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Engineers Canada Challenges and Opportunities Consultation

Input for Strategic Direction

No.	**1. What are the major challenges facing the profession in the next five years?**	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
NS1	Achievement of the 30 by 30 goal and creating a profession that is reflective of Canadian demographics.	Diversity & Inclusion	E3	5	4	20
QC7	Ensuring that the next generation of engineers is more diverse (women, aboriginals and immigrants)	Diversity & Inclusion	E3	4	4	16
YK7	Retaining engineers especially female engineers in the engineering profession	Diversity & Inclusion	E3	4	3	12
MB5	Diversity: more immigration, more women, more First Nations.	Diversity & Inclusion	E3	4	3	12
SK3	Ensuring the activities of Engineers Canada are aligned to the mandate and wishes of its members. (e.g. Engineers Canada pursuing Educational Credential Assessment without the support of the majority of CAs.)	Enabling Eng. Canada	4	5	5	25
AB2	Engineers Canada's governance is still not optimized. - The division of responsibilities between EC staff, AB and QB appears to be unclear. - CA staff is allocated to support all three of these entities and therefore frustration results within the CAs. - EC staff needs to be the central body to plan and coordinate the work of EC. AB and QB can provide	Enabling Eng. Canada	G	5	5	25
ON2	Council spends a lot of time fighting against proposals of Engineers Canada: foreign trained credentials, CEAB renaming. Major challenge for PEO.	Enabling Eng. Canada	G	4	5	20
ON4	Engineers Canada CEO has to be held accountable. Credential services imposed by EC CEO.	Enabling Eng. Canada	G	3	5	15
ON5	Carver governance model is broken (as demonstrated by the recent CEAB name change). This is EC	Enabling Eng. Canada	G	3	5	15
ON6	EC is trying to take control of CEAB and QB thru carver model. Accreditation being taken over by the Deans. EC needs to understand why people get licensed.	Enabling Eng. Canada	G	3	3	9
NB1	National Code of Ethics	Excellence & Integrity	1B	5	4	20
MB6	Ethical practice; combatting corruption and bad character.	Excellence & Integrity	1B	4	4	16
QC6	Professionalism and ethics	Excellence & Integrity	1B	4	4	16
NL1	To maintain and build on the ethical and technical competence of engineers contributing to the public welfare in terms of public safety, the environment and economic wellbeing. As part of this engineers must be innovators, making things better with less resources. This is especially to address the public infrastructure deficit that is becoming very apparent within the five year period.	Excellence & Integrity	1B	4	4	16
NL4	Bringing greater assurance that those licensed under constituent associations are maintaining both ethical and technical competence	Excellence & Integrity	1B	5	3	15
NT1	Need to keep up to date on technical expertise.	Excellence & Integrity	1B	4	3	12
MB2	Keeping-up with the changing Canadian society and global context.	Globalization	1B	4	5	20
NL3	Operating in an increasingly international work place, with the challenges it brings for those practicing in terms of qualifications of practitioners, use of appropriate standards and conformance to these standards, and ethical practice.	Globalization	1B	5	4	20
ON3	Globalization of engineering, Interprovincial mobility, Washington Accord (WA seen as a problem for PEO).	Globalization	2	4	5	20
MB1	Competition from other nations.	Globalization	1D	4	4	16

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No.	1. What are the major challenges facing the profession in the next five years?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
OS2	Engineers Canada should continue to monitor and assess the impact of major trade deals currently underway (e.g. CETA, TPP) on the regulation and value of the engineering profession in Canada. There is a real possibility that international trade agreements threaten the licensure.	Globalization	1D	4	3	12
ON7	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Globalization	2	3	3	9
QC1	Globalization (outsourcing of engineering services)	Globalization	2	3	2	6
YK16	Alignment of all the CAs (engineering in NB should be the same as in BC and the Yukon - for	Harmonization	1A	4	5	20
YK13	Harmonizing things across the CAs so that from the engineers perspective, things like CPD are the same. Reduce duplication so that an engineer registering in multiple jurisdictions doesn't have to do lots of parallel application work.	Harmonization	1A	5	4	20
ON11	EC should be a body to encourage cooperation . Why does Canada have separate provincial standards? Can we not cooperate? Why all 12 develop individual standards? Work together on standards, practices and do it as a team.	Harmonization	1A	5	3	15
YK17	Major challenges are alignment of strategic policy/directions of all the constituent associations within Engineers Canada framework. This includes alignment of policy related to: - CPD (confidence in profession after Mt. Polley, Charbonneau and Elliott Lake) - streamlining qualified foreign credentials for registration - accreditation and qualification	Harmonization	1A	4	3	12
AB1	Regulation (of any sort) is not a privilege to be taken lightly. Maintaining the social acceptability of regulation is key. The lack of national alignment in our regulatory regimes will be a weakness of our profession's until we recognize the need to align.	Harmonization	1	3	3	9
NL5	Ensuring that national accreditation standards and entrance standards to the profession otherwise address the changing needs of the workplace and society.	High Std in Education	1C	5	5	25
MB3	Engineering education relevancy and service to society.	High Std in Education	1C	4	5	20
OS2	Consider the entrance requirement of an undergraduate degree (in science and math) before being eligible to apply for a professional degree program in applied science and engineering, similar to pharmacy.	High Std in Education	1C	3	3	9
YK12	Capitalizing on attracting (and making things easier) for foreign engineers entering Canada. As the baby boomer generation retires, the size of the educated workforce is reducing even though the engineering challenges facing Canada are not. Actively helping/recruiting/attracting foreign engineers is important in this, not just making things slightly easier for them to apply if they want.	Labour Market	E3	5	5	25
YK14	Retention of experienced people retiring faster than experienced people are coming in	Labour Market	E3	5	4	20
ON1	Massive unemployment among the cohort of engineers	Labour Market	1A	5	4	20
QC8	Adapting the offer to the demand in terms of the types of engineering jobs available	Labour Market	E3	4	2	8
QC9	Difficulty in filling positions in highly specialized emerging fields of engineering	Labour Market	E3	4	2	8
QC2	Massive retirements = loss of expertise	Labour Market	E3	2	3	6
ON12	EC should not do anything that adds to the supply side of engineers.	Labour Market	1A	2	3	6

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No.	**1. What are the major challenges facing the profession in the next five years?**	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
YK1	Ensuring that the value of engineering is recognized and enhanced in the eyes of politicians, policy-makers and law-makers.	National Voice	1E	5	5	25
SK6	Focusing government on existing infrastructure that is vulnerable to climate change. The temptation is to pursue new technologies without dealing with adapting the installed base of infrastructure.	National Voice	E2	4	5	20
ON10	More recognition by all levels of government.	National Voice	1E	4	5	20
SK1	Maintaining the trust of the public in light of significant failures and ethical scandals and the effect this may have on the privilege of self-regulation.	National Voice	1E	4	4	16
NL2	To retain and build on the well-founded confidence that the public has that engineers are both ethical and technical competent. This includes dealing with situations where engineering disasters occur in a way that addressees public concerns both with respect to the existing disaster and the future implications of those disasters	National Voice	1E	4	4	16
QC5	Weakening of public trust in engineers	National Voice	E2	4	3	12
YK10	What do Canadians really know about engineering as a profession? Letting the Canadian public know (or reminding them) what the profession is all about and how its relevant to problems facing Canada. Public relations campaign (possibly combined with previous bullet) talking about Elliot Lake Mall collapse and Mount Polley, also about challenges like climate change - how professional engineers can help and are helping. Address what's the difference between engineer and professional engineer.	National Voice	1E	3	3	9
YK9	Attracting graduating engineers into the profession - they don't always know much about it. Must first let them know that CAs exist and the benefits to them (and to the public) of being a P.Eng. Public relations campaign targeted to students (possibly combined with next bullet).	Outreach	E3	3	5	15
YK8	Promoting engineering profession in schools and colleges	Outreach	E3	3	5	15
YK11	Informing Canadian school students about engineering as a profession - deciding on a career is very difficult for high-school students. Support material for outreach to students would be good.	Outreach	E3	3	2	6
YK3	Reduced number of engineering graduates registering as professional engineers.	Outreach	E3	3	2	6
NL6	Being relevant and regulating all segments of engineering practice in Canada. Currently the federal government and more especially nationally regulated industries are not subject to the same regulation under the engineering acts as is engineering practice that operate under provincial jurisdiction. This also applies to emerging disciplines and at least one other discipline (software engineering) that has emerged for quite some time.	Proactive Regulation	E1	5	5	25
SK7	CAs respecting the independence of each others admissions processes and trusting each others admissions processes so we can sustain mobility and share and use data in the IIDD.	Proactive Regulation	E1	5	5	25
YK5	Consistency among all the CAs in process, registration and CPD	Proactive Regulation	1A	4	5	20

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No.	**1. What are the major challenges facing the profession in the next five years?**	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
NB3	Globalization Advances in international trade and business has resulted in an increased need for engineers to have their credentials recognized in other countries. It is important that the credentials for Canadian Engineers be recognized so they are able to be licensed to practice engineering in another country. On the other side of this issue is that IEGs are required to have one year of Canadian experience before they can get licensed to practice in Canada. a) Engineering on large scale Canadian projects being done outside our borders 1. Engineering 24/7 365 days per year b) Ensuring regulatory compliance on these projects is reviewed and documented 1. How is licensing being enforced/addressed	Proactive Regulation	1A	5	4	20
NS2	National Mobility – including more national focus of initiatives with collaboration and support through the national structure. We need to overcome the provincial differences to have a stronger profession. This includes a nationally adopted code of ethics, true mobility of CPD and true mobility of disciplinary decisions. It is our Council's view that a lack of a national regulatory focus with consistent processes has engineering lagging behind other professions such as the CPA profession.	Proactive Regulation	1A	5	4	20
NS4	Staying relevant as a regulator to the members, especially newly graduating engineers. This is especially noticed in our non-traditional branches of engineering, including those branches that typically do not need a stamp on documents.	Proactive Regulation	E3	5	4	20
ON9	Emerging disciplines and having a national horizon watch	Proactive Regulation	E1	4	5	20
YK2	Defining when an engineer is legally required to perform certain services, and achieving legal consistency across the country.	Proactive Regulation	1A	4	4	16
QC3	Internal and external mobility in Canada	Proactive Regulation	1A	4	4	16
BC1	Relevance and challenges to regulation with respect to the engineering profession of the 21st century: a. Regulation of emerging disciplines: i. The definition of professional engineering is difficult to use when it comes to encompassing emerging disciplines. ii. Complementary activities Instead of updating the definition are possible but can the regulators legitimately lay claim to new areas of practice through developing practice guidelines and accrediting new programs? iii. Establishing the value-added aspect of professional registration.	Proactive Regulation	1A	4	4	16
YK6	Smooth line the registration of foreign qualified engineers in CAs	Proactive Regulation	2	4	4	16
SK8	Managing the aspirations of the technologists who, across Canada, are seeking to obtain an independent scope of practice within the practice of professional engineering.	Proactive Regulation	1A	3	5	15
NB2	National/International Mobility a) Assessment of International Engineering Graduate credentials b) Development of Mutual Recognition Agreements (EC input required) c) Free Trade Agreements d) One year of Canadian work experience	Proactive Regulation	1A	5	3	15

