

Defence Portfolio

INQUIRY QUESTION

(Question No. 2)

Senator the Hon Linda Reynolds asked the Department of Defence the following question, upon notice, on 28 June 2024:

At what point in this process does the voice of the customer come in? Are there lessons learnt from this? Has anybody unpacked the implications for the customer yet? It's the customer's reputation that's been hurt by this process. There are other flow-on issues for Australian industry. One is confidence. I've had this back from a number of people: if you go into a contract with Defence but you keep changing the schedule and asking for these changes, customers can't or aren't pushing back, because they're concerned about whether they keep the contract. In that aspect, what are the lessons learnt in this new process? Admiral Hughes, I think these two lots of five make great sense, but how do you retrospectively apply these to projects that are already in existence?

Defence provides the following answer:

The engineering change process for the Arafura class offshore patrol vessel acquisition project is documented and includes representatives from all relevant areas of Defence and Luerksen Australia. Defence considers the customer to be the Royal Australian Navy (RAN) and as the delivery manager, Naval Shipbuilding and Sustainment Group (NSSG) works with the capability manager as the key RAN representative throughout the acquisition project.

The Arafura class offshore patrol vessel is based on a Reference Ship Design. The acquisition contract with Luerksen Australia commenced with design reviews ahead of construction. The delivery manager and capability manager co-chaired this series of reviews with Luerksen Australia to ensure the design met Defence needs. Changes were identified during these reviews, agreed by Defence and Luerksen Australia, and implemented through the documented engineering change process.

Defence identified changes after the design review period as a result of evolving capability needs (e.g. main gun), equipment obsolescence, and contemporary safety requirements (e.g. structural fire protection). These were considered at Defence engineering review boards. When the engineering change would result in a change to the Function and Performance Specification (the contractual requirements the Arafura class offshore patrol vessel must meet), the change was presented for approval at a Defence configuration change board that included both the delivery manager and the capability manager.

Since contract execution, Defence has approved fewer than 100 major engineering changes (defined as all changes to the Functional Baseline and any other changes with significant impacts such as impacts to functional and physical interchangeability and supportability of the product). Luerksen Australia routinely provides a statement of cost, schedule and contractual impact as part of each change proposal, which Defence assesses in the approval process. Both Defence and Luerksen

Australia must sign off on all major engineering changes. Defence considers the quantum and categories of engineering changes to be within normal parameters for a shipbuilding program of this size and level of complexity.

Defence wishes to assure the Committee that there is a documented and applied process with respect to change management that includes the capability manager (as the customer) and Luerssen Australia. In order to enhance rigour in decision making, the capability manager and the delivery manager determined that all changes considered by the Engineering Review Board are to be endorsed by a configuration control board, not only the changes that would result in a change to the Function and Performance Specification.

Defence also notes the ship designer and builder will identify minor engineering changes (defined as a change that has small or no significant impact) required as part of the normal ship design and shipbuilding process. Changes such as rerouting pipes, location of equipment, and addressing unintentional errors in the design are considered minor engineering changes, resulting in updates to drawings at no cost to Defence and without any contract changes required. Luerssen Australia approves these changes internally through its configuration control board, and provides these changes to Defence for review and concurrence.

Defence's experience with this project has highlighted the importance of minimising or negating capability manager driven design changes to the reference design, other than as a result of critical safety or legislative requirements deemed to have an unacceptable risk level (after controls are assessed and applied), for schedule critical projects.