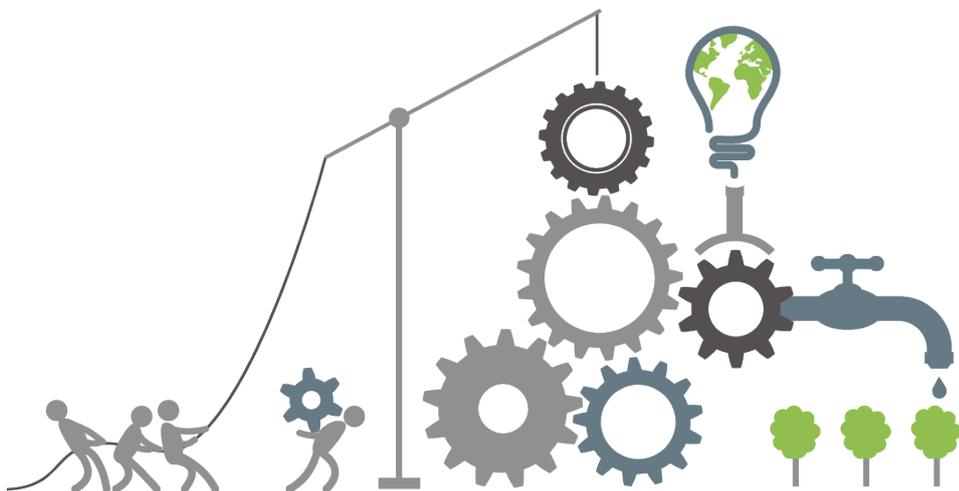




OUR RESPONSE: ENGINEERING ETHICS VISION 2028

Engineers Without Borders UK's draft response to the Engineering Ethics Vision
2028 consultation



INFLUENCING THE ENGINEERING PROFESSION

During our recent community survey, our membership overwhelmingly stated they wanted to influence the engineering profession to be more globally responsible. Demonstrating how together, as a movement, we can engineer change.

As a result, we provided our members the opportunity to contribute to the Engineering Ethics Vision 2028. The vision, founded by the Inter-Disciplinary Ethics Applied (IDEA) Centre at the University of Leeds, focuses on growing and strengthening the ethical competence, responsible innovation and sustainability of the profession to address major challenges such as the climate crisis.

By contributing to this vision, our members have the opportunity to share their experiences and opinions, which in turn will contribute to a more globally responsible industry.

Following a review of the responses submitted, we have drafted Engineers Without Borders UK's organisational response to the Engineering Ethics Vision 2028. As a contributor, we would like to invite you to review the draft response and provide any further comments before we submit this.

Please review the below response and send any comments or questions to membership@ewb-uk.org by Sunday 12 January 2020. If we do not hear from you by this date we will assume you are supportive of the response and have no further comments.

Thank you again for your participation in the consultation. Together we can ensure engineering serves all people and our planet better than ever before.

DRAFT RESPONSE

Question 1. The vision document includes a vision statement, a set of four key goals and five tables (2-6) which set out some enablers/actions for each broadly defined stakeholder group. Do you think that this way of structuring the document is clear and helpful?

We are very pleased to see a vision addressing the need for the industry to service the public interest, closely aligning with Engineers Without Borders UK's drive for the engineering community to serve all people and the planet. Our members have responded positively to the purpose of the vision and opportunity to play a role in

both shaping it and contributing to the achievement of the goals, for example:

- *“This is a great vision and essential to the progression of our industry. Coupled with some clear, measurable objectives and success factors, this would make a great vehicle to stimulate and track improvement over the next 10 years.”*

The structure of the document is clear and straightforward, with the four key goals easy to identify. To ensure ease of use and that that the vision widely accessible, the following recommendations have been identified:

- Include an executive summary to provide a concise overview of the vision, before going into the details of each goal.
- Include a definition of ‘public interest’ at the beginning of the document to ensure readers understand the meaning of the phrase when used in the vision i.e. that there are constraints to ensure that the environment is not exploited.
- Review the layout of the vision to include signposting to the key points, for example including a contents and key goal number with the subheadings (e.g. Goal 1: Growing and strengthening the profession). It has also been recommended to increase the size of the text in the tables.
- Create a new section for the barriers to ensure they are easily identified by the reader, building awareness of the barriers we must address to meet the vision.

Question 2. We have set out four goals / priorities for the Engineering profession for the next ten years, in brief:

- 1) Growing and strengthening the profession
- 2) Ethical competence
- 3) Responsible innovation
- 4) Sustainability and climate change

A) Do you think these are the right priorities? Yes / No

Yes

B) How, if at all, would you change the list?