Input for Strategic Direction

No.	**1. What are the major challenges facing the profession in the next five years?**	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
BC5	Relevance and challenges to regulation with respect to the engineering profession of the 21st century: Role and Aspiration to Practice Rights for non-Alberta Professional Technologists i. Will the role of professional technologists erode the position of licensed professional engineer and endanger the public interest? ii. Is there a definition of engineering technology that is separate from professional engineering?	Proactive Regulation	1	3	5	15
YK4	Consistent, robust and expedient system of evaluating foreign-trained credentials.	Proactive Regulation	1A	4	3	12
SK5	Managing the current volume of IEG applicants in a slow economy.	Proactive Regulation	E1	5	2	10
BC3	Relevance and challenges to regulation with respect to the engineering profession of the 21st century: - Understanding the challenges to public and environmental safety faced by members	Societal Leadership	1E	4	4	16
OS5	Focusing on societal benefit	Societal Leadership	1	4	4	16
NS3	International mobility.	Valued Profession	2	5	4	20
MB4	Cultural shift from retiring Baby Boomers to Millennials.	Valued Profession	4	4	4	16
OS3	Industrial exception threatens growing or maintaining P.Eng. membership. Indeed, comments have been heard from engineers indicating that they would rather not be forced to obtain licensure in order to practice. The many engineering graduates who do not obtain licensure but perform a variety of engineering like tasks, software design for example, reflect a portion of the potential professional engineering community that are not pursuing licensure.	Valued Profession	E3	4	4	16
BC4	Relevance and challenges to regulation with respect to the engineering profession of the 21st century: - Engineering as a commodity: as engineering grows into more shared fields and information is widely and instantly available, some engineering is becoming commodity that is being (and in some cases can be) provided by others. In order to protect the public interest and stem the gradual incursion of others into professional engineering by others who are not licensed nor qualified to do certain engineering work, the profession needs to better articulate the value proposition of innovation, value and accountability that professional engineers provide to engineering versus the more routine or prescriptive work that can be done by others,	Valued Profession	1D	4	4	16
BC6	Economic downturn affecting employment of members thus relevance/value of members to employers is critical	Valued Profession	1D	4	4	16
BC2	Relevance and challenges to regulation with respect to the engineering profession of the 21st century: - Relevance to upcoming generations of engineers	Valued Profession	1D	4	4	16
OS4	Evolutionary capacity Now: Ontario and Canada are attempting to evolve into a new economic engine. There's evidence that engineering is falling behind – we're no longer at the forefront. Science and technology continues to accelerate, but how is engineering accelerating? Future: We need to catch up, keep up and lead.	Valued Profession	1	4	4	16

Input for Strategic Direction

No.	**1. What are the major challenges facing the profession in the next five years?**	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
OS1	Erosion of professional practice through ongoing competition for engineering work based on price instead of value. This is not only caused by globalization of services, but actively practiced domestically (for the past decades) among firms that bid competitively for work and then download low-bid projects onto engineers expected to render a professional service.	Valued Profession	1D	5	3	15
SK2	Maintaining the privilege of self-regulation.	Valued Profession		4	3	12
SK4	Current economic slowdown and associated employment issues.	Valued Profession	1D	4	3	12
QC4	Erosion of the engineer's important role in public safety (fewer responsibilities defined in standards and norms)	Valued Profession	1D	4	3	12
ON8	Value of the license practicing vs non practicing engineers. Need to increase the value of the license.	Valued Profession	1D	3	4	12
OS1	Overcoming the trend of price vs. value requires a strong (national) regulatory attitude towards minimum acceptable practices within the profession of engineering (i.e. Strong Active Enforcement). In addition to this, public awareness is critical.	Valued Profession	1D	3	4	12
OS3	Forming a stronger identity Now: We are somewhat insecure, lacking a common definition of who an engineer is or what she or he does. Future: We need to be confident and proud. We need to work on diverse teams, where we're integrated with specialists in other areas, and clear on what engineers bring to the table. We need to redefine and reclaim our common identity.	Valued Profession	1D	3	4	12
YK15	Old infrastructure and small budget	Valued Profession		3	2	6
NT2	Changing structure of engineering firms (losing local firms to large firms).	Valued Profession		3	1	3

Input for Strategic Direction

No.	1 (a). What is needed to overcome them (the major challenges facing the profession in the next five years)?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
MB5	Diversity: affirmative action? Innovative policies? Cross-cultural sensitivity training. Openness to the obvious changes in the profession in Canada.	Diversity & Inclusion	E3	4	4	16
PE1	One of the major challenges facing the profession in the next five years includes how to achieve the 30/2030 goal, which is only 14 years away.	Diversity & Inclusion	E3	4	4	16
NT2	Business training in organizational structures.	Enabling Eng. Canada	G	5	5	25
NB2	Strong relationship between Engineers Canada, the Constituent Associations, the Federal Government (CIC), Provincial & Territorial Governments, and International Organizations.	Enabling Eng. Canada	4	4	4	16
BC3	Recruit a blue ribbon volunteers who feel the new issues and can frame them for Engineers Canada with an outward-looking approach	Enabling Eng. Canada	G	3	5	15
MB6	Greater effort on ethics and good character training and testing.	Excellence & Integrity	1B	5	5	25
QC1	Maintain a high level of expertise among engineers	Excellence & Integrity	1B	5	4	20
QC2	Provide mentoring	Excellence & Integrity	1B	5	4	20
YK3	Better planning for mentorship program and overlap of EIT and intermediate with senior level	Excellence & Integrity	1B	4	3	12
QC7	Implement a program of transitional training (from one field to another)	Excellence & Integrity	1B	3	3	9
NT1	Ongoing professional development.	Excellence & Integrity	1B	4	2	8
QC8	Encourage interprovincial internships	Excellence & Integrity	1B	3	2	6
QC5	Promote Canadian engineering expertise abroad	Globalization	2	4	4	16
NS1	More trust and cooperation between provinces - not simply talking about it, but actually doing it.	Harmonization	1A	5	5	25
PE2	With respect to implementing relevant national standards to facilitate mobility, we noted that teamwork, collaboration and the establishment of timelines would be important considerations.	Harmonization	1A	5	3	15
YK5	Integrated approach across Canada (CAs) to regulate engineering	Harmonization	1A	5	3	15
MB1	Robust education system with flexible, competitive syllabi.	High Std in Education	1C	5	4	20
NB1	Trust (public and stakeholders), Transparency, Consistency, Communication	National Voice	1E	4	4	16
NS2	Leadership from Engineers Canada to manage and deliver the message.	National Voice	1E	4	4	16
QC3	Promote the image of engineering and the contribution engineers make to the public good in order to reinforce the profession's position as government's trusted technical source	National Voice	1E	4	4	16
SK1	Educate members and the public.	National Voice	1E	4	4	16
SK3	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	National Voice	1E	4	4	16
YK1	Items (a), (b), and (c) are interconnected. Promoting and reminding politicians and lawmakers of the engineers role in protecting public safety. For item (d) - as retirements from the profession are expected to exceed new registrants, the shortfall will probably need to be filled by foreign-trained engineers. This item requires allocation of resources to create a nationally-accepted program	National Voice	1E	4	4	16
MB4	Strong advocacy programs; reaching government and the public.	National Voice	1E	4	3	12
QC4	Organize a public campaign to raise awareness about the legal responsibility and benefits of using engineers to explain standards and technical issues	National Voice	1E	4	3	12
YK2	Promoting the profession	National Voice	1E	4	3	12

Input for Strategic Direction

No.	1 (a). What is needed to overcome them (the major challenges facing the profession in the next five years)?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
YK4	Ensure that government is provided with the information necessary to understand the challenges faced by the various provinces and municipalities	National Voice	E2	5	2	10
QC6	Lobby for the inclusion of engineers within governmental and private decision-making spheres (e.g., organizations that develop national norms and standards)	National Voice	1E	4	2	8
MB3	Strong outreach to parents, youth and collaboration with employers.	Outreach	E3	3	3	9
BC1	The profession needs to establish the value-added aspect of professional engineer/geoscientist registration/licence to all practitioners in all disciplines/areas of practice.	Proactive Regulation	1A	4	4	16
BC2	Collaboration to discuss the needs and challenges to the profession of the 21st century	Proactive Regulation	1	4	4	16
SK2	More sharing of information on IEG assessment and finishing the IIDD tool.	Proactive Regulation	E1	4	4	16
MB2	Open minds, open thinking, flexible attitudes.	Proactive Regulation	1	4	3	12

Input for Strategic Direction

No.	2. What is the one need that, if met, would immediately assist your association?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
AB1	Improve internal coordination so as to maximize the contribution of the limited CA resources.	Enabling Eng. Canada	OE	5	5	25
ON6	Regularly scheduled component of PEO Councils agenda for two-way communication with Engineers Canada	Enabling Eng. Canada	G	5	5	25
NS1	A more appropriate funding structure for Engineers Canada. It is our strong view that Engineers Canada revenues should come primarily from the constituent associations. It is also our strong view that affinity revenues should flow directly to those constituent associations that actively support the affinity programs.	Enabling Eng. Canada	G	4	4	16
QC1	The most pressing need is professionalism and ethics: Communicate with and educate the engineering community about professionalism and ethics in order to protect the profession's reputation and build public trust.	Excellence & Integrity	1B	4	5	20
YK3	Alignment of all the CAs for everything	Harmonization	1	4	4	16
NS2	Constituent associations need to act more decisively on initiatives that they claim to support.	Harmonization	1	4	4	16
NS3	There should be increased opportunities for constituent association staff to cost-effectively collaborate and share information and resources.	Harmonization	1	4	4	16
ON5	Promote the advantages of our licensing system.	Harmonization	1	4	3	12
YK4	Unified approach to CPD	Harmonization	1B	4	3	12
YK1	A common registration system among the CAs	Harmonization	1	3	2	6
YK2	Taking care of common administrative functions that would offload tasks from the smaller CAs, e.g., common registration online just check off which associations you're applying to and enter credit card number	Harmonization	1	3	2	6
PE1	E-3 (Sustainability of the Profession) is important to focus on. More collaboration is needed and more materials that can help "sell" the profession would be helpful.	National Voice	1E	4	5	20
MB1	Strong advocacy programs; reaching government and the public.	National Voice	1E	4	5	20
NL1	Progress in the professional regulation of federally regulated industries and government departments.	National Voice	1E	4	4	16
NB1	Engineers Canada can lobby the federal government to help in improving the profile and public perception of the profession. The Constituent Associations and Engineers Canada can do a better job in educating the public on the engineering profession and how our members work daily to ensure the public is kept safe. We need to reach a broader audience and Engineers Canada can assist with delivering this message.	National Voice	1E	4	4	16
ON4	Branding exercise for engineering.	National Voice	1E	3	5	15
ON1	Communicating to the public the value of professional engineers	National Voice	1E	5	2	10
ON3	National marketing campaign similar to what the CPAs are doing.	National Voice	1E	5	1	5
OS1	The critical need is the recognition of the essential need for engineering advocacy with the public and government (at all levels). There is a general need for engineers in advocacy in all provinces and levels of government. Engineers Canada need to encourage other provincial professional bodies to advocate on issues of importance to engineering.	National Voice	1E	5	1	5

Input for Strategic Direction

No.	2. What is the one need that, if met, would immediately assist your association?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
SK1	Complete the IIDD tool.	Proactive Regulation	E1	5	5	25
ON7	Federal government engineers should be licensed	Proactive Regulation	1A	4	5	20
NT1	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Proactive Regulation	E1	4	5	20
BC1	Form a cross-Canada task group to evaluate the current move for technologists to gain practice rights and to make recommendations for a national approach to regulation of the practice of engineering technology and the implications for public protection.	Proactive Regulation	1A	3	4	12
ON2	Get national demand side legislation	Proactive Regulation	1A	3	2	6

