# Guided Weapons Systems:

## How in-country sustainment solutions will improve availability


With more than 24 different types of guided weapons in its portfolio, the Australian Defence Force (ADF) has a critical weapons inventory that represents billions of dollars in capital investment.

In the late 1960s the Royal Australian Navy (RAN) first equipped its ships with guided weapon capabilities with the introduction of the Charles F. Adams class of destroyers. Over the decades that followed, the RAN steadily and significantly grew the level of capabilities on its surface combatants.

Today, each ship has its own suite of guided weapon systems for air defence and surface warfare. This expansive suite of guided weapons plays a vital role in protecting Australia and its interests. Because these systems are such a critical capability for Australia, it is important that they remain available to the RAN to support operations.

Managing the availability of such weapons relies upon its sustainment process. The sustainment of guided weapons is a complex task, due to the fact that there are multiple organisations and steps involved. For weapons of US origin, sustainment is performed under Foreign Military Sales arrangements with engagement from the original equipment manufacturer (OEM) and Australian Defence Force (ADF).

As part of this process, the ADF is largely reliant on overseas repair and has a limited in-country test and maintenance capability. Many of the capabilities that are in need of testing and repair require sea transport back to the US, resulting in an average turnaround time of two years.

This means that guided weapon sections or all up rounds can be out of the country for years at a time, undergoing test and repair in the US, where there is an extensive and comprehensive inventory of test equipment.

But what if some of this comprehensive in-country test and repair capability existed in Australia? This would mean that guided weapons capability could be tested and repaired in just four months rather than two years. And it is a possible scenario.

This US test equipment could be made available for the ADF to use in-country if both parties agreed to an appropriate licensing arrangement to allow greater testing of guided weapons sections in Australia. One approach to developing such a model would be to engage local defence industry to partner with their US parent companies and the ADF to deliver in-country smart sustainment solutions for these capabilities.

For example, of the ADF's suite of 24 guided weapons types, Raytheon is the prime contractor for more than half of these systems. As an in-country provider of smart sustainment solutions, Raytheon Australia can work closely with its US parent company and the ADF to ensure compliance and deliver a more streamlined support model.

RAYTHEON IS THE PRIME
FOR **54%**
OF THE ADF'S
GUIDED WEAPONS

Raytheon Australia's proven smart sustainment solutions are based on a systems approach that draws upon the collection of timely and accurate data from engineering, maintenance and supply

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# Guided Weapons Systems:
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support. Ultimately, this model drives towards a "single source of the truth" to improve availability.

One specific opportunity as part of this model would be the in-country establishment and operational launch of an Augmented Intermediate Logistic Maintenance Facility (AILMF) for the Evolved Sea Sparrow Missile (ESSM). This would be a new test capability for Australia and would allow for the in-country testing and maintenance of guidance sections, reducing turnaround times.

This capability would allow the ADF to replace approved components that will significantly improve the reliability and, in some cases the capability, of the ESSM inventory. By implementing the AILMF, the ADF will be able to complete this task in just four years by removing the requirement for sea transport. In the current arrangement, this would take 19 years.

In addition, this model would enable Raytheon Australia to conduct ongoing testing, re-certification and maintenance enabling the RAN to optimise the availability of their inventory.


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