- Overall it is felt that the four goals set out in the vision are the right priorities for the profession over the next ten years, however, recommendations are made to increase the emphasis on sustainability and climate change.
- It is recommended that the order of the goals is revised to:
 - 1) Growing and strengthening the profession
 - 2) Sustainability and climate change
 - 3) Ethical competence

4) Responsible Innovation

- With this, it is recommended that the enablers and barriers for sustainability and climate change are expanded within tables 2-7, ensuring they are given at least as much content as the other three goals.
- It is proposed that goal one can be used to inspire and enthuse people to engage with the vision, with the focus then on sustainability and climate change as the priority goal.
- We suggest rephrasing 'Growing and strengthening the profession' to 'Selective and directed growth and strengthening of the profession' due to concerns that the current focus has the potential to stifle innovation and lead to labour-intensive work practices.
- We recommend reviewing the following for inclusion in the goals: "More appropriate selection of cost and benefit criteria for major projects"

C) Please give the reasons for your answers.

- The priorities are deemed to be the right priorities because, as they stand, goals 2-4 are an accurate reflection of societal concerns and needs at the moment.
- However, over the next 10 years of the vision, we need to ensure that sustainability is front and centre of every business decision if we are to see any step change in the industry. Therefore, it is recommended that there is an increased focus on sustainability and climate change, with innovation and growth second to that.

Question 3. Is the vision realistic and achievable?

A) Yes / No

We will not provide a yes or no answer to this question due to the split opinion of participating members.

B) Why / Why not?

- There is mixed opinion on whether the current version of the vision is realistic and achievable.
- It is seen to be possible if all engineers are educated and inspired to adopt the vision. The enthusiasm for the vision needs to be maintained, for example through providing examples of actions and achievements made towards the vision.
- It was also expressed that to achieve the vision it needs to extend beyond the stakeholders identified, for example to include politicians.
- It is recommended that the vision is revised to include measurable goals to

make it easier to determine if it is achievable and when these goals have been achieved. This will provide the opportunity to refocus as and when required, for example identifying the remaining barriers and evolving enablers, and support stakeholders to understand the actions they should take to support the achievement of the vision.

- In reference to the timeframe of the vision, there is some opinion that this is aspirational rather than realistic, and therefore potential to instead issue the vision with a review date rather than set end date.

Question 4. Based on your experience as part of a stakeholder group (e.g. an education institution; a firm; a PEI etc.), do the barriers and enablers (displayed in the seven tables (1-6)) present a true reflection of the engineering profession and how it might help to embed ethics?

A) Yes / No

Yes

B) Please explain your reasons.

- Engineers Without Borders UK's movement represents all stakeholder groups identified in the vision.
- Overall, it is felt that the vision provides a good summary of the key areas to focus on, and that the barriers and enablers are a true reflection of the engineering profession and how it might help to embed ethics.

C) Are there any specific enablers or barriers that you think should be changed or removed?

- Recommendations are made to increase the focus on some enablers and barriers, and add additional ones, rather than removing any of those included. This includes:
- Adding government as a stakeholder group with a focus on how laws, legislations and final support/subsidies can catalyse this vision at firm & individual level
- Acknowledging the barrier of public opinion affecting engineers who want to speak out. We need the public to recognise that honest mistakes or accidents can happen, but the existing blame culture can significantly deter people from raising concerns publically and addressing these.
- Sustainability and climate change to include environment and earth resource, and to be featured as a higher priority within the enablers and barriers tables.

Question 5. Do you have a clear idea of what part you/your organisation might play to help achieve the vision?

A) Yes / No

We will not provide a yes or no answer to this question due to the split opinion of participating members.

B) If no, please explain why

- Engineers Without Borders UK has been a long-term champion of bringing better engineering ethics to the forefront of engineering education and practice and the needs for the engineering community to serve all people and the planet better than ever before. Whilst this work continues to evolve to meet current global challenges, we are clear on the role we can play and this broadly falls into:
 - Inspiring students, educators and engineers at all levels about the principles and potential of ethical, environmentally sound and culturally sensitive engineering
 - Enabling partner organisation, people and communities to use and develop their engineering capabilities to address global challenges
 - Influencing the engineering community to lead by example and make positive contributions as responsible global citizens.
 - Whilst our members are clearer in their ideas of the role that Engineers Without Borders UK should play to help achieve the vision (e.g. holding the profession to account, dissemination of knowledge to members, advocating for change and the Engineering Ethics Vision, showcasing examples of globally responsible engineers and engineering), there is mixed understanding on the role that they can and should play.
 - The ideas identified include:
 - Looking for opportunities to reduce energy use and resulting impact on the environment.
 - Encouraging management to take decisions based on sustainable results, even at some deviation for financially optimum solution.
 - Individually and amongst peers, look for improvement in consumer habits to reduce energy use and waste.
 - Discussion within the firm and making employees aware of the Vision.
- However, there is a strong recommendation made that the vision develops to provide practical ways to both promote and achieve the vision for all stakeholder groups to support those who are either unsure of the actions they should take or unsure of which actions will have the greatest influence and impact to get the industry closer to achieving the vision.