Input for Strategic Direction

No.	3. What is the greatest opportunity to provide the engineering community with value that we're missing as Engineers Canada?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
AB1	Engineers Canada could be a powerful force to bring together opinions and expertise to create national direction on a myriad of issues. The Board of EC needs to identify who the benefactor(s) is/are of its effort and then tailor its work to deliver value to those stakeholders. For example, the CEO Group has clearly stated its priorities to the EC Board. This could be a significant start point for the Board to align its efforts to deliver value aimed at these priorities.	Enabling Eng. Canada	G	4	4	16
NS2	Provide more effective governance. The Engineers Canada Board has grown in size to the point where it is not particularly effective. It is our view that a plan should be put in place to reduce the Board size within the next 5 years.	Enabling Eng. Canada	G	4	4	16
NS1	Return affinity revenues to the constituent associations that actively support the affinity programs.	Enabling Eng. Canada	G	4	4	16
BC1	Guidance to members on how to carry out professional engineering activities in a manner that meets the engineers professional obligations under the required legislation.	Excellence & Integrity	1B	4	5	20
NB4	Continued Competency and Educational programs	Excellence & Integrity	1B	4	4	16
NB2	Leadership and Professional Development	Excellence & Integrity	1B	4	4	16
NS3	Provide cost-effective professional development opportunities.	Excellence & Integrity	1B	4	4	16
NB3	Providing support in the development of PD workshops and webinars	Excellence & Integrity	1B	4	3	12
YK2	A unified system of registration and consistency among all the CAs	Harmonization	1A	5	5	25
YK3	Harmonization of CAs	Harmonization	1	5	5	25
SK2	Communication between CAs of regulatory differences that lead to equivalent outcomes (regulations, standards and processes).	Harmonization	1A	4	3	12
YK1	Harmonization of requirements among the CAs: CPD, ethics, foreign-trained qualifications assessments	Harmonization	1A	4	2	8
NL1	An important element is value that engineers bring as generators of economic wellbeing, which includes improving the productivity of the country. The productivity of Canada as it lags its comparable countries is a well-known matter of concern and one that will require more effort by the country over the next while. Engineers Canada should incorporate this into many of its initiatives. The economic elements of the accreditation should be reviewed to ensure engineers understand their role in this area and have the appropriate tools to do so.	High Std in Education	1C	4	5	20
ON2	Engineers Canada should consult with stakeholders and bring ideas forward to constituent associations (for example OSPE)	Issues & Trends	2	4	5	20
NS4	We actually serve the public, not our members - perhaps this is a different question that should be asked.	Issues & Trends	1	4	5	20
BC3	Identifying industry trends and issues (e.g. when, where, and how does outsourcing occur, how have engineering shortage predictions panned out in reality) that will enable CAs to use data to evaluate and take action as necessary	Issues & Trends	1E	1	4	4
ON1	Promote recognition of Engineering disciplines and their value	National Voice	1E	4	5	20
NB1	Public Trust and Public Confidence in the Profession advertising campaign	National Voice	1E	4	4	16
SK1	Coordinated national communications program.	National Voice	1E	4	3	12

Input for Strategic Direction

No.	**3. What is the greatest opportunity to provide the engineering community with value that we're missing as Engineers Canada?**	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
QC1	Provide national visibility to raise the profession's profile	National Voice	1E	4	2	8
SK4	Develop a guideline for assessing competencies of applicants before CAs independently develop different competency assessment tools.	Proactive Regulation	E1	5	5	25
YK4	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Proactive Regulation	E1	4	5	20
BC2	Relevance of action for todays engineering community and building collaboration among the provinces/territories to achieve it. Engineers Canadas greatest opportunity is to bring the profession together to discuss real issues facing the profession (the practising profession) on a proactive basis and to share innovative practices among the regulators.	Proactive Regulation	1	3	2	6
SK3	Share information with the CAs about Professional Development programs utilized by each of the CAs, and maintain and update the current guideline.	Promising Practices	1	5	5	25
OS1	Bring the key topics of environment and energy at the federal level to work closely with our provincial associations In terms of the profession, an opportunity exists to be restructured. The study of engineering should require an advanced degree. A 4-year program of undergraduate study is no longer adequate. Engineering practice should be licensed by discipline-specific practice. Common general engineering licensure is a disservice to the profession and to the public which it serves.	Valued Profession	1	4	5	20
MB1	One strong unified advocacy voice for the profession – similar to the CPAs.	Valued Profession	1	4	5	20

Input for Strategic Direction

No.	4. Are there particular needs/issues you would like Engineers Canada to address?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
SK5	Increasing aboriginal participation in the profession.	Diversity & Inclusion	E3	4	4	16
YK3	Promotion of 30x30	Diversity & Inclusion	E3	4	4	16
PE1	Engineers Canada directors should be encouraged to become more aware of local issues and practices. (for example: encouragement to attend council meetings)	Enabling Eng. Canada	G	4	5	20
BC3	Minimize the focus on Engineers Canada governance and the perceived need for every regulator to do things the same way. We feel that this suppresses innovation. There are great ideas and great challenges in the provinces and territories - facilitate sharing them and finding solutions.	Enabling Eng. Canada	G	4	5	20
NS1	Develop and implement a more appropriate funding structure for Engineers Canada. It is our strong view that Engineers Canada revenues should come primarily from the constituent associations. It is also our strong view that affinity revenues should flow directly to those associations that actively support the affinity programs.	Enabling Eng. Canada	G	4	4	16
NB1	Ownership Linkages For far too long there has been a level of distrust and what some feel is a lack of transparency between Engineers Canada and some of the Constituent Association members. a) Improvement on communication and transparency will go a long way to build confidence and trust in the daily operations of Engineers Canada. b) The provincial director on the Board for Engineers Canada should also have a seat on the Council for the Constituent Association. This would assist in the flow of communication between the CAs and Engineers Canada board.	Enabling Eng. Canada	G	4	4	16
NS2	The Engineers Canada Board has grown in size to the point where it is not particularly effective. It is our view that a plan should be put in place to reduce the Board size within the next 5 years.	Enabling Eng. Canada	G	4	4	16
MB3	Otherwise, Manitoba is satisfied with the support and programming provided by Engineers Canada: support resources provided by the accreditation officials and professional practice guidelines. The Board can set the agenda and pick one to go after.	Enabling Eng. Canada	OE	3	5	15
QC2	Student mobility (needs in certain sectors and/or provinces are not being met)	Harmonization	1	4	5	20
SK3	Engineers Canada should facilitate an ongoing dialogue among the CAs to discuss processes that can achieve equivalent public safety and regulatory outcomes (i.e.: CPD, competency based reporting, academic assessment, etc.).	Harmonization	1	4	4	16
ON1	Strong accreditation system is highest priority.	High Std in Education	1C	5	5	25
YK1	Items (a) and (b) in the first column Resolution of the concerns expressed by Engineering Deans associated with the Accreditation Board.	High Std in Education	1C	4	5	20
QC3	National market needs for engineers	Labour Market	1D	4	5	20
YK4	Become more of an advocate for the Engineering Profession	National Voice		5	5	25
QC4	National position statements (to protect the public)	National Voice	1E	4	5	20
NL1	Greater emphasis on federal government matters such as federally regulated industries, demand side legislation and the value that engineers bring as economic generators for the country.	National Voice	1E	4	4	16
YK2	Supporting outreach to schools is my favourite.	Outreach	E3	3	4	12

Input for Strategic Direction

No.	4. Are there particular needs/issues you would like Engineers Canada to address?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
MB2	Agreement between all provinces to give an exemption to any engineer licensed in multiple jurisdictions if the engineer reports CPD in their home province.	Proactive Regulation	1B	4	5	20
BC1	Facilitate a national approach to technologists/technicians, their goals to or current rights to practice embedded in Engineering Acts or 3rd party legislation, and the overlap with the practice of professional engineering.	Proactive Regulation	1	5	4	20
SK1	As Engineers Canada has recognized, it does not regulate the engineering profession, but should continue its consultation with the CAs in its development of guidelines to assist them in their regulatory function.	Proactive Regulation	OE	4	4	16
SK2	Engineers Canada and the CAs must respect the independence of each other, differences in their regulatory functions and NOT be involved in attempting to develop a national licence scheme.	Proactive Regulation	E1	4	4	16
QC1	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Proactive Regulation	E1	4	4	16
NS3	Projects need to be finished, not just started. Examples would be the National Database and the Competency-Based Assessment program.	Proactive Regulation	OE	4	4	16
AB2	All CAs have strategic plans. EC should review them and see where the significant overlaps are and focus the discussions on these. PEO and APEGA have several similarities in their strategic plans.	Proactive Regulation	1	3	5	15
AB1	CBA – EC should confirm its commitment to CBA and have its appropriate bodies work together to benefit the CAs. For example, has QB fully developed/agreed with the competencies that APEGBC have been working on? Could these be exported to all CAs? Then we could look at the tools to implement.	Proactive Regulation	E1	3	4	12
BC2	Facilitate alignment of investigation and discipline principles, procedures and understanding of staffs roles and responsibility across the country.	Promising Practices	E1	5	5	25
SK6	Encouraging participation in forums/gatherings of CA staff and volunteers to facilitate development and sharing of operational successes and problems.	Promising Practices	1	4	5	20
SK4	Sharing 30 by 30 strategies and activities among CAs and proposing initiatives that CAs can consider for implementation within their province or territory.	Promising Practices	1	4	4	16
MB1	Engineering services being treated like a commodity	Valued Profession	1D	4	4	16

No.	5. What are the most critical outcomes that Engineers Canada should seek to achieve?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
YK2	Attracting greater/more diverse people into engineering schools and into the profession. Must start young.	Diversity & Inclusion	E3	4	4	16
YK4	Ensuring Professional Engineering remains current and vital and promotion of membership growth	Diversity & Inclusion	E3	4	4	16
SK3	Provide leadership and coordination of 30 by 30 initiatives. We need more than a slogan.	Diversity & Inclusion	E3	4	4	16
BC2	Build a base of respected volunteers whose advice is of value and can be turned into practical solutions that help the profession	Enabling Eng. Canada	OE	5	5	25
NS2	The Engineers Canada Board has grown in size to the point where it is not particularly effective. It is our view that a plan should be put in place to reduce the Board size within the next 5 years.	Enabling Eng. Canada	G	5	5	25
NS3	The Board needs to be created with competencies in mind. Board members may be too invested in the organization.	Enabling Eng. Canada	G	4	4	16
NS1	The Ends continue to be a concern. Many Councillors feel that the monitoring reports do not reflect operational realities.	Enabling Eng. Canada	G	4	4	16
NB1	The most critical outcomes for Engineers Canada to achieve are defined by the Ends policies. Engineers Canada needs to focus on achieving the current Ends. As the current Ends are achieved new Ends can be added.	Enabling Eng. Canada	OE	4	4	16
SK5	Ensure CAs have the opportunity for input to and approval of the strategic plan, including the budget	Enabling Eng. Canada	G	3	2	6
NL2	Continuing competence standard models that if adopted by the associations would assure the public that the associations are providing reasonable assurance of ethical and competent practice	Excellence & Integrity	1B	4	5	20
BC1	Coordination of research and policies for addressing regulatory issues across the constituent associations to stop the overlap of work and encourage the sharing of information. Currently, communications across the CAs on regulatory matters is sporadic.	Harmonization	1	4	4	16
PE1	We reviewed the report from the Big Picture Thinking session February 28, 2014 Consistency among the constituent associations regulatory standards and practices to protect and serve the public interest`` and think it remains relevant and covers the critical outcomes that Engineers Canada should continue to achieve.	Harmonization	1A	5	2	10
NL1	Accreditation standards that are world class and that address the future needs of society	High Std in Education	1C	4	5	20
MB1	Changes to the present system of education and regulation that support a more robust and resilient Canadian profession. We need to foster competitiveness.	High Std in Education	1C	4	5	20
OS1	The most critical is Federal-Provincial working forums. As PEO is not charged with advocacy it is necessary that OSPE have a seat at the Engineers Canada table.	National Voice	1E	4	5	20
NL3	Interaction with the federal government that ensures that the federal governments role in ensuring that engineering practice within the federal government or in its regulated industries are done by qualified and licensed engineers.	National Voice	1E	4	4	16
SK1	Raise the profile of the profession with a coordinated national advertising campaign.	National Voice	1E	4	4	16
QC1	National visibility for engineers (Hall of Fame, etc.)	National Voice	1E	3	5	15

