



ENGINEERS
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External Voice Project

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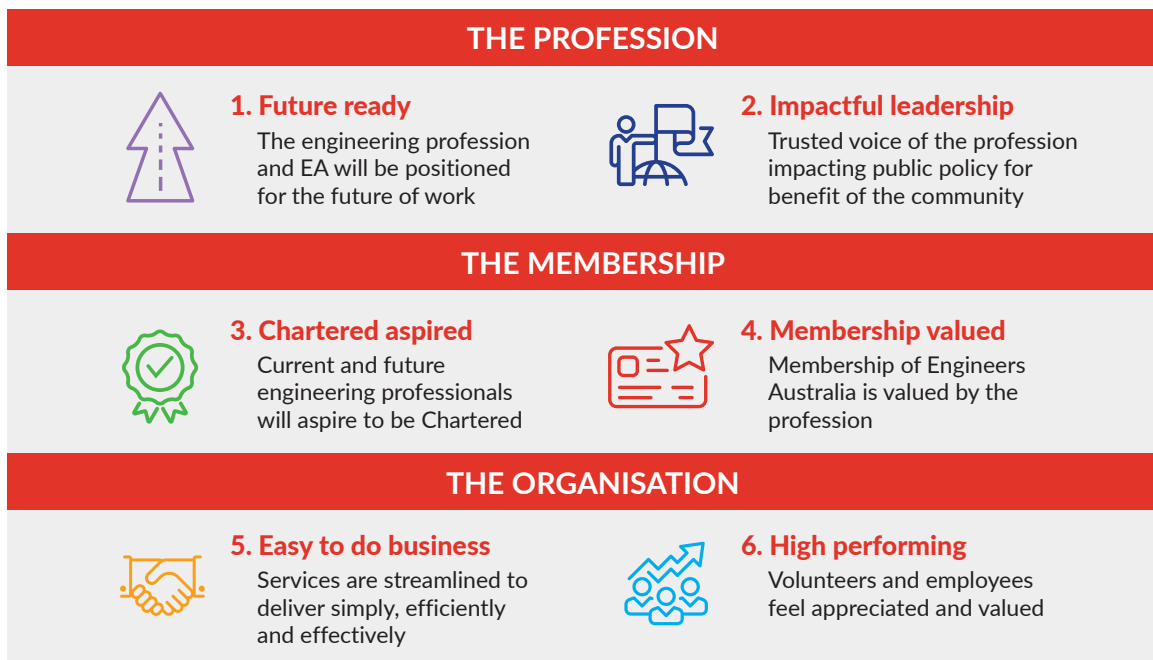
1. Introducing the External Voice Project

With around 100,000 individual members, Engineers Australia is the profession's peak body. We are the voice of the profession, and exist to advance the science and practice of engineering for the benefit of the community.

Our high standards, globally-recognised credentials and international agreements enable Engineers Australia members to live and work around the world – with our members currently in more than 120 countries.

Founded in 1919 as the Institution of Engineers Australia, our work has underpinned the progress of our nation for more than a century. Engineering plays a pivotal role in society and will continue to shape the future of Australia, creating healthy, just, prosperous, secure and sustainable communities.

Engineers are enthusiastic contributors to public discussions on the biggest community and policy issues of our time. This is reflected in Engineers Australia's Strategy 2020-23 (the Strategy), which establishes six actions aimed at strengthening the profession's contribution to public life and being recognised for doing so. The External Voice Project (EVP) is a mechanism for delivering on this set of Board priorities.



For engineering to be viewed by key stakeholders as a vibrant and influential profession in public debate it needs to:

- be context aware (especially understanding the place and role of engineering in society)
- be strategically focused on issues that require strong technical leadership and collective action
- understand the potential for engineering to be transformative (and under what conditions), and
- actively seek to shape and position the profession as a proactive contributor to public life, delivering value for government, industry, and community stakeholders, (including by supporting members to achieve great things and advocating for opportunities that enable the profession to be influential).

The EVP provides a thematic focus for the systematic development of these matters and, in so doing, contributing to each of the six actions of the Engineers Australia Strategy in a structured way (i.e. directly linked to Strategy outcomes).

