ENGINEERS
AUSTRALIA

Mr John Alexander OAM MP
Chair
House of Representatives Standing Committee on Infrastructure, Transport and Cities
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Parliament House
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Dear Mr Alexander,

Inquiry into procurement practices for government-funded infrastructure

Engineers Australia appreciates the opportunity to provide a submission to the House of Representatives Standing Committee on Infrastructure, Transport and Cities inquiry into procurement practices for government-funded infrastructure.

Established in 1919, Engineers Australia is the peak body of the engineering profession in Australia. With about 100,000 individual members, we represent individuals from a wide range of disciplines and branches of engineering. Engineers Australia is a not-for-profit organisation, constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Infrastructure projects are mostly medium-to-long term endeavours taking many years to reach completion. Improving management and procurement practices of these projects is important as we move toward a sustainable, productive and resilient future. The advice in this submission is drawn from work, currently in progress, that is focused on enhancing productivity in the infrastructure industry and informed by our members as well as industry, academia and peak body representatives. This work will culminate in a policy directions paper which will be published later this year. This submission is based on our interim findings that align with four of the terms of reference.

Existing infrastructure pipelines and related supply requirements

Where government is the asset owner, consideration of strategic use of resources through standardised acquisition processes, and creation of a centralised data bank and decentralised flow of information is recommended and may assist in the short term. Transparency and accountability of these processes are essential to market confidence, as is depoliticised consensus-based decision-making. Increased state-to-state cooperation and an increased focus on leveraging the supply chain should be key tenets of the infrastructure pipeline. Standardised infrastructure across states and territories makes longer-term integration and connectivity easier and saves money through high-volume procurement activities.

To assist in this, appropriate technical expertise in decision-making is vital to a project's success, particularly during procurement to ensure the products sourced are fit-for-purpose and of suitable quality. Without adequate technical expertise it will be difficult to maximise benefits and minimise risks. For example, Asset Managers should be part of the procurement stage to ensure people who understand operation of an asset and maintenance can provide their expertise.

Engineers Australia recommends Governments implement a consistent procurement framework across all levels and between all departments associated with infrastructure.

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Challenges and opportunities with existing procurement practices, including frameworks, standards, rules and norms, and intersections between tiers of government and the private sector

There is an opportunity for government and industry to consider how we collaborate and compete while working towards a prosperous and secure future for our communities and businesses. Engineers Australia supports the work of independent statutory infrastructure bodies and their assessments of long-term infrastructure needs. As mentioned above, long-term assessments of infrastructure needs can assist with standardising infrastructure across states which leads to cost savings through high-volume procurement activities.

Engineers Australia believes new models for infrastructure planning, funding and delivery are critical. Some options for consideration include greater collaboration between government and industry, embedding technical expertise throughout the planning process and including sustainability principles and innovation requirements in tendering processes. Increased engagement with the engineering community regarding infrastructure and the role technology can play to improve current practices can further assist with the development of these models. Greater promotion of government cross sectoral collaboration involving land, transport, utility and energy agencies, to deliver innovative and sustainable infrastructure solutions is recommended.

In addition to investigating new models, Engineers Australia recommends developing a staged project pipeline over the medium term to effectively manage resources and minimise inefficiencies. This could involve developing baseline infrastructure first with a structured return on the investment, before proceeding to the next level of value-adding infrastructure while enhancing the process and resources.

Challenges and opportunities to enhance Australia's sovereign industry capability, including for Australian owned businesses

Innovation and research, rather than finance, should lead design. The initial focus should be on a best-practice assessment of weighted possibilities to encourage innovation, and better social, environmental and efficiency outcomes.

One opportunity to enhance Australia's sovereign industry capability is industrialised construction. This is an innovative building system whereby the design and manufacturing of structural components are automated and are developed in a factory prior to delivery and assembly on site. Industrialised construction would be relatively easy to achieve through a pipeline framework by nominating specific processes or products, or a delivery timeframe that requires off-site manufacturing.

A consistent strategy based on risk and value analysis, and with clearly defined objectives, must be applied across all levels of government and between government departments to establish and promote industrialised construction in Australia. There are benefits to automated design and production processes, but detailed testing, assessment and development of implementation strategies will be necessary before approving proposed solutions.

A further opportunity is to consider changes to the tendering process to support small-medium enterprises (SMEs) win tenders. There is a large cost to businesses submitting a tender which can sometimes outweigh the return on investment. The government should seek greater visibility of the cost to a company submitting a tender. Solutions should then be explored to support reducing these costs, such as staged tenders or removing certain aspects, such as design, from the tender and doing more inhouse, to allow SMEs to compete.

Alternative procurement models, including reference to international examples

The procurement process sets the tone for the project. Setting the standard and behaviours of the project early, focusing on quality and safety, rather than lowest cost, is critical in developing the right project culture. Engineers Australia recommends exploring the UK-based initiative Project 13. This is an industry-led movement focussed on improving the way infrastructure is delivered. It is based on core principles that enable a shift from a transactional to

an enterprising model. Project 13's potential lies in promoting supply chain integration, enabling smart, collaborative working practices, and aligning commercial arrangements and incentives with customer and end-user outcomes. It emphasises the need to recognise infrastructure as an information-based industry. The benefits of Project 13 are greater certainty, productivity, performance and value in delivery and operation, and a more sustainable, innovative and highly skilled industry.

Engineers Australia would welcome further discussions with the committee.

Yours faithfully,

Jonathan Russell,
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