Input for Strategic Direction

No.	5. What are the most critical outcomes that Engineers Canada should seek to achieve?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
YK1	Ensuring that the profession remains vital and recognized for its role in protecting public safety	National Voice	1E	4	3	12
YK3	Alignment of all CAs and promoting the profession (if manpower is available, promotion within high schools and universities would be important, CAs do not always get around to do enough of it)	Outreach	E3	3	3	9
NT1	Accreditation of engineering at universities, and of foreign engineers.	Proactive Regulation	E1	5	5	25
SK2	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Proactive Regulation	E1	5	5	25
SK4	Encourage CAs to move to competency assessment programs for assessment of engineering work experience.	Proactive Regulation	1	4	4	16
AB1	Common services/efforts on behalf of the regulators. No need to invent 12 wheels when one wheel can serve all CAs. While 100% alignment and convergence is unlikely EC does need to aim at about 65% is good enough.	Supporting Regulators	E	4	5	20

Input for Strategic Direction

No.	6. What are the strengths (and weaknesses) of the current Ends?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
BC8	E 2.3 Relationships with others whose work and practice is aligned with professional engineering are informed, strong and support protection of the public interest	Diversity & Inclusion	E2	4	4	16
BC2	E-1.1 Accreditation of Canadian engineering programs promotes and encourages high standards in engineering education, meets the academic requirements for licensure and is recognized globally for the purposes of mobility of engineers.	Diversity & Inclusion	E1	4	4	16
BC3	E-1.2 Information, systems and agreements to facilitate national and global mobility for registered engineers	Diversity & Inclusion	E1	4	4	16
BC4	E-1.3 Development and sharing of tools and guidance on how to carry out professional engineering activities in a manner that meets the engineers professional obligations (under their respective legislation).	Diversity & Inclusion	E1	4	4	16
BC5	E1-4 Alignment of investigation and discipline principles and procedures and provision of information and systems that promote the members responsibility to share information towards the protection of the public.	Diversity & Inclusion	E1	4	4	16
BC7	E-2.2 The public confidence and public expectations of the profession are sustained and improved and appropriate actions are taken by the profession to meet this end.	Diversity & Inclusion	E2	4	4	16
BC6	E2-X (New) The confidence of professional engineers/ingnieur(e)s in the self-regulation and relevance of the profession is high and their feedback on ways to improve the profession is sought and considered.	Diversity & Inclusion	E2	4	4	16
BC9	E-3 Engineering is recognized as a relevant, valuable and value-added profession. This End shall be allocated between 15 and 25 percent of the operational budget.	Diversity & Inclusion	E3	4	4	16
BC10	E-3.1 add EC volunteer membership that is reflective of the demographics of the profession	Diversity & Inclusion	E3	4	4	16
BC11	E-3.1.1 To ensure a supply of engineers needed to support Canadas needs, an equivalent number to the number Canadian engineering graduates for each graduating year applies for licensure in Canada.	Diversity & Inclusion	E3	4	4	16
BC12	E-3.1.2 delete - self-evident	Diversity & Inclusion	E3	4	4	16
BC13	E-3.2 New areas of engineering practice are identified and information and tools are proactively developed for the use of the members	Diversity & Inclusion	E3	4	4	16
BC14	E-3.3 - Is this a role for Engineers Canada?	Diversity & Inclusion	E3	4	4	16
NS1	They can be tweaked but they are not the real issue. Several of the ends need more focus and attention.	Diversity & Inclusion	E	4	4	16
YK4	Regulatory Excellence; Sustainability of the Profession; Confidence in the Profession; Protection of Engineering Terms are all very still very relevant and should continue to be our cornerstone ends. The only weakness I would suggest would be to do with Growth of the Profession in terms of expanding roles of engineering as well as promotion of growth in membership.	Enabling Eng. Canada	G	3	2	6
OS1	The value to the public should be highlighted as well.	Enabling Eng. Canada	E	2	4	8
YK3	Does E-4 Protection of Engineering Terms really require hard goal of 10% of overall resources?	Enabling Eng. Canada	E4	2	5	10

Input for Strategic Direction

No.	6. What are the strengths (and weaknesses) of the current Ends?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
NL2	A weakness is that whereas the associations manage their relationships with the provincial government, and that is an important part of what they do, they rely on Engineers Canada to be their means to manage relationships with the federal government. The existing E 2.1 does not reflect the importance of this end to the profession.	Enabling Eng. Canada	E2	4	3	12
YK2	Most of my suggestions above relate to E-2 Confidence in the Profession and E-3 Sustainability of the Profession. These are probably the areas with the biggest potential for improvement.	Enabling Eng. Canada	E2	3	4	12
YK1	I think the current Ends are sufficient	Enabling Eng. Canada	E	3	5	15
SK6	The inadequately defined current ends have allowed Engineers Canada to develop into an organization seeking purpose and undertaking an agenda without regard to the demonstrated needs of the CAs.	Enabling Eng. Canada	G	3	5	15
BC15	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Enabling Eng. Canada	E4	4	4	16
SK5	The Board needs to revisit the percentages of time and financial resources allotted to each End (see comment re: CEAB and CEQB below).	Enabling Eng. Canada	G	4	4	16
NL1	A strength is that the ends generally mirror many of the elements of the associations ends or goals.	Enabling Eng. Canada	G	4	5	20
MB1	End 1 - Regulatory excellence End 2 - Confidence in the Profession End 3 - Sustainability of the Profession End 4 - Protection of Engineering Terms. Strengths: the four Ends seem properly targeted and current. Weakness: "buy-in" from board members to actually work collectively towards achieving the Ends.	Enabling Eng. Canada	G	5	4	20
SK2	End E-1 change facilitate to promote. This makes it more measureable. o E Purpose statement replace on behalf of its with to the. Engineers Canada doesn't own the regulators.	Enabling Eng. Canada	E	4	5	20
OS6	More work could be done here to understand the evolving scope of engineering practice and to identify emerging disciplines and their definitions. This will be imperative in emerging fields such as disruptive technologies, nanotechnology, bio-medical advances, climate change solutions, such as new energy sources, etc. that are already well underway and will soon be creating a paradigm shift in our economy and our society.	Enabling Eng. Canada	E3.2	4	5	20
NT2	Not sure what some of them are actually trying to achieve.	Enabling Eng. Canada	G	5	4	20
SK1	Some ends are too broadly worded and cant be defined or measured. The CEO can only be accountable for his actions, not what third parties think of his actions.	Enabling Eng. Canada	G	4	5	20

Input for Strategic Direction

No.	6. What are the strengths (and weaknesses) of the current Ends?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
NB2	The Engineers Canada Board of Directors needs to accept the decision to move to the Policy Governance/Carver Model and allow the CEO and his staff to do what is needed within acceptable limitations to achieve the ends. Don't criticize the process unless you have a better way of doing it and are willing to commit the time, and energy to implement your plan in a timely and effective manner. The one thing that appears to be lacking at the moment is the Assurance of Organizational Performance.	Enabling Eng. Canada	G	4	5	20
QC1	The new governance model is having problems taking hold. After three years, the model is still not functioning properly and does not appear to meet the needs and expectations of the Board. Information about Engineers Canada activities does not receive enough visibility and the current Board is not quick to respond.	Enabling Eng. Canada	G	5	4	20
SK4	There is concern about the direction that Engineers Canada is taking with respect to its role as facilitator compared to the role of the CAs as regulators. The ends need to address the latitude delegated to the Engineers Canada staff in supplanting the role of the CAs as regulators.	Enabling Eng. Canada	G	4	5	20
SK3	There is inadequate communication between the CEO and the Board as to what exactly the organization should be doing (i.e. the three key activities for the year). What is, or is not, operational interferes with a frank exchange of information and Board direction.	Enabling Eng. Canada	G	4	5	20
NB1	In Policy Governance, the board has three primary jobs: Ownership Linkage - connecting with owners to learn their values about ends that are desired and means that would be unacceptable; Policy Development - writing those values as guidance for organization and for the board itself; and Assurance of Organizational Performance - monitoring to ensure the organization demonstrates reasonable progress toward desired ends and reasonable compliance with policy guiding means. The board's focus is at the broadest level of policy informed by the ownership's values. When writing policy, the board only goes into as much detail as needed, and stops making policy when it can accept any reasonable interpretation of its policy language.	Enabling Eng. Canada	G	5	5	25
NT1	They are very general, don't seem to have a focus or specific goal.	Enabling Eng. Canada	G	5	5	25
OS3	This is the most visible and rigorously exercised mandate of Engineers Canada, and is demonstrated via its activity with engineering programs	High Std in Education	E1.1	4	4	16
OS5	Being linked to current documentation that reports on these public perceptions (and related actions flowing from public responses).	National Voice	E2.2	3	3	9
OS4	Recognizing that this isn't how other provincial associations are currently structured, it is still imperative to have a similar voice at the national level that influences public policy in several federal government portfolios in which the engineering profession can and will play an important role: climate change and the environment (which is very high profile to this government); new energy sources in addition to carbon-based ones; infrastructure investments (airports, highways, public transit, housing, municipal works, etc.); technology and innovation; advanced manufacturing; natural resources; implications of international trade deals (CETA, TPP); labour market, economic and productivity issues.	National Voice	E2.1	3	4	12

Input for Strategic Direction

No.	**6. What are the strengths (and weaknesses) of the current Ends?**	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
OS2	Very little of this flows down to a practicing engineer in terms of guidance via best practices or practice standards	Proactive Regulation	E1	2	4	8
BC1	E-1 A proactive network that builds collaboration among the members and effectively shares, develops and transfers knowledge and tools to facilitate excellence in the profession is available to the constituent associations. This is highest priority among Ends and shall be allocated no less than 40 percent of the operational budget.	Proactive Regulation	E1	4	4	16