2. EVP conceptual model

2.1 The 'T-shaped profession', a mission agenda and 3-stage implementation

The External Voice Project (EVP) will build the engineering professions' reputation for impact in public policy by:

- Demonstrating that engineering is a T-shaped profession that is both technically competent and socially engaged (see section 2.1.1).
- It will do this via a mission-based leadership agenda which builds alliances with community decision-makers on critical and engineering-intensive social matters.
- It will use a 3-stage iterative and agile approach to grow the organisation's and profession-at-large's capacity to deliver impact for the benefit of the community.

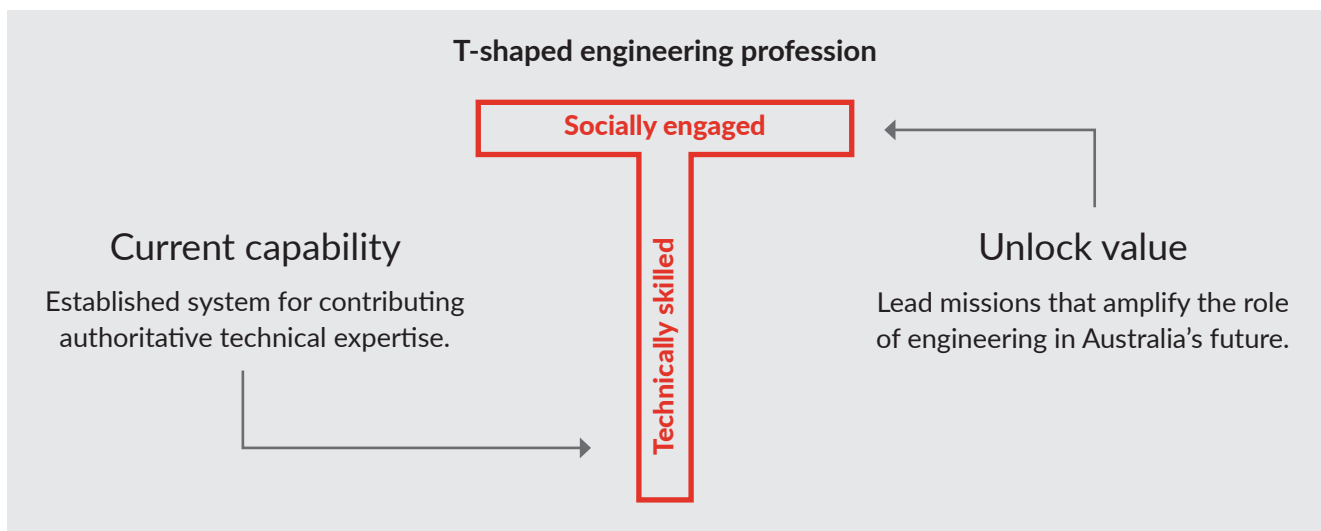
2.1.1 The T-shaped profession as a model for advocacy

The EVP leverages the technical capability of our organisation and membership, to build an advocacy program that delivers:

- community-wide understanding that engineering is a 'T-shaped' profession that has both deep technical expertise (the vertical) and wide social engagement and relevance (the horizontal), and

improved Engineers Australia-wide and member-wide capacity to discuss the relevance of the engineering profession and the value of Engineers Australia in ways that are fit for their context.

Figure 1: The T-shape model for the profession and Engineers Australia advocacy



Engineers Australia's current strength is our established system to contribute authoritative technical perspectives to public policy debates (the technical depth represented by the vertical part of the 'T'). This value needs to be unlocked by improving how the technical perspectives are integrated within society, with broader inclusion of technical perspectives in public policy discourses and decisions (the horizontal part of the 'T'). This will be done by leading workstreams, via a 3-stage implementation model

(section 2.1.3), that amplify the role of engineering in Australia’s future.

2.1.2 The Royal Charter Mission

The Engineers Australia Royal Charter requires the organisation to advance the science and practice of engineering for the benefit of the community. This service to the community is the core mission of the EVP.

2.1.3 3-stage implementation

In practice, the EVP undertakes medium-to-long term Workstreams, each of which is comprised of short-to-medium term Activities. A Workstream is a broad but limited set of related issues or challenges that are of importance to both the engineering profession and the broader community. The Workstreams we are currently focused on are given in section 2.2.1.

