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Australian Government  
The Department of Infrastructure, Transport, Regional Development, Communications and the Arts  
Office of the Arts  
Via email: [culturalpolicy@arts.gov.au](mailto:culturalpolicy@arts.gov.au)

22 August 2022

## Re: National Cultural Policy Survey

Engineers Australia appreciates the opportunity to be involved in the process to develop a new National Cultural Policy. Technological heritage, which includes the physical artefacts and the intangible knowledge used to design, build, operate and maintain the artefacts, is a relatively unrecognised and under-valued component of cultural heritage. Engineers Australia would like to see increased opportunities to recognise and support technological heritage.

Engineers Australia is the peak body for the engineering profession in Australia, with about 115,000 members. Constituted by Royal Charter, our mission is to advance the science and practice of engineering for the benefit of the community. Through Engineering Heritage Australia, a special interest group within Engineers Australia, we equip engineers with heritage conservation skills through continuing education. We also work with other heritage and cultural organisations to promote the value of all types of heritage and the continuing role of engineers in preserving all forms of technology, technological knowledge, and constructed heritage artefacts.

Engineers Australia wishes to draw attention to the unbalanced recognition given to the preservation of all forms of engineering and industrial (referred to as technological) heritage within the traditional heritage sector. We wish to present a position which allows alternative means of preserving Australia's movable cultural heritage. In addition, Engineers Australia believes the technological heritage organisations and the traditional museum sector are following parallel paths and would benefit by collaborating.

This submission provides feedback to the survey questions posed in the National Cultural Policy submission template. If you wish to discuss the content of this submission further, please contact Michael Bell, Senior Policy Advisor, at [mbell@engineersaustralia.org.au](mailto:mbell@engineersaustralia.org.au) or on +61 8 6214 6321.

## Survey questions

WHAT CHALLENGES AND OPPORTUNITIES DO YOU SEE IN THE PILLAR OR PILLARS MOST RELEVANT TO YOU?

### FIRST NATIONS

While most technological heritage dates from the industrial age, Engineers Australia has long recognised the achievements of indigenous technology and the role it played in sustaining a culture for millennia. Engineers Australia supports the increased emphasis being placed on indigenous movable and intangible heritage.

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## A PLACE FOR EVERY STORY

Technology has been a defining driver of Australian society and community life for the past two hundred years. It has influenced location and growth of towns and cities, transport, communication, employment, work practices, labour organisation, wealth creation, recreation and much more and yet these aspects of “universal” culture are largely unrecognised in favour of a very narrow definition of “culture” and revering of iconic items (the first, last, grandest, most famous, most aesthetically pleasing, etc.).

### **1. No Commonwealth legislation recognises or protects movable heritage while it remains in Australia**

The Environmental Protection and Biodiversity Conservation Act excludes movable and intangible heritage and the Protection of Movable Cultural Heritage Act only controls import and export.

Only NSW, Victoria and Northern Territory Heritage Acts recognise movable heritage – and only at state significance level. No state recognises movable heritage at a local level (not recognised under state local environmental planning laws). The current association of significance to “place” is limiting. An object can be significant to a defined group of people distributed throughout the country.

*Recommendation: The Commonwealth Department of the Arts should provide leadership to other levels of government to recognise and support movable and intangible heritage, including technological heritage.*

Understanding and protection of intangible heritage is continuing to develop. Most UNESCO-recognised intangible heritage dates from before the industrial age and, in Australia is mostly associated with place. It is important to include the intangible heritage of knowledge and skills employed in the creation of technological objects – how to design, build and operate a power station or a grain harvester or a refrigerator or a bionic ear. These are intensely creative activities and Australians have demonstrated a unique ability to adopt, adapt and create objects suited to our environment and have very often created world-leading technologies.

*Recommendation: Engineers Australia suggests an expanded explanation and discussion of intangible heritage and supports the preservation/continuation of heritage knowledge and skills.*

### **2. The Protection of Movable Cultural Heritage Act 1986 does not provide sufficient protection for Australia’s incredibly rich movable cultural heritage. Too many significant objects continue to be exported.**

In 2015 the Borders of Culture Report prepared by Mr Shane Simpson was tabled and universally welcomed within the movable heritage sector. A draft Bill has been prepared incorporating the recommendations but has still not been enacted.