Input for Strategic Direction

No.	6. (a) What's missing?	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
NB1	In Policy Governance, the board has three primary jobs: Ownership Linkage - connecting with owners to learn their values about ends that are desired and means that would be unacceptable; Policy Development - writing those values as guidance for organization and for the board itself; and Assurance of Organizational Performance - monitoring to ensure the organization demonstrates reasonable progress toward desired ends and reasonable compliance with policy guiding means. The board's focus is at the broadest level of policy informed by the ownership's values. When writing policy, the board only goes into as much detail as needed, and stops making policy when it can accept any reasonable interpretation of its policy language.	Enabling Eng. Canada	G	5	5	25
SK2	The accountability of Engineers Canada as an organization to its members.	Enabling Eng. Canada	G	4	5	20
SK4	The Board needs more input into what is operational and what is not.	Enabling Eng. Canada	G	4	5	20
NB2	The Engineers Canada Board of Directors needs to accept the decision to move to the Policy Governance/Carver Model and allow the CEO and his staff to do what is needed within acceptable limitations to achieve the ends. Don't criticize the process unless you have a better way of doing it and are willing to commit the time, and energy to implement your plan in a timely and effective manner. The one thing that appears to be lacking at the moment is the Assurance of Organizational Performance.	Enabling Eng. Canada	G	4	5	20
SK1	There is only a very weak linkage between the members (CAs) needs and much of the activity of Engineers Canada, and a very limited opportunity for the CAs to define their needs and obtain the assistance of Engineers Canada.	Enabling Eng. Canada	G	4	5	20
ON6	Associations should see value for money Do not want consistency among associations we want to maximize something or maintain something, but not consistency.	Enabling Eng. Canada	G	5	4	20
ON4	There are no hard metrics: nothing to hold Engineers Canada (and its CEO) accountable	Enabling Eng. Canada	G	5	4	20
ON7	We need motivation to change beyond consistency.	Enabling Eng. Canada	G	4	5	20
ON5	What's missing is an End regarding how constituent associations money is spent.	Enabling Eng. Canada	G	5	4	20
SK3	The main activities undertaken by Engineers Canada that are of value to the CAs are CEAB and CEQB activities, developing and renewing MRAs and carrying on federal government relations. There should be ends policies specifically developed under CEAB and CEQB responsibility to ensure their activities are properly resourced.	Enabling Eng. Canada	G	4	4	16
YK1	This could be a sub goal or E-2 or E-3, but addressing item (b) would be of value, particularly in the context of such situations as the recent removal of the word engineer from national technical standards: an action that jeopardizes public safety.	Enabling Eng. Canada	G	3	5	15
NT1	Status reports on goals achieved.	Enabling Eng. Canada	G	3	4	12
ON8	Want to focus on the core deliverables don't create more Ends, do better achieving the ones we've got.	Enabling Eng. Canada	G	4	3	12
AB1	The measures of success in the GP 11.1 are fairly light. It is great that the linkages TF has CEOs on the TF but there is no mention of the CEOs as part of EC's linkages (at least not in this GP). CEOs are a key linkage to EC and perhaps we need to think about how this link can be better leveraged.	Enabling Eng. Canada	G	4	3	12

No.	**6. (a) What's missing?**	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
ON1	The Washington Accord should be something the universities should want to do -- to PEO it is irrelevant. Remove reference to WA from the Ends.	Enabling Eng. Canada	G	2	5	10
NL1	Engineers Canadas ends and resource allocations do not appropriately reflect the importance of its relationship with the federal government in achieving matters important to the constituent associations. For example, there are no elements addressing federally regulated industries or federal demand side legislation.	Enabling Eng. Canada	G	3	3	9
ON9	Ends E2-1 through 2.3 are peripheral. How can EC be accountable for this metrics are required.	Enabling Eng. Canada	G	4	2	8
ON2	We do not assess credentials; we assess individual competencies. Remove any reference to credentials from the Ends.	Enabling Eng. Canada	G	3	2	6
ON10	No comment on ends E-3 and E-4.	Enabling Eng. Canada	G	3	2	6
PE1	The current ends in the governance model are adequate However we note that too much time is being spent on governance issues and this is taking away from getting things done.	Enabling Eng. Canada	G	3	2	6
MB1	The four Ends appear to cover the tenets of a national professional advocacy organization.	Enabling Eng. Canada	G	2	3	6
ON3	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Excellence & Integrity	G	5	5	25

No.	**Big Picture Thinking items**	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
F15	Ethics training and mandatory component - Students (accreditation) - Engineers (CPD)	Excellence & Integrity	1B	5	5	25
F15	Promotion and awareness of ethics and professional responsibility	Excellence & Integrity	1B	5	5	25
F15	Ethics is requirement for initial licensure	Excellence & Integrity	1B	5	5	25
F15	All engineers: are accountable for their ethical conduct have a consistent understanding of ethics are perceived by the public as ethical	Excellence & Integrity	1B	4	5	20
F15	Incorporate anti-corruption into ethics training and obligations	Excellence & Integrity	1B	4	4	16
F13	Code of Conduct, Ethics and Corruption in the Engineering Profession	Excellence & Integrity	1B	4	4	16
W14	Consistency among the constituent associations' regulatory standards and practices to protect and serve the public interests	Harmonization	1B	4	4	16
W14	Consistency of national standards and guidelines is needed to achieve a number of valid objectives including: - Maintaining high standards - Mobility Encouraging entry into the profession - Maintaining credibility and safeguarding the right to self-regulation	Harmonization	1B	4	4	16
W14	A shared vision for consistent national standards and guidelines needs to be defined. A process needs	Harmonization	1B	4	4	16
W14	A shared vision should form the foundation of a dialogue with government on how we can work together to achieve the vision. Perhaps we should consider moving toward giving greater authority to Councils and not embedding as much in the Act.	Harmonization	1B	4	4	16
W14	Going forward there needs to be broad, meaningful engagement at multiple levels with the constituent associations as national standards and guidelines are developed and made ready for implementation. Customized implementation plans are also needed.	Harmonization	1B	4	4	16
W14	We need better tools and processes to ensure we acknowledge, understand and benefit from regional diversity and expertise in the development and implementation of national standards and guidelines.	Harmonization	1B	4	4	16
W14	Providing a consistent and transparent approach to the impact of internationalization is a priority. We need to identify all other priorities and focus our work accordingly.	Harmonization	1B	4	4	16
W14	Past performance is not acceptable we must find ways to move faster.	Harmonization	1B	4	4	16
F19	National Code of Ethics	Harmonization	1	3	2	6
S14	Engineering Education: A foundation for engineers to protect and serve the public interest	High Std in Education	1C	4	4	16
S14	The world is changing and the engineering profession must continuous adapt to change.	High Std in Education	1B	4	4	16
S14	Engineer education is a lifelong process. It is a continuum that begins with the engineering student, continues as an engineer-in-training and does not end until the professional engineer retires or dies. Regulators have a role to play throughout all these phases.	High Std in Education	1B	4	4	16
S14	There is a continuous need to improve awareness at all levels of the personal responsibility for lifelong learning.	High Std in Education	1B	4	4	16

S14	There is a need for a balance of skills. Soft skills (leadership, communications, collaboration, etc.), awareness of limitations, and ability to respond appropriately to unexpected challenges must complement technical skills. We need to research and implement ways to achieve the right balance.	High Std in Education	1B	4	4	16
S14	Engineer education is a collaborative effort that includes academic institutions, employers, regulators and others. No one organization can do it all.	High Std in Education	1B	4	4	16
F14	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Labour Market	1A	5	3	15
W15	One year Canadian experience requirement	Proactive Regulation	1B	5	5	25
S16	The Future of Self-Regulation	Proactive Regulation	1A	5	5	25
M15	Responsible Mobility in a Global Environment	Proactive Regulation	1B	4	4	16
S14	National and international mobility are different issues requiring different approaches. The priority should be on resolving the national mobility issue first.	Proactive Regulation	1B	4	4	16
S14	There may be a need for better tools and possibly better evidence-based decision making in looking at options to improve mobility.	Proactive Regulation	1B	4	4	16
S14	A catalyst is needed to enable action. The Engineers Canada Board cannot enforce mobility put perhaps the Board could facilitate a national dialogue by convening the appropriate parties to examine the issue and propose action.	Proactive Regulation	1B	4	4	16
F13	We have the raised the bar to practitioners be better we could take the carrot versus the stick concept and I think we seen be anyway that the carrot tends to work better that the stick and excellent in the profession is really the best protection of the public somehow we have to take the training that we give to young engineers and take the exam and we need to remind the practitioner and we forget twenty years later what that means and what value of the code of ethics is and we need to reinstate that constantly through our career to insure people are really understand and I think we started and we do not really understand what to fall from the code of ethics when you practice for twenty year you really do not understand it and we need to revisit that the all idea training as we continued continuing professional development or however you see it is very vital.	Proactive Regulation	1B	4	4	16
F13	We have culture to develop where was seen as part doing normal business that a different issue which I think somebody should have reported that to OIQ and did not. We have the process now which we could investigate that situation but did not report. So to me what we need to do is increasing the awareness what we could expect of the profession why should be doing that, what value it bring to you, what value to bring into the profession and development another document or procedures on every exam. All the people who put up with this kind of things like the professional exams and we do write professional exam so one more professional exam will not solve the problem. It is individual value what we need to encouraging the people.	Proactive Regulation	1B	4	4	16

F13	I think as a profession we have to be not only black and white we have to be technic color and say this is what we believe no if no ends no but this is what we believe and I think in a perfect especially we could do for the world with that project manager did with that particular project years ago.	Proactive Regulation	1B	4	4	16
F15	National Code of Ethics discussion progressed it became apparent that there was support for the following: - Harmonization. Engineers Canada should lead with a model Code of Ethics that the constituent associations may refer to whether they adopted it in whole or in part. - Aspirational values are largely shared between the associations, whereas differences, if any, tend to fall within the realm of a code of conduct. Instilling Ethical Values. An educational effort is required to enhance the awareness and implementation of ethics and professional conduct by individual engineers.	Proactive Regulation	1B	4	4	16
F15	Motion WHEREAS, the constituent associations participate in the development of Framework elements and decide if, when, and how to adopt the elements in their jurisdiction. THAT the Board and the CEO Group promote adoption of the Framework element “Code of Ethics”.	Proactive Regulation	1B	4	4	16
S13	Membership vs. licensure, class of membership and membership categories is a huge challenge.	Valued Profession	1B	4	3	12
S13	There is a difference between membership and licensure. We must keep in mind our mandate which is protecting the public. How we manage the concept of membership going beyond licensure is important. Concerned that watering the licence will affect the public’s view of engineering and public safety; watering down would come at a cost.	Valued Profession	1B	4	3	12
S13	Concept on global membership is anybody involved in the engineering profession, not just in licensure – a tiered membership, but not a club.	Valued Profession	1B	4	3	12
S13	Very concerned that we become a social club rather than a licensing body.	Valued Profession	1B	4	3	12
S13	We need to improve on embracing engineers coming into licensure and make the route as painless as possible.	Valued Profession	1B	4	3	12
S13	Must be cognizant of the term engineering (grey areas) vs. professional engineering (regulated by a professional body). We should consider rescinding their licence if they have not practiced in years. There are tools available for partners.	Valued Profession	1B	4	3	12
S13	What is the public perception on what an engineer is and what the engineer is entitled to do? Many attempts have been made at defining the practice of engineering. Two parts; are we trying to regulate the work or increase membership, but also the part about the definition of engineering. The definition of engineering is subject to interpretation. The line is not always clear in defining the practice of engineering.	Valued Profession	1B	4	3	12
S13	Is there a way of getting more engineering students involved in licensure? Encourage students to become student members (no fee, non-voting membership) but it keeps them in the loop.	Valued Profession	1B	4	3	12

