



RINA/IMarEST Technical Presentation

Upgrade or Replace: A Cost Comparison of Australian Warship Service Lives

Speaker:	Alastair Cooper Royal Australian Navy
Date	Wednesday 4 July 2018
Venue:	Harricks Auditorium Engineers Australia 8 Thomas St Chatswood
Refreshments:	6:00 pm
Presentation:	6:30 pm

The service life of a warship has a significant impact on the way the Navy Enterprise (Navy, Defence and Industry partners) organise themselves, affecting acquisition and procurement, manufacturing, supply chain and inventory, personnel management and training. It is therefore a very useful mechanism to understand the Navy Enterprise as a system (or system of systems).

Because ships are the lynchpins for the sophisticated networks making up the enterprise, decisions affecting ship service life have direct implications for the naval enterprise and reverberate through the rest of Defence. This presentation uses an historical examination of decisions related to the service lives of several Australian and international warship classes to examine the issue. To simplify the analysis, this presentation compares a nominal 20-year service life with no major mid-life upgrade to a nominal 30-year service life which includes a major mid-life upgrade.

The publicly available costings suggest that there's little difference in the annual cost of ownership between a 30-year-plus-upgrade service life and a 20-year-without-upgrade service life. That creates the possibility that service life options could be considered for navy vessels that enable other parts of the navy to be optimised.