

Submarines represent the most complex of engineering machines operating in the most challenging environment, in which other underwater systems are also employed. Government departments and agencies and the shipyards and contractors who serve them benefit from BMT's deep expertise in Submarine design and support. **We solve complex maritime problems in submarine and ship design, acquisition or sustainment and are sought by our clients to support informed decisions.**



From Adelaide to Washington, Canberra to London, the best of BMT stands ready to support.

For decades we have supported submarine programs such as Vanguard and Astute Class in UK, Victoria Class in Canada, and Collins Class in Australia, including the Coles Review into submarine sustainment.

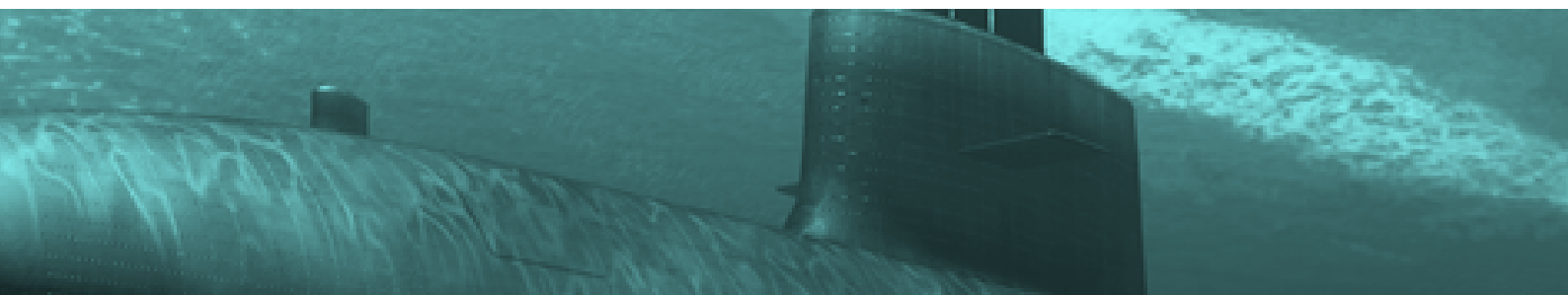
We help you navigate that complexity, bringing a whole enterprise perspective to the many technical and contractual issues involved and building a complete understanding of engineering, quality, safety, availability, costs and risks.

We use our operations experience and technical ability to deliver practical solutions, and we assure the effectiveness of those solutions through our domain, safety, and regulatory knowledge.

We understand the submarine and underwater systems ethos and bring a working style that is collaborative and collegiate, working to promote the common good by improving the interfaces between the many parties required to address complex acquisition programmes.

BMT have supported key Submarine programs including:

- Attack Class Submarine Acquisition
- Collins Class Submarine Sustainment
- Astute Class Submarine Acquisition
- Dreadnought Class Submarine Acquisition
- Vanguard Class Submarine Life Extension
- Victoria Class Submarine Modernisation
- Ula Class Submarine Modernisation



BMT is an Employee Benefit Trust giving assured neutrality and independence from banks, shareholders, foreign powers and manufacturing or product interests.

<p>COLLINS CLASS Submarine Sustainment (Australia)</p>	<p>Over a period of five-years, BMT delivered a Study into the Business of Sustaining Australia's Strategic Collings Class Submarine Capability. Led by John Coles, the study provided fresh insight into the root causes of the loss of availability of the Collins Class Submarines and made recommendations for change.</p> <p>Coles later documented the improvement in availability, which by 2016, was on track to achieve the international benchmark for submarine availability, with almost no increase in resources.</p>	<p>DREADNOUGHT CLASS Submarine Program (United Kingdom)</p>
<p>TRAFALGAR CLASS Submarine Sustainment (United Kingdom)</p>	<p>SUBMARINE NAVAL DESIGN PARTNERSHIP (United Kingdom)</p>	<p>Since its outset, BMT has been a key partner in the enduring SNDP.</p> <p>BMT has supplied key support to the Maritime Underwater Future Capability (MUFC) Pre-Concept Phase and the Submarine Combat Systems Group (SM CSG) including management of the Spearfish Upgrade integration project ("Weapon Thread").</p>
<p>Continuous support to the in-service fleet since 1993 in the following areas:</p> <ul style="list-style-type: none"> • Ship and Propulsion Systems • Platform Structures & Naval Architecture • Combat Systems • Whole Platform Safety • Availability & maintenance engineering • Maintenance of design information 	<p>ASTUTE CLASS Submarine Program (United Kingdom)</p>	<p>Initially supporting the Astute Class design, BMT Assisted in shaping the Initial Astute Support Solution (IASS) in what was a major departure from previously established submarine handover practices.</p> <p>Now engaged in the in-services support for the submarine fleet, BMT has been sought to provide support to upcoming life extension.</p>
<p>ATTACK CLASS Submarine Program (Australia)</p>	<p>Over nearly a decade, BMT have provided Submarine expertise, from across its businesses in Australia, UK, USA and Canada.</p> <p>This expertise was key in the development and assessment of options, including new design and evolved Collins Class options and has extended into the acquisition program.</p> <p>Our Modelling and Simulation Team have helped define support system requirements for the future submarine fleet, while our functional mapping provided advice to the Commonwealth on the structure of a Technical Assurance Authority across Select, Acquire and Sustain project phases.</p>	<p>VICTORIA CLASS Sustainment (Canada)</p>
<p>TRAINING</p> <p>For over a decade, BMT have delivered its Submarine Design and Engineering Course in Australia, equipment CASG, RAN and defence industry personnel with the knowledge they need for the Submarine Enterprise. BMT continue to share its knowledge and experiences to improve the submarine enterprise skills base with contemporary training to suit program needs.</p>	<p>VANGUARD CLASS Life Extension (United Kingdom)</p>	<p>For the past 20-years, BMT has been a key partner on the Vanguard Class Life Extension Program. This has followed a sustained and long history supporting the in-service fleet since 1993 in the following areas:</p> <ul style="list-style-type: none"> • Ship and Propulsion Systems • Platform Structures & Naval Architecture • Combat Systems • Whole Platform Safety • Availability & maintenance engineering • Maintenance of design information
<p>Submarine Design</p>	<p>It's important to BMT that we maintain our skill level and expertise in Submarine Design and Engineering.</p> <p>Supporting this endeavour, we have developed several submarine concepts of our own, using these to improve our skills, test our ideas and identify design and technology challenges.</p> <p>This process is a key part of maintaining our ability to advise clients on Submarine programs.</p>	