S13	From the academic perspective, faculties of engineering need to be very proactive in encouraging students on the importance of becoming professional engineers upon graduation. Professionalism is a very important element of new graduate attributes assessment. Believes an engineering student membership category should exist.	Valued Profession	1B	4	3	12
S13	Believes student membership is an excellent idea. It is important that students feel they are part of the profession and important that faculties provide a role model. Maybe we need a system of periodic review ensuring that a P.Eng. is not for life. Emphasis should be public protection.	Valued Profession	1B	4	3	12
S13	Many students do not feel the need to be licensed. Many professors at university are not P.Eng. There are two sides to the spectrum; engineers that need a licence and those that do not. It is important to focus on those that do not, but are considering getting licensed. Professional engineers are encouraged to speak to third and fourth-year students outlining the benefits of being licensed. Mentorship opportunities would also be helpful. Students need to be aware of the options out there. Supports a student membership category.	Valued Profession	1B	4	3	12
S13	The licensing portion (protection of public interest) is a policing function. Promotion of engineering is of interest to a broader group than licensed engineers. It would make sense to have at least two groups.	Valued Profession	1B	4	3	12
S13	It comes down to a division between right to title vs. right to practise. There is merit and advantages in having both categories. Maybe we need different levels of licensure. We must focus on the next generation and emerging disciplines; we must be inclusive rather than exclusive. The best protection of the public is excellence in our professions; there may be a difference between membership and licensure but you can encourage excellence in the profession through your membership.	Valued Profession	1B	4	3	12
S13	There is no risk in bringing the students into the membership; it can only be good. Concerned that if we let the definition of engineering become too broad, its meaning becomes ambiguous to the public.	Valued Profession	1B	4	3	12
S13	Not sure there is a need to license every graduating student and cannot capture everyone. Also not sure there is a need to license everybody. Must also look at the definition of public.	Valued Profession	1B	4	3	12
S13	Boils down to licensure vs. membership, the public's interest vs. the profession's interest. If you advance the public interest, the second will follow.	Valued Profession	1B	4	3	12
S13	Various levels of membership, including non-practising. It's all about making sure the public is protected; the value of the profession is tied to that.	Valued Profession	1B	4	3	12
S13	Favors a structured, all-inclusive model. Feels that every student who graduates and goes on to do professional engineering should be licensed. Is there a way to extend a concrete tie-in to the tuition licence to some sort of professional licence with the education process/tuition being paid?	Valued Profession	1B	4	3	12
S13	Opportunity to look at what kind of licence could be implemented with engineering students who do co-op and summer jobs after their second or third year.	Valued Profession	1B	4	3	12

S13	Two classes (practising and non-practising) would confuse the public and members alike. If the objective is increase membership, the key is education, promotion of the profession, and protection of the public.	Valued Profession	1B	4	3	12
S13	Feels that members of the profession should be licensed but he sees room for different categories of membership.	Valued Profession	1B	4	3	12
S13	The real facts on the ground are that a lot of engineers are not licensed. To what extent is it encouragement vs. enforcement?	Valued Profession	1B	4	3	12
S13	Feels students have a sense about what goes on in the profession. If we want to make progress with students, engineers must make their own progress in the profession in making sure all are registered. Must keep moving the boundaries.	Valued Profession	1B	4	3	12
S13	Need to understand that students are the sustainability of our profession.	Valued Profession	1B	4	3	12

Input for Strategic Direction

No.	Environmental Scan - 2015	Theme	Aligned with	Impact on Item	Ability to Achieve	Score
23	Assist women to remain active in the profession.	Diversity & Inclusion	E3	4	4	16
61	Work with other national self-regulating professions	Enabling Eng. Canada	4	4	4	16
12	Reinforce the professional code of ethics.	Excellence & Integrity	1B	5	4	20
24	Facilitate lifelong learning and continuing competency.	Excellence & Integrity	1B	4	4	16
27	Monitor engineers' career development	Excellence & Integrity	1B	4	4	16
28	Review the work of newly licensed engineers.	Excellence & Integrity	1B	4	3	12
3	Advance harmonization of standards across the country.	Harmonization	1A	4	4	16
38	Adapt accreditation to the changing needs of the marketplace quickly.	High Std in Education	1C	5	5	25
39	Be more responsive to the needs of schools.	High Std in Education	1C	5	5	25
40	Ensure the right balance between academic instruction and industry best practices.	High Std in Education	1C	5	5	25
41	Manage transition to outcomes-based assessment with extreme care.	High Std in Education	1C	5	5	25
42	Modify accreditation criteria to recognize international education.	High Std in Education	1C	5	5	25
43	Develop a common understanding of how engineers should be trained.	High Std in Education	1C	4	4	16
44	Partner with industry to identify skill sets needed.	High Std in Education	1C	4	4	16
45	Include business, communications and soft skills in undergraduate education.	High Std in Education	1C	4	4	16
46	Ensure that engineering education includes the concepts of sustainability and environmental awareness.	High Std in Education	1C	4	4	16
47	Seek input from students regarding engineering programs.	High Std in Education	1C	4	4	16
48	Provide more graduate level programs.	High Std in Education	1C	4	4	16
49	Incorporate global exposure into undergraduate programs.	High Std in Education	1C	4	4	16
59	Ensure engineers have the right employability skills.	High Std in Education	1C	4	4	16
52	Facilitate the development of policies to integrate foreign-trained engineers coming to Canada.	Labour Market	1	4	4	16
57	promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Labour Market	1D	4	4	16
7	Consider a certification for engineers as infrastructure resilience professionals.	National Voice	E3	5	5	25
2	Coordinate constituent association policies and programs.	National Voice	1	4	5	20
6	Develop strategic positions and practice guidelines on climate change.	National Voice	1E	4	5	20
8	Demonstrate why self-regulation is worthwhile.	National Voice	1E	5	4	20
15	Ensure that protection of the public is paramount.	National Voice	1E	4	4	16
17	Review the use of industrial exemptions.	National Voice	1A	4	4	16
29	Increase engagement with the public.	National Voice	1E	4	4	16
30	Play a lead role in informing the public and stakeholders.	National Voice	1E	4	4	16
31	Advocate on behalf of the public regarding government projects with an engineering component.	National Voice	1E	4	4	16
34	Inform policy development.	National Voice	1E	4	4	16
35	Ensure that engineers play a prominent role in advising government.	National Voice	1E	4	4	16

36	Ensure that government policies are well grounded in sound scientific research and evidence.	National Voice	1E	4	4	16
37	Work closely with governments and educational institutions to ensure that public servants are adequately trained.	National Voice	1E	4	4	16
51	Work with government to facilitate the mobility of engineers in Canada and overseas.	National Voice	1E	4	4	16
32	Ensure that engineers and their role in society are well understood so that they are appropriately valued and compensated.	National Voice	1E	4	4	16
33	Promote Engineering.	National Voice	1E	4	4	16
10	Respond to engineering failures in a more decisive manner.	National Voice	1E	4	4	16
22	Develop inclusive outreach programs.	Outreach	OE	4	4	16
11	Take a management system approach to dealing with corruption.	Proactive Regulation	1A	5	5	25
13	Increase penalties for breaches of professional conduct.	Proactive Regulation	1A	5	5	25
19	Consider moving to competency-based assessment.	Proactive Regulation	E1	5	5	25
1	Review the engineering acts and the definition of engineering.	Proactive Regulation	1A	4	5	20
5	Develop a framework and guidelines to mentor engineers-in-training.	Proactive Regulation	E1	4	5	20
9	Consider alternatives to the existing self-regulation model.	Proactive Regulation	1A	5	4	20
53	Ensure that the profession does not impose, or appear to impose, barriers to licensure (Canadian experience requirement).	Proactive Regulation	E1	5	4	20
54	Work more closely with employers to find effective ways of assessing the qualifications of foreign trained engineers in a timely manner.	Proactive Regulation	E1	5	4	20
4	Play a lead role in projects and work to raise quality standards.	Proactive Regulation	1E	4	4	16
16	Ensure that arbitrary and unnecessary barriers to licensure are removed.	Proactive Regulation	1B	4	4	16
55	Implement a means of assessing credentials and competencies prior to immigration.	Proactive Regulation	E1	4	4	16
56	Advocate for quality standards internationally.	Proactive Regulation	E1	4	4	16
58	Revisit the boundaries of engineering to include the work of applied scientists, architects, technologists, designers, etc.	Proactive Regulation	1A	4	4	16
18	Consider developing discipline-specific designations.	Proactive Regulation	1A	3	4	12
60	Set up Lesson Learned Groups as needed	Supporting Regulators	1A	4	4	16
25	Explore ways of supporting engineers who do not need, or wish to be, licensed.	Valued Profession	E3	5	5	25
14	Ensure that a license is a highly recognized, portable professional qualification.	Valued Profession	1D	4	5	20
62	Engage non licensed engineers	Valued Profession	1	4	4	16
20	Address the changing needs of engineers.	Valued Profession	1D	4	4	16
21	Provide programs that add value to membership.	Valued Profession	1D	4	4	16
50	Expand the role of Canadian engineers at the international level.	Valued Profession	2	4	4	16
26	Support engineers after they have obtained their license.	Valued Profession	1D	4	3	12

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
Accreditation criteria includes a diversity requirement for each program.	Diversity & Inclusion	1	5	5	25
More diversity (30 by 30) (2).	Diversity & Inclusion	E3	4	5	20
The engineering profession is representative of Canadian demographics and that our definition of diversity includes all forms, not only women, newcomers, etc. (therefore, the profession will need a cultural shift).	Diversity & Inclusion	E3	5	4	20
To have a diverse group of people engaged in the engineering profession.	Diversity & Inclusion	E3	5	4	20
As an engineer, I would like to see the profession represent a Canadian demographic (multicultural, multi-gender).	Diversity & inclusion	E3	4	4	16
Be truly representative of Canadian demographics.	Diversity & Inclusion	E3	4	4	16
Diverse and inclusive.	Diversity & Inclusion	E3	4	4	16
Engineering is an attractive profession that is reflective of Canadian demographics.	Diversity & Inclusion	E3	4	4	16
Engineering profession is well represented by the diverse population – diversity is a strength.	Diversity & Inclusion	E3	4	4	16
Get more diverse groups into engineering education	Diversity & Inclusion	E3	4	4	16
Greater inclusion and diversity.	Diversity & Inclusion	E3	4	4	16
More women are represented in the profession and in governance of the profession.	Diversity & Inclusion	1D	4	4	16
That we are able to attract, as a profession, a representative population – more women and minorities – so that we reflect society as a whole.	Diversity & Inclusion	1D	4	4	16
We are as diverse as the society we serve.	Diversity & Inclusion	E3	4	4	16
Diversity is better yielding wider slice of people in engineering.	Diversity & Inclusion	E3	4	3	12
Diversity that reflects the overall demographics present in society (gender ethnicity and gender balance). (4)	Diversity & Inclusion	E3	4	3	12
Be more inclusive.	Diversity & Inclusion	1D	3	3	9
That the profession be considered a career of choice for people of all ethnicities and genders.	Diversity & Inclusion	1D	4	2	8
Establish and utilize connections with the organizations where there is a potential for mutually beneficial partnership.	Enabling Eng. Canada	4	5	5	25
As an EC Board member, having EC focus on the priorities of its owners – the regulators.	Enabling Eng. Canada	G	4	5	20
Be more responsive to the needs of the regulators.	Enabling Eng. Canada	G	4	5	20
promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	Enabling Eng. Canada	G	4	5	20
Create a high performance work environment where staff, the Board and volunteers can flourish	Enabling Eng. Canada	EL	4	5	20
Engineers Canada has a solid foundation for the ongoing delivery of its purpose.	Enabling Eng. Canada	OE	4	5	20
I wish for the engineering profession that organizations start talking to each other instead of working in siloes.	Enabling Eng. Canada	4	4	5	20
Smaller, more agile Engineers Canada Board.	Enabling Eng. Canada	G	4	5	20