Each Workstream Activity follows the same 3-stage structure for implementation. Each stage has a standard purpose, typical types of work and output options (Figure 2 and Table 1).

Several workstreams can progress in parallel but are likely to be at different stages of maturity.

Figure 2: Three-stage (and repeatable) implementation for Workstream Activities

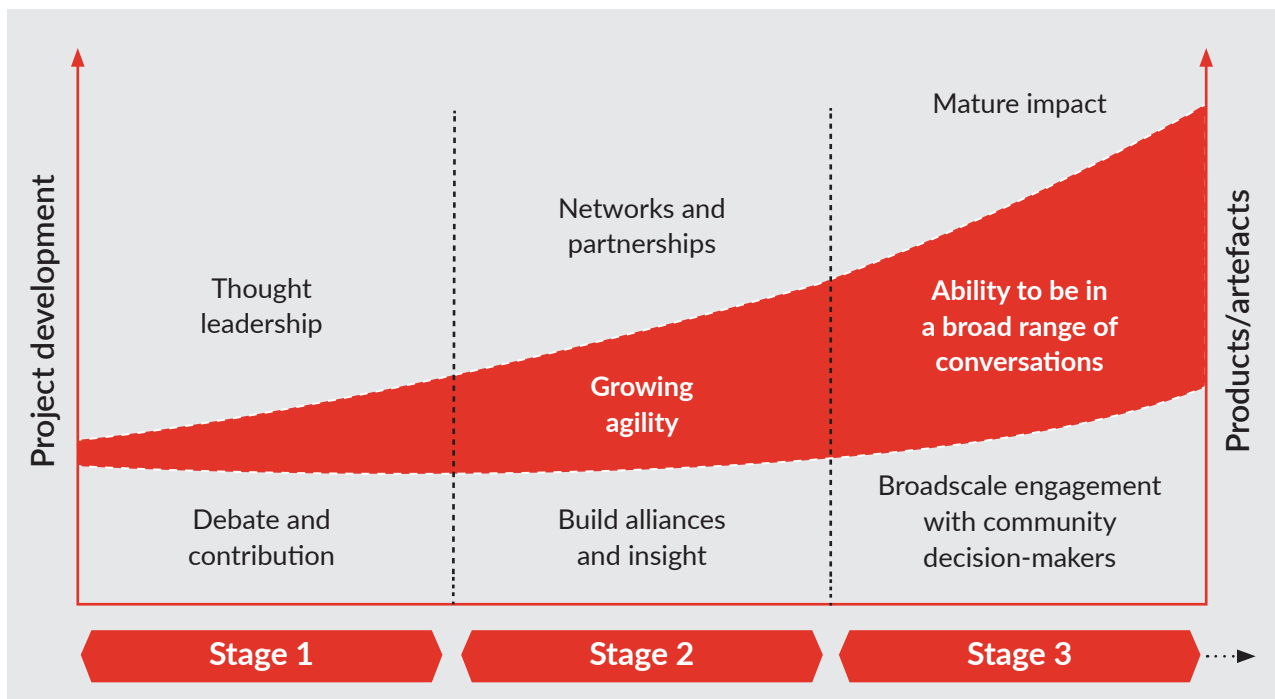





Table 1: Three-stage (and repeatable) implementation for Workstream Activities

| Stage | Purpose | Typical work | Output options |
|-------|---|--|---|
| 1 |  <p>Thought Leadership Lead debate and encourage contribution</p> | <ul style="list-style-type: none"> Engagement with experts Roundtable discussions | <ul style="list-style-type: none"> Public discussion paper Comms program built on short-form articles/papers |
| 2 |  <p>Networks and partnerships Build alliances and develop insights for an advocacy agenda</p> | <ul style="list-style-type: none"> Flagship roundtable discussions Build alliances Raise awareness amongst membership Build staff capacity | <ul style="list-style-type: none"> Thought leadership report Comms program built on long-form articles/papers and public op-eds Briefings to build internal capacity Awareness-raising campaign (targeted stakeholders) |
| 3 |  <p>Mature Impact Broadscale engagement with community and decision-makers</p> | <ul style="list-style-type: none"> Promotion of ideas via multiple channels Meetings with politicians Contribution to public consultation processes | <ul style="list-style-type: none"> Advocacy campaigns (wide range of public stakeholders) Engagement with political leaders Engagement with media |

2.2 Workstreams and prisms

The EVP Workstreams represent the priority public policy topics as determined by Engineers Australia and the Board. In 2021 four Workstreams will be progressed in parallel.

