ENGINEERS
AUSTRALIA

Defence Industry Position Statement

2016

Maximising Australian defence capability

The technical capability of our defence organisations must not fall at a time when the complexity of systems continues to grow and when many next generation military assets are being procured. High defence engineering capabilities and workforce skills are more important than ever.

Defence engineering is entirely subsumed within the profession of engineering in the broadest sense and engineers play an important role in all defence inputs, from academia and industry to government resources both uniformed and civilian. The latest Defence White Paper explicitly states that industry is a fundamental input to defence capability.

Defence capability includes defence assets, infrastructure, personnel and organisational processes. Systems engineering provides the clearest description of the life cycle management of defence assets from perceived need through requirements analysis, research, development, test, evaluation design, construction, integration, acceptance, operation, sustainment, disposal and new capability development. Engineering plays an essential role in every part of this life cycle.

The 2016 Defence Industry Policy Statement outlines key elements of the government's plans for delivering defence capability, defence innovation, driving competitiveness and export potential, and cutting red tape. Engineers Australia welcomes these initiatives, and the establishment of a Centre for Defence Industry Capability.

Numerous reviews continue to highlight the need for defence to be able to make informed procurement decisions, and to be a technically competent owner and operator of engineering-intensive equipment. This cannot be done without specialised workforce skills and expertise throughout the entire asset life-cycles.

Through programs such as the future submarines, Joint

Strike Fighter and Hawkei, it is critical that state and federal governments support and develop the skills needed to build and sustain the assets. Engineers Australia supports decisions which back local industry options. It is the capability of the people working on the design, development and delivery of our defence systems that create and shape the acquisition, maintenance and operation of our national defence capability. The development of high-tech skills is an essential public good that benefits the broader economy.

Defence procurement must support industry policy by providing local build, technical assessment, design and research and development opportunities, and whole of life sustainment. Announcements in 2016 for the future of naval ship building in Australia are a welcome commitment to skills development and Australian industry.

The government has recognised that there is a need to ensure Australian industry can sustain and integrate defence capability over its life in Australia and while deployed. We have an extremely capable engineering workforce but if industry is to support major platforms it is critical that it is closely involved in the engineering-intensive design and build phase. This will enable development of the skills and experience required to maintain, operate and upgrade those platforms throughout their lives and provide opportunities for local enterprises to innovate and be part of the supply chain.

Recommendations:

- State and federal governments should commit to supporting and developing the engineering skills needed to build and sustain defence assets in Australia.
- Defence should continue to maximise opportunities for local industry to be involved in the build, assessment, design, research and development and whole of life support of all major Defence assets.

Defence procurement and industry

The current Defence Industry Policy should be supported by a more comprehensive industry policy, particularly for manufacturing. This broader industry policy would recognise the critical role of manufacturing in boosting economic growth, innovation and productivity.

Existing policies fail to recognise the critical role of manufacturing in driving innovation. Australia lost competitiveness because it has not re-invested in capital technology, unfavourable exchange rates and high cost issues. Many basic manufacturing industries are now uncompetitive but there is potential to reinvigorate or replace them. If nothing proactive is put in place and current trends continue, there will be a lost opportunity for economic and employment growth. Defence procurement offers the opportunity to accelerate structural change.

Government exerts minimal influence on broader industry policy—with much left to market forces—but it has the ability to foster outcomes in the national interest. The link between defence procurement and economic benefits has been long established, and it brings greater access to new technology and global supply chains. Governments can create conditions where expertise and build phase operations of new capital assets are sourced locally, creating a local industrial commons and economies of scale.

The government has a fundamental responsibility to develop the economy for the benefit of everyone, and this is best done with an innovative and productive manufacturing base. Australia needs a coherent industry-wide policy that begins with a defence industry focus to push the economy forward.

Recommendations:

Engineers Australia recommends that the 2016 Defence Industry Policy Statement be used to:

- Develop a comprehensive industry policy supported by innovative procurement methods to drive economic growth and boost productivity.
- Renew Australian manufacturing, and enable world-class, professional technological and engineering capability through domestic defence capital acquisitions.