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
Engineers Canada is valued by the profession for its vision and national leadership promoting and maintaining the integrity, honour, interests and excellence of the profession	Enabling Eng. Canada	OE	4	4	16
The profession is response, well-managed, and well respected.	Enabling Eng. Canada	1	4	4	16
Regulators and members of the profession are engaged, knowledgeable, and broadly supportive of the programs, activities, and delivered value of Engineers Canada.	Enabling Eng. Canada	1	3	4	12
As a volunteer, I would like to see greater communication between stakeholders (i.e. regulators, Board, Board committees, Deans).	Enabling Eng. Canada	EL	2	5	10
Synchronize all levels of the system.	Enabling Eng. Canada	4	3	2	6
CPD program requirements are based on risk	Excellence & Integrity	1A	5	5	25
Codes of Ethics are lived out by Canadian engineers around the world.	Excellence & Integrity	1F	5	4	20
Engineer advance professional excellence and take pride in profession's reputation for ethical practice	Excellence & Integrity	1B	5	4	20
Engineers are life-long learners.	Excellence & Integrity	1B	5	4	20
Ethics mandatory component to professional development programs.	Excellence & Integrity	1F	4	5	20
National Code of Ethics fully endorsed by all regulatory bodies.	Excellence & Integrity	E1	5	4	20
That every member will guide every activity in accordance with our Code of Ethics.	Excellence & Integrity	1B	5	4	20
All engineers and permit holders: are accountable for their ethical conduct, have a consistent understanding of ethics and are perceived by the public as ethical.	Excellence & Integrity	1B	4	4	16
All engineers have strong communication and leadership skills.	Excellence & Integrity	1B	4	4	16
Engineers receive fundamental leadership and team skills.	Excellence & Integrity	1B	4	4	16
Engineers offer services, advise on or undertake engineering assignments only in areas of their competence and practise in a careful and diligent manner.	Excellence & Integrity	1F	5	3	15
That members of the profession practice with the highest level of skill, ethics and regard for the environment and public safety.	Excellence & Integrity	1F	5	3	15
Total professionalism – ethical behaviors, increased competence, decrease in complaints.	Excellence & Integrity	1B	5	3	15
Profession grows intellectually, i.e. into more endeavors, especially biological-based.	Excellence & Integrity	1B	3	2	6
Integrate the Global Engineering Certificate to all campuses in Canada.	Globalization	1B	1	4	4
Greater consistency in the requirements of "all things" related to the profession.	Harmonization	1F	3	3	9
Engineering education and accreditation systems are relevant in a global context.	High Std in Education	1C	5	5	25
Create a more adaptable curriculum.	High Std in Education	1C	5	4	20
Curriculum and education that has the capacity to evolve quickly along with society.	High Std in Education	1C	5	4	20
Engineering curriculum includes more ethical notions, to make the profession less at risk of problems such as the Commission Charbonneau.	High Std in Education	1C	5	4	20
Innovative and forward thinking.	High Std in Education	1C	4	4	16
Engineering education promotes entrepreneurial aspirations.	High Std in Education	1D	4	3	12

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
Diverse thinkers.	High Std in Education	1D	5	2	10
Entry level engineers are critical thinkers with a broad perspective. Specialization occurs after first degree.	High Std in Education	1B	3	3	9
Please include students in the conversation re: · Target global problems · Clear vision · Focus on innovation/research · Curriculum revision · Accreditation process revision	High Std in Education	1C	4	2	8
Hear the students in regards to what they have confidence in skills-wise and build off that.	High Std in Education	1C	2	3	6
I wish for the engineering profession that it becomes as cool as “design thinking” (as in Stanford DLab).	High Std in Education	1C	3	2	6
Inspiring education.	High Std in Education	1C	3	2	6
Leading innovation.	Innovation	1E	3	3	9
Engineers networking with non-engineers.	Multi-disciplinary	1E	3	4	12
Seeing collaboration as being with non-engineers; actually multi disciplinary.	Multi-disciplinary	1E	4	3	12
Profession that is well-equipped and eager to engage in multidisciplinary efforts and teams.	Multi-disciplinary	1E	4	2	8
Create a more multi-disciplinary environment.	Multi-disciplinary	1E	3	2	6
Create more opportunity for inter-disciplinary teamwork.	Multi-disciplinary	1E	3	2	6
The public knows that engineers will be held accountable of their failures.	National Voice	E2	5	5	25
Engineers are a highly trusted public entity that is regularly consulted on public policy.	National Voice	1E	5	4	20
Broader recognition of the value of, and need for, professional engineers.	National Voice	1E	5	4	20
That the public have full confidence in the profession in keeping public safety in the forefront in all we do.	National Voice	E2	5	4	20
The public has confidence that engineers practise with competency and integrity and their work safeguard the economy, environment and citizens.	National Voice	E2	5	4	20
Promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public	National Voice	1E	5	4	20
Elevate voice of those with engineering backgrounds in public debates.	National Voice	1E	4	4	16
Public confidence in engineers by all levels of governments.	National Voice	1E	4	4	16
The public and engineers understand that the public has given the profession with a social licence to operate, and regulators ensure the profession upholds its end of the deal.	National Voice	1E	4	4	16
Continue to prove that we are capable of being a self-governing profession and showing it to everyone.	National Voice	1E	4	4	16

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
Greater awareness among public that engineering is a fully regulated occupation.	National Voice	E2	4	4	16
Increased engineering presence in the media (2).	National Voice	1E	4	4	16
Greater public awareness and confidence in the profession.	National Voice	1E	4	4	16
Instill a sense of confidence in the public that engineers and are competent and acting in the public interest.	National Voice	1E	4	4	16
Promote an understanding by the public that the practice of engineering is only carried out by individuals licensed by regulators to practice the profession and by permit holders authorized by the regulator.	National Voice	1E	4	4	16
The public views engineers creating a better future for all	National Voice	1E	4	4	16
Engineers play a prominent role in advising government	National Voice	E2	4	3	12
Full participation in governments' decision-making, policy setting.	National Voice	1E	4	3	12
Involved in high level policy making process in Canada for all Canadians.	National Voice	1E	4	3	12
Seen, from public opinion, the merits of professional engineering decision-making.	National Voice	1E	4	3	12
That the public understands the value of good engineering.	National Voice	E2	4	3	12
Greater general awareness regarding engineering and professionalism.	National Voice	1E	4	3	12
I hope that the profession of engineering will be more respectable in any dimensions of the fields of practice.	National Voice	1E	4	3	12
Increase public awareness and confidence in the profession.	National Voice	1E	4	3	12
Public trust and confidence in the profession.	National Voice	E2	4	3	12
Recognition of the notoriety of the engineering profession.	National Voice	1E	4	3	12
Recognition, from a basis of public opinion, of the contributions of the engineering profession (2).	National Voice	1E	4	3	12
That the public really understands what the profession does.	National Voice	1E	4	3	12
That the public understand the role engineers play in society and the importance of that work (3).	National Voice	1E	4	3	12
To increase the stature of the profession in the public conscious.	National Voice	1E	4	3	12
Advocacy or lobbying is not evil or dirty.	National Voice	E2	3	3	9
An aspiration would be to have the Government of Canada formally recognize that reality and focus resources on increasing Canada's ratio of engineers: population as a means to ensuring Canada remains competitive among "first world countries".	National Voice	1E	3	3	9
Achieve public perception of being a leader.	National Voice	1E	3	3	9
Important/recognition of work and impact.	National Voice	1E	3	3	9
Visible within society	National Voice	1E	3	3	9
Engineers and Geoscientists enjoy the same level of national recognition as medical doctors, scientists, lawyers.	National Voice	1D	4	2	8
There is broad acceptance of self-regulation by all engineers and Canadians.	National Voice	1E	4	2	8

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
Engineering mindset is engrained in all professions in some way.	National Voice	1E	3	2	6
Improve external communication – e.g. advertising like the accountants.	National Voice	1E	5	1	5
The most respected profession in Canada.	National Voice	1E	3	1	3
Engineering is known by youth 6-16.	Outreach	E3	4	5	20
That young people understand what engineers do.	Outreach	E3	4	5	20
Strong, engaging outreach program that engages and presents to the student population what the engineering profession is and how it can be an interesting and rewarding career choice. “This is not a profession of nerds”.	Outreach	1A	5	3	15
Creation of specialists are based on risk	Proactive Regulation	E1	5	5	25
Discrepancies in regulation practices across the country are minimized to those items that are actually required based on regional differences.	Proactive Regulation	E1	5	5	25
Outcome based assessment of the knowledge and skills	Proactive Regulation	E1	5	5	25
Regulate federally regulated industries and federal government practices.	Proactive Regulation	1A	5	5	25
That engineers get properly licenced in every jurisdiction that they work. Stop trying to sneak in…	Proactive Regulation	1F	5	5	25
We eliminate poor quality, “rubber-stamp” engineers that make the whole profession look bad.	Proactive Regulation	1F	5	5	25
As a regulator, protection and expansion of scopes of engineering practice with exclusive rights to practice.	Proactive Regulation	E1	5	4	20
Concentrate on improving regulation.	Proactive Regulation	E1	5	4	20
Every graduate shall have the opportunity to be a registered engineers.	Proactive Regulation	1F	4	5	20
Full mobility anywhere in the world.	Proactive Regulation	2	5	4	20
Registration of qualified applicants is completed more efficiently and quickly while still maintaining high standards of ethics and competence to protect the public.	Proactive Regulation	1F	5	4	20
That there are guidelines for most areas of practice to provide practitioners with a consistent base for practice.	Proactive Regulation	1F	4	5	20
Improve public safety by having more software/electrical/computer engineers regulated/licensed. In general, we do a poor job of licensing/regulating engineers that do not use a stamp (i.e. there is no demand legislation to require a P.Eng.).	Proactive Regulation	1F	4	4	16
Regulation covers all aspects of engineering.	Proactive Regulation	1F	4	4	16
That our members fully understand their obligation and commitment to the ethical practices and behaviors in all that they do at work and outside of work.	Proactive Regulation	1B	4	4	16
That practitioners use a consistently comprehensive quality assurance program.	Proactive Regulation	1B	4	4	16
That the members understand what self-regulation means (i.e. not member control).	Proactive Regulation	1F	4	4	16
Embrace new technologies in the regulation and definition of engineering.	Proactive Regulation	E1	3	5	15