*Recommendation: Engineers Australia advocates to have the new Protection of Moveable Cultural Heritage Act incorporating the recommendations of the Borders of Culture report finalised and enacted.*

### **3. Commonwealth, state and local government support for movable and intangible heritage is limited.**

Much of the Commonwealth’s funding is directed towards institutional museums and galleries and cultural grants to support visual and performance culture. Only a limited amount is allocated each year for the entire movable heritage sector to prevent export of significant objects.



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*Recommendation: Direct monetary support, while welcome, may not be the most effective type of support in many cases. Engineers Australia recommends further discussion with the sector to identify more suitable support (for example, insurance, regulatory compliance costs, heritage skills training, marketing and business management expertise).*

#### **4. Technological movable heritage receives little official support.**

There are over 400,000 owners/custodians belonging to over 3,000 volunteer-run organisations caring for technological heritage, maintained and regularly displayed in operating condition. Some fit the traditional model of a museum, however only around 60 of these organisations are associated with the established museum community. The others are incorporated clubs, associations and societies caring for important collections. They collect and care for the artefacts, including associated contextual historical material and stories, as well as preserving the intangible heritage associated with the restoration, operation and maintenance of the artefact. The collections are usually a mix of private (numerically the majority) and organisation ownership and are displayed regularly. They meet the UNESCO definition of a museum and have the added advantages of low overhead costs, being able to access a vast collection and are willing and able to take the collection to different locations.

More than three and a half million people visit to experience these displays annually, indicating the appeal of this type of 'everyday' heritage which resonates with everyday people in every local government area who want to experience heritage performing its original function, not merely observe it in a museum or gallery.

*Recommendation: Engineers Australia encourages the Department of the Arts to consider alternative museum structures such as distributed collections, public/private collaboration and non-fixed locations.*

#### **5. More data is required**

There is little useful information regarding the technological heritage sector. Engineers Australia has collated the information available and produced some very conservative estimates. More comprehensive information will allow more targeted and effective actions within the sector.

*Recommendation: Engineers Australia suggests resources be allocated to conduct a thorough quantitative investigation of the cultural, economic and social benefits of the technological heritage sector. This will need to be conducted in partnership with the technological heritage community to ensure that the owner/custodians are surveyed (they are not currently included in "traditional" heritage cohorts).*

#### **THE CENTRALITY OF THE ARTIST**

Creativity is a fundamental human characteristic which is demonstrated in many professions and activities. Preserving and demonstrating examples of past creativity is critical to demonstrate the continuous development of human creativity and inspire new generations to continue to create. For example, technological heritage promotes creativity by:

- Demonstrating the continual creativity involved in developing new and improved technologies
- Preserving heritage knowledge and skills through transmission to new generations
- Inspiring new generations



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- Demonstration of science, technology, engineering and mathematics (STEM) principles
- Challenge new generations to find newer, better solutions
- Challenge engineers to apply 21<sup>st</sup> century technology to preserve 19<sup>th</sup> and 20<sup>th</sup> century technology.

*Recommendation: All forms of cultural heritage must be recognised and supported for their contribution to Australian society.*

## STRONG INSTITUTIONS

There are over 3,000 organisations with over 400,000 active participants which restore maintain and display technological heritage in its original, operating, condition. Some have fixed infrastructure such as rail heritage (for example, Puffing Billy and other rail organisations) and museums, others are incorporated organisations with members' distributed collections such as historic motor vehicle and machinery associations. Special attention is being paid to attract younger and more diverse volunteers/custodians to bring new skills and perspectives and ensure the continued strength of the organisations. These people are found in every local government area and are connected with the local community and together care for an incredibly large and diverse collection of Australia's movable cultural heritage.

The individual and organisation owners/custodians are passionate and knowledgeable of their collections and enjoy displaying them publicly. They welcome around three and a half million visitors each year and spend an estimate two and a half billion dollars, 99 per cent provided by themselves, sponsors and visitors. Those organisations which do have a fixed location are often occupying sites provided by local councils or other government authorities. They often make significant site improvements but do not have secure tenure and can be "evicted" if a more profitable use for the site is found. They will benefit from having secure tenure. Almost all technological heritage organisations are entirely volunteer run. They often lack the skills to develop the full potential of their organisation.