2.2.1 Workstreams

Workstreams are a practical way to enable discussion of the role of engineering and the application of the science and practice of engineering for the benefit of the community. Four Workstreams are proposed:



Technology and Industry



Infrastructure



Energy



Climate Change

These Workstreams are selected because they have been assessed as complex public issues with broadscale community demands for action, and for which engineering is vital to success. They represent maximum alignment with the Royal Charter mission. They are also nested activities that provide a balance of breadth and depth to the mission agenda.

2.2.2 Prisms through which work will be considered

Within the EVP, prisms are a means for describing the factors that will be considered in all Workstream Activities. Like the well-known PESTLE¹ approach, the EVP prisms will help ensure that essential issues of concern to the community and engineering profession inform the EVP.

Note that the PESTLE framework will be considered in all EVP work because they represent factors inherent to normal operations (Political, Economic, Socio-cultural, Technological, Legal and Environmental).

To complement PESTLE, a framework that is more specific to Engineers Australia and engineering is proposed: "Ethics+", which draws on the Engineers Australia Code of Ethics and its four core principles:²



Integrity



Competence



Leadership



Sustainability

The "+" signifies that there are other issues that have been identified as being particularly important in the context of engineering and the general community for the immediate future:

- Security and safety
- COVID-19 recovery
- Climate change (as a focussed subset of 'sustainability')
- Good engineering (as an extension to 'competence')

Each Workstream Steering Group (see section 3) is required to apply Ethics+ to their work. The External Voice Steering Group will similarly assess EVP products against Ethics+.

1 PESTLE stands for political, economic, socio-cultural, technological, legal and environmental and describes a framework for analysis of factors as part of project and strategic management.

2 Engineers Australia, Code of Ethics and Guidelines on Professional Conduct, November 2019. Available at: <https://www.engineersaustralia.org.au/sites/default/files/resource-files/2020-02/828145%20Code%20of%20Ethics%202020%20D.pdf>

3. People and governance

3.1 Governance model

The External Voice Project is led by the Engineering Business Group (EBG), with functional management by the Policy & Advocacy team.

The governance structure has two levels:

1. An overarching External Voice Steering Group (EVSG)
2. A Workstream Steering Groups (WSG) for each Workstream

3.1.1 External Voice Steering Group

The EVSG is a forum comprising representatives from eight Engineers Australia business units for collaboration to guide high level strategy for the EVP and inform detailed execution of each Workstream. It will ensure their coordination, especially regarding elements of the project that require action by other Engineers Australia business units such as media, marketing and so on.

EVSG will meet at least once per month and is proposed to include the following 8 business units:

- Policy & Advocacy
- Communications
- Media
- Marketing
- Business Growth
- Divisions
- Learned Society
- Professional Development

3.1.2 Workstream Steering Group

Each workstream is managed by a Senior Policy Advisor who is responsible for its design and execution, drawing on staff and external support as they determine is necessary.

A Senior Policy Advisor creates at least one WSG to guide the tasks advanced within each workstream. This model recognises the need for an agile approach to Workstream governance and expanding membership beyond Engineers Australia members and engineers. The exact form of each WSG will be the responsibility of the relevant Senior Policy Advisor.

Each WSG is proposed to be small and draw from at least one person from each of the following types of stakeholder:

- Member experts
- Non-member engineers
- Non-engineer external experts.

Figure 3: Engineering Business Group - Governance model:



4. Next steps

Implementation of the EVP has commenced, beginning with the infrastructure Workstream. Engineers Australia will build its workforce capacity in the first quarter of 2021 to enable delivery of all other Workstreams.

For more information or to express an interest in being involved with an EVP Workstream, please contact the Engineers Australia Chief Engineer at ChiefEngineer@engineersaustralia.org.au.



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