

SHOAL™

DEFENCE

AIR | LAND | SEA | JOINT



OUR SOLUTIONS

The analytical processes, modelling and simulation tools and techniques behind our approach to systems thinking are key differentiators. That's because, as cyber-physical systems begin to dominate and capability complexity increases, traditional approaches to concept development no longer suffice. Across the defence sector, in Australia and abroad, we provide systems engineering support to programs in government and industry. This includes digital engineering, to provide the digital thread from Defence strategy to detailed capability design; modelling and simulation of Defence systems, to provide analytics for evidence based decision making; and digital transformation, to enhance industry's ability to design and develop the complex cyber-physical capabilities Defence needs.

OUR EXPERTISE

- Early lifecycle systems engineering
- Model Based Systems Engineering
- Creating the digital thread from strategy to systems requirements
- Digital transformation of systems engineering
- Weapons systems modelling, simulation and analysis
- Probabilistic range and fight safety

OUR CLIENTS

ADF Headquarters | Air Force | Army | Navy | Defence Science and Technology Group | Capability Acquisition and Sustainment Group | BAE Systems | Babcock | Hanwha | Leonardo



YOUR CHALLENGES

- Conceptualisation of requirements to build defence capability
- Inter-dependencies and interrelationships of legacy systems and new capabilities
- Realistic, scenario based data for decision making
- Mitigation of safety, security and performance risk
- Effective allocation and use of project resources



ABOUT SHOAL

Shoal are leaders in systems thinking. We use it to help clients define, manage and deliver big projects in complex environments; the kinds of projects that you dream of, but then have nightmares trying to figure out. These projects often have lots of moving pieces that are interrelated and technically challenging, so we use a rigorous, complex systems engineering approach, based on best practices gleaned from around the world (amongst which are our own). When we do this, all the pieces of the system come together to enable our clients to make better decisions, adapt, avoid risks and achieve objectives.

Founded in 2001 and headquartered in Adelaide, our team extends across Australia and New Zealand.

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