approves the extension of the 30 by 30 Task Force by six months to 31 December 2020 with no additional funding.</i> <i>2. That Council approves the establishment of an annual check in meeting with key stakeholders to track metrics, starting in 2020, until the 30% goal is reached in 2030. The metrics gathered from this annual meeting will feed into the annual reporting to PEO Council, starting at its November 2020 meeting.</i>

7. Appendices

- Appendix A – 30 by 30 Task Force Terms of Reference
- Appendix B – 30 by 30 Task Force Terms of Reference revised 2021

Terms of Reference

30 by 30 Task Force

Issue Date: Sept 18, 2018
Approved by: Council

Review Date: March 20, 2020
Review by: Council

Legislated and other Mandate approved by Council	For PEO to show visible leadership in addressing the underrepresentation of women licensed in the profession by formally endorsing the 30 by 30 initiative with Engineers Canada and committing to undertaking an action plan to resolve this inequity.
Key Duties and Responsibilities	<p>Develop a detailed complementary action plan to the one developed by OSPE to engage and inform PEO licence holders, volunteers, key stakeholders and staff on the 30 by 30 initiative, identify the appropriate owners of PEO's actions in the plan, and provide direction to the Registrar and volunteer leadership, as appropriate. This to include:</p> <ol style="list-style-type: none"> 1. Plan Development <ol style="list-style-type: none"> a. Develop a detailed action plan that complements OSPE's plan. b. Present the action plan to PEO Council for approval. 2. Coordinate <ol style="list-style-type: none"> a. Coordinate PEO's 30 by 30 initiatives by providing direction to the Registrar and volunteer leadership to ensure implementation of the joint action plan and that ownership of PEO's responsibilities are appropriately assigned. b. Monitor the progress on uptake in implementing the action plan. 3. Inform/Educate <ol style="list-style-type: none"> a. Communicate the 30 by 30 action plan to PEO licence holders, volunteers, key stakeholders and staff. b. Provide an annual update to PEO licence holders, volunteers, key stakeholders and staff on the progress of the 30 by 30 initiative launch in the PEO Annual Report.
Constituency, Number & Qualifications of Committee/Task Force Members	The task force shall consist of four (4) members including the PEO President (2017-2018); a member of the Executive Committee (2017-2018); a currently serving Councillor (2017-2018); and the Ontario representative on the Engineers Canada Equitable Participation in the Profession Committee (2017-2018).

Qualifications and election of the Chair	The Chair is to be elected from among the members of the task force in accordance with Wainberg's Society Meetings, By-Law No. 1, section 25(4) and Committee and Task Force Policy
Qualifications and election of the Vice Chair(s)	The Vice Chair is to be elected from among the members of the task force in accordance with Wainberg's Society Meetings, By-Law No. 1, section 25(4) and Committee and Task Force Policy
Duties of Vice Chair(s)	To act in the absence of the Chair.
Term Limits for Committee Chair and Vice-Chair	If applicable.
Term Limits for Committee Members	If applicable
Quorum	In accordance with Wainberg's Society Meetings and By-Law No. 1, section 25(1), quorum for the purpose of having the meeting's decisions be considered binding is at least 50 per cent of the task force's membership present at the meeting.
Meeting Frequency & Time Commitment	The task force will meet at the call of the Chair.
Budget	\$20,000 annually for the two-year term of the Task Force, prorated by number of months of operation in a given budget year.
Operational year time frame	Task Force start - June 2018. The Task Force is to be stood down 31 December 2020.
Committee advisor	Jeannette Chau, Manager, Government Liaison Programs
Committee Support	Sylvia Millstein, Corporate Services Administrator

Terms of Reference

30 by 30 Task Force

Issue Date:
Approved by: Council

Review Date: September 25, 2020
Review by: Council

Legislated and other Mandate approved by Council	For PEO to show visible leadership in addressing the underrepresentation of women licensed in the profession by formally endorsing the 30 by 30 initiative with Engineers Canada and committing to undertaking an action plan to resolve this inequity.
Key Duties and Responsibilities	<p>Develop a detailed complementary action plan to the one developed by OSPE to engage and inform PEO licence holders, volunteers, key stakeholders and staff on the 30 by 30 initiative, identify the appropriate owners of PEO's actions in the plan, and provide direction to the Registrar and volunteer leadership, as appropriate. This to include:</p> <ol style="list-style-type: none"> 1. Plan Development <ol style="list-style-type: none"> a. Develop a detailed action plan that complements OSPE's plan. b. Present the action plan to PEO Council for approval. 2. Coordinate <ol style="list-style-type: none"> a. Coordinate PEO's 30 by 30 initiatives by providing direction to the Registrar and volunteer leadership to ensure implementation of the joint action plan and that ownership of PEO's responsibilities are appropriately assigned. b. Monitor the progress on uptake in implementing the action plan. 3. Inform/Educate <ol style="list-style-type: none"> a. Communicate the 30 by 30 action plan to PEO licence holders, volunteers, key stakeholders and staff. b. Provide an annual update to PEO licence holders, volunteers, key stakeholders and staff on the progress of the 30 by 30 initiative launch in the PEO Annual Report.
Constituency, Number & Qualifications of Committee/Task	The task force shall consist of four (4) members including the PEO President (2017-2018); a member of the Executive Committee (2017-2018); a currently serving Councillor (2017-2018); and the Ontario representative on the Engineers Canada Equitable Participation in the Profession Committee (2017-2018).

Force Members	
Qualifications and election of the Chair	The Chair is to be elected from among the members of the task force in accordance with Wainberg's Society Meetings, By-Law No. 1, section 25(4) and Committee and Task Force Policy
Qualifications and election of the Vice Chair(s)	The Vice Chair is to be elected from among the members of the task force in accordance with Wainberg's Society Meetings, By-Law No. 1, section 25(4) and Committee and Task Force Policy
Duties of Vice Chair(s)	To act in the absence of the Chair.
Term Limits for Committee Chair and Vice-Chair	If applicable.
Term Limits for Committee Members	If applicable
Quorum	In accordance with Wainberg's Society Meetings and By-Law No. 1, section 25(1), quorum for the purpose of having the meeting's decisions be considered binding is at least 50 per cent of the task force's membership present at the meeting.
Meeting Frequency & Time Commitment	The task force will meet at the call of the Chair.
Budget	\$20,000 annually for the two-year term of the Task Force, prorated by number of months of operation in a given budget year. \$10,000 for 2021.
Operational year time frame	Task Force start - June 2018. The Task Force is to be stood down 31 December 2021.
Committee advisor	Tracey Caruana, Manager, Engineering Intern Programs
Committee Support	Sylvia Millstein, Corporate Services Administrator

Briefing Note – Information

C-536-4.1

COUNCILLOR/COMMITTEE ITEMS

a) Councillors/Committee Chair Questions

Purpose: To provide Councillors and committee chairs with an opportunity to bring forward questions to help Council identify any problems, risks and/or opportunities to address in its strategies and governance in the public interest.

No motion required

Prepared by: Dale Power – Secretariat Administrator