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
That regulations and licensure processes change and evolve to better suit current student and millennial priorities.	Proactive Regulation	1F	5	3	15
That there are no Elliot Lakes, Mt. Polleys for the foreseeable future.	Proactive Regulation	1F	5	2	10
Greater demand-side legislation at both federal and provincial levels.	Proactive Regulation	1F	3	3	9
Shared best practices such as continuing professional development.	Promising Practices	1A	5	5	25
Develop a system to capture and share the new ideas and best practices of the regulators	Promising Practices	E1	3	5	15
The profession understands the need to lead.	Societal Leadership	1E	5	5	25
We are actively engaged in solving society's problems.	Societal Leadership	1E	5	5	25
Engineers are key players in solving our grand challenges.	Societal Leadership	1E	5	4	20
Engineers consider social impact in the work they do.	Societal Leadership	1E	5	4	20
Maintain Canadian leadership in the worldwide profession.	Societal Leadership	1E	4	5	20
The profession being recognized as the fabric allowing our society to evolve (e.g. infrastructure, I.T., buildings, transportation, etc.).	Societal Leadership	1E	5	4	20
We inspire society.	Societal Leadership	1E	5	4	20
Advocates for a positive relationship between social and technical.	Societal Leadership	1E	4	4	16
As an engineer, my aspirations for the profession is that we achieve the perception in the public that engineers are "the trusted technical source" for any and all issues in the fast-changing technological world.	Societal Leadership	1E	4	4	16
Maximum utilization of the knowledge of Canadian engineers.	Societal Leadership	1E	4	4	16
Public has factual information upon which to develop informed opinions on engineering issues	Societal Leadership	1E	4	4	16
As engineer, engineering is a well-recognized profession by the public. As a volunteer, we work together to form and promote national voice for engineering issues. We need to move away from "us" vs. "them" mentality. We are all together.	Societal Leadership	1E	3	5	15
Engineering profession is valued and contributing to society.	Societal Leadership	1E	5	3	15
Focused on social impact.	Societal Leadership	1E	5	3	15
Alignment between what the public values about the profession, and the values of the profession itself.	Societal Leadership	1E	4	3	12
Apply science and technology for benefit of society: - Understand possibilities of science and technology solutions. - Understand preferences of citizens collectively. - Communicate pros and cons, trade-offs to citizens so informed collective preferences can be formulated.	Societal Leadership	1E	4	3	12
Be a thought leader in problem-solving and predicting societal challenges.	Societal Leadership	1E	4	3	12
Engineering as a business is socially responsible and contributes to a thriving local and diverse economy.	Societal Leadership	1E	4	3	12

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
Introspective and critical profession that regularly examines its impact on society and the environment.	Societal Leadership	1E	4	3	12
The profession's leadership be fully engaged or exploited for a sustainable development of the Canadian economy.	Societal Leadership	1E	4	3	12
Government policies are well grounded in sound scientific research, engineering principles and evidence	Societal Leadership	1E	5	2	10
Profession that is eager and capable to interact with society on various levels to portray an accurate reflection of engineering.	Societal Leadership	1E	5	2	10
Acceptance that not all engineers are not trying to save the world and that's ok.	Societal Leadership	1E	3	3	9
Canadian engineers play a disproportionate part in creating an energy balance in Canada.	Societal Leadership	1E	3	3	9
Communicate with society better.	Societal Leadership	1E	3	3	9
Engineers are leaders beyond their profession.	Societal Leadership	1E	3	3	9
Greater contribution to technological literacy.	Societal Leadership	1E	3	3	9
Promote ethical technology.	Societal Leadership	1E	3	3	9
Servant leadership.	Societal Leadership	1E	3	3	9
Canadian engineers design an approach to natural resources exploitation/extraction that respects/supports diversity, community and environment.	Societal Leadership	1E	4	2	8
Engineers are doing impactful work to eradicate major social barriers.	Societal Leadership	1E	4	2	8
That engineers take ownership of the whole impact of their work (social, environmental, economic, etc.).	Societal Leadership	1E	4	2	8
A well-defined plurality of what motivates the profession.	Societal Leadership	1E	3	2	6
Bridge technological progress and societal outcomes.	Societal Leadership	1E	3	2	6
Engineers are more involved in public life.	Societal Leadership	1E	3	2	6
Engineers come out of the darkness and "shine a light".	Societal Leadership	1E	3	2	6
We embrace the changes we and others make.	Societal Leadership	1E	3	2	6
Make fundamental sciences more affordable for society.	Societal Leadership	1E	3	1	3
Countries in the world that have relatively high standards of living and are economically progressive also tend to have high ratios of engineers to "total population".	Societal Leadership	1E	2	1	2
Make sustainable human societies.	Societal Leadership	1E	2	1	2
Reduce the international technology gap.	Societal Leadership		2	1	2
Evolve[2]	Societal Leadership		1	1	1
A unified profession, building on the strengths of the partners, to better use collective resources to enhance the engineering profession to safeguard the economy, environment and the citizens.	Valued Profession	1D	5	5	25

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
A unified, united Engineers Canada leading the profession and its regulation in Canada.	Valued Profession	1D	5	5	25
To continue the privilege of self-regulation.	Valued Profession	E2	5	5	25
It is felt that, in Canada, "Canadian" engineers have (collectively) a good reputation and are recognized worldwide for skill and value. The profession in Canada should understand why that is, and should proactively work to preserve, protect and enhance that reputation.	Valued Profession	1D	4	5	20
Our definition of "engineer" moves beyond P.Eng.	Valued Profession	1D	4	5	20
Relevant	Valued Profession	1D	5	4	20
To have a clear vision for the future of engineering in Canada.	Valued Profession	2	4	5	20
Ability for a P.Eng. to register in any jurisdiction in Canada in under 30 seconds.	Valued Profession	1D	4	5	20
Recognition of all engineering professionals.	Valued Profession	1D	5	4	20
We can be mobile across the country and beyond.	Valued Profession	1D	4	5	20
A movement (more than an impermeable profession).	Valued Profession	1D	4	4	16
Engineers agree to the need to invest in the profession.	Valued Profession	1D	5	3	15
Students are supported through their transition to working professionals.	Valued Profession	1D	5	3	15
National licence.	Valued Profession	1A	3	5	15
National licensure; full portability.	Valued Profession	1A	3	5	15
National registration for P.Eng./P.Geo., EIT/MIT, limited license, permit to practice.	Valued Profession	1A	3	5	15
Canadian engineers display PRIDE in their professional contributions, in their careers, communities.	Valued Profession	1D	4	3	12
I wish for the engineering profession that a groundswell of excitement (hope and change, Obama-style) sweep through the system to tackle 30by30.	Valued Profession	1D	4	3	12
That engineers see licensing as a positive and aspirational thing to have in their career.	Valued Profession	1D	4	3	12
A profession in which all the spectrum from child to retired engineer are valued members.	Valued Profession	1D	3	4	12
A profession that learns to invest in itself as a group, not as individuals.	Valued Profession	1D	4	3	12
Clearer understanding of what drives the value of engineering professionals.	Valued Profession	1B	3	4	12
As an engineer, better employment/career opportunities and higher incomes.	Valued Profession	1D	4	3	12
All our members will have such pride in their profession that they will not tolerate sub-standard performance from others (self-regulation by means of peer pressure).	Valued Profession	1D	5	2	10
Integrate students in decision-making.	Valued Profession	1D	3	3	9
Open and respected.	Valued Profession	1D	3	3	9

ASPIRATIONS FOR THE ENGINEERING PROFESSION Members of the profession were asked to state their 2-3 major aspirations for the profession)	**Theme**	Aligned with	Impact on Item	Ability to Achieve	Score
That QBS is the primary mode of public procurement in Canada and associated provinces/territories.	Valued Profession	1D	3	3	9
The profession is seen as a boon to employers as opposed to a hindrance.	Valued Profession	1D	3	3	9
The professional, social and economic needs of engineers are met.	Valued Profession	1D	3	3	9
I wish for the engineering profession to be freed from its history and its arbitrary limitations into	Valued Profession	1D	2	3	6
Engineers command fees comparable to other learned professions such as law and medicine.	Valued Profession	1D	3	2	6
Open-minded about itself.	Valued Profession	1D	2	2	4
Engineering is no longer viewed and treated as a commodity to be bought and sold at the lowest price.	Valued Profession	1D	3	1	3
Engineers are paid in a similar manner to other regulated professions (standardized charge-out rate chart).	Valued Profession	1D	3	1	3

Themes	Sub-themes
Diversity & Inclusion	30 by 30 Attraction and Retention
Enabling Eng. Canada	Governance Operational Excellence Partnering with Other Organizations
Excellence & Integrity	Competence Ethics Practice
Globalization	Mutual Recognition Agreements Mobility Off-shoring
Harmonization	
High Std in Education	Accreditation Relevant Education
Innovation	
Issues & Trends	
Labour Market	
Multi-disciplinary	
National Voice	Government Relations Public Awareness Public Confidence Public Policy
Outreach	
Proactive Regulation	
Promising Practices	
Societal Leadership	
Supporting Regulators	
Valued Profession	Strong Profession Pride in the Profession Value for the Engineer Value of the license

WORKSHEET KEY

Aligned with

Statement of Purpose - Not in current Ends (1, 1A, 1B, 1C, 1D, 1E, 2, 3. 4) - details below
ENDS (E, E1,E2, E3, E4) - details below (related work is underway or in the Business Plan)
Governance (G)
Operational Excellence (OE)
Executive Limitations (EL)

Impact on Item

Impact that the statement has on the Aligned with Rating
(1 no impact 2 slight impact 3 moderately impact 4 high impact interesting 5 extremely high impact)

Ability to Achieve

Engineers Canada ability to achieve with current resource, which would included influence of third parties, cost, etc.
(1 Very difficult, 2 Difficult, 3 Major shift is resource, 4 Reasonable, 5 Doable)

Score

Product of Impact on Item and Ability to achieve

Statement of Purpose

1 The purposes of the Corporation are to provide national support and national leadership to the engineering profession on behalf of its members, so as to promote and maintain the interests, honour and integrity of the engineering profession in Canada, and to do all such lawful things as are incidental to or conducive with the attainment of the foregoing purposes including, without limitation:

1) to establish and foster relationships with and among the provincial and territorial associations of professional engineers in Canada and to assist them in, among other things:

1A coordinating their activities and policies, particularly in the areas of registration of engineers, mobility of registered engineers and interprovincial practice

1B promoting and maintaining high standards in the engineering profession

1C supporting and encouraging high standards in engineering education

1D developing effective human resources policies and promoting the professional, social and economic welfare of the members of the engineering profession

1E promoting a knowledge and appreciation of engineering and of the engineering profession, and enhancing the relationship of the profession to the public

2 to act on behalf of and to promote the views of its members concerning the engineering profession in matters that are national or international in scope, including without limitation, international registration or certification .of engineers, and reciprocal practice

3 to apply for or acquire and deal with or dispose of any trademark or copyright in any word(s), mark, design, slogan, or logo, or any literary, or other work, as the case may be, pertaining to the engineering profession or to its objects,

4 to affiliate with, join or enter into arrangements or agreements to carry on any undertaking with or for the benefit of the members of any society, association or other body having objectives similar or comparable to those of the Corporation.

Ends

E Engineers Canada exists to provide national support and leadership on behalf of its regulators to promote and maintain the integrity, honour, interests and excellence of the profession at a cost that is justified by the results.

E1 A framework, standards, practices and systems and a means to effectively transfer knowledge to facilitate regulatory excellence are available to the regulators.

E2 Stakeholders have evidence that engineers meet high standards, practise with competence and integrity, and that their work and self-regulation benefit society.

E3 Stakeholders have information regarding how engineering is practiced in Canada and engineering is recognized as an attractive profession.

E4 The public is not misled by persons improperly using terms, titles, images, and words that are integral to the engineering brand, including in federal corporations and trademarks.