*Recommendation: Encourage collaboration between all cultural heritage organisations. Technological heritage organisations will benefit by adopting established skills such as collection management, interpretation and general organisation management.*

## REACHING THE AUDIENCE

As well as organising their own events, often a highlight on the town's calendar, these organisations are an integral part of the local community, participating in agricultural shows, field days and other community events. Many support local community groups such as local sporting clubs, Rural Fire Service, hospital auxiliaries, etc. They receive little or no marketing support, however there is tremendous potential to promote the organisations and their events as cultural destinations. There is also the potential for these organisations to work more closely with local historical groups to complement the artefacts with the context and stories associated with them. Most collections consist of objects owned in common by the organisation and many more privately owned and cared for. Their associations organise regular displays and events, and members (and visiting exhibitors) participate.

Generally, organisations do not measure attendance as the events are part of a community event with no charge or donation to charity. Those which do have formal attendance measurement record over two million paid visits per year. It is extremely satisfying to see the number of families (often three generations)



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and people of diverse socio-economic and cultural backgrounds visiting these events. The technological heritage collection provides several unique challenges and opportunities:

- The typical visitor to a technological organisation or event is, generally, wanting to experience the objects in operation and they expect variety in the displays (at different places and different times). The technological heritage organisations could often benefit from adopting basic museum principles and practices in some areas, for example, significance assessment and interpretive signage.
- The collection can move – it can travel to any location (usually managed by volunteers without the cost of professional logistics).
- The collection can complement the traditional museum collections by demonstrating the function of the historic artefact and its positive and negative effects
  - To allow visitors to experience aspects of life as their forebears did.
  - To educate new generations in STEM concepts (historic machinery exhibits scientific and engineering principles “in the raw”).
  - To demonstrate the changes in technology throughout time (for example, energy and climate change), to demonstrate the benefits and problems associated with each technology and inspire future citizens to consider alternatives and compromises and embrace further improvements.
  - To train people in heritage trades and skills.
- There is a tremendous opportunity for the traditional museum sector and the technological heritage organisations to collaborate to share knowledge and offer different experiences to new types of visitors.

Modern museums have existed for three hundred years and have developed a relatively rigid model. Despite sophisticated management processes and the embrace of technology, there is a sameness about most museums.

*Recommendation: Engineers Australia encourages the museums sector to adopt truly innovative ideas, for example, alternative conservation and display philosophies, accommodating private collections and distributed collections.*

*In addition, technological heritage organisations, including traditional museums, have a key role in promoting, explaining and demonstrating the development of technology in Australia. Technological heritage is ideal for demonstrating STEM principles and applications – it's basic and it's visible and it's not only for children! The museum sector, in all its structures, has a great opportunity to partner with the education sector to deliver STEM education.*

PLEASE TELL US HOW EACH OF THE 5 PILLARS ARE IMPORTANT TO YOU AND YOUR PRACTICE AND WHY.

#### FIRST NATIONS

The knowledge and practices developed and honed over millennia can teach us much in our modern world. The “fitness for purpose” and elegance of indigenous technology deserves to be recognised along with the supporting intangible culture of language, land care, art and stories that sustained the society.



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## A PLACE FOR EVERY STORY

The heritage establishment has traditionally placed attention on the extraordinary. The adoption, adaptation and creation of technology has shaped recent Australian society. It is part of our lived experience. Technological heritage is not understood and is undervalued by the heritage establishment despite its resonance with everyday Australians. Preserving technological heritage in operating condition allows people to experience heritage and create their own experiences and memories.

## THE CENTRALITY OF THE ARTIST

Creativity needs to be nurtured through demonstration of past achievements (inspiration), encouragement of current practitioners and the transmission of technological knowledge and skills to future generations.

## STRONG INSTITUTIONS

The technological heritage sector is strong and can offer much more with appropriate support. It receives almost no governmental or institutional support. It needs assistance in the following areas:

- Appropriate legislation and regulation to avoid unintended adverse consequences for the operation of the objects
- Strong heritage protection legislation (for example, Protection of Movable Cultural Heritage Act)
- Support for continued training in heritage knowledge and skills
- Collection of meaningful statistical data to allow targeted development
- Additional resources to ensure preservation of culturally significant objects

## REACHING THE AUDIENCE

The technological heritage community can offer substantial benefits to the “museum” sector including:

- An expanded and more diverse range of objects conserved and displayed
- Social benefits (community identity and involvement of people with a purpose and people looking after each other)
- Economic benefits (support industries and visitors)
- Education, particularly Science, Technology, Engineering and Mathematics

*Engineers Australia encourages the Department of the Arts to explore innovative ways to expand the concept of cultural heritage and recognise and collaborate with the technological heritage community as a valuable member of the Australian heritage sector.*