THE AUSTRALIAN Defence Force's sharpest thinkers have long recognised that this country needs to rethink its strategies for a future where surface warships are made as obsolete as biplanes by space based bombardment systems and where any vehicle with more parts than a donkey will attract fire-and-forget missiles fired from hundreds of klicks away.

While the Australian Defence Force is taking serious steps towards a high technology future, the barriers to playing the digital battle space game are formidable.

The very complexity of the new systems is daunting and is causing delay after delay, leaving Defence with a procurement nightmare on its hands. Tens of thousands of millions of dollars worth of high technology projects are in disarray due to difficulties involved in bringing complex new systems into service. Many systems have failed to live up to expectations and price tags, with some suppliers failing to deliver the capabilities they claimed to have on offer.

With the exception of the Military Off The Shelf (MOTS) acquisitions like the M1A1 (SA) Abrams, the C-17A Globemasters and F/A-18F, almost every other major ADF equipment project funded in the past 10 years has either been cancelled or is running way over schedule or budget. Sometimes both.

The Royal Australian Navy is probably in the worst position of all the Services with massive cost and schedule over-runs on major warship projects, crew recruitment and retention issues and the forced cancellation of the failed SH-2G (A) helicopter development project.

Forced to meet operational demands beyond its capacity and budget, the Navy has literally run its amphibious capability into the ground. The LPA's *Kanimbla* and *Manoora* and the LSH *Tobruk* have been worked to death.

The RAN's Collins-class submarine acquisition has descended into a near fiasco with only one vessel available for operations on a good day. The Adelaide-class upgrade was once again over time and over budget and did not produce a deployable warship until last year - four years before the first of the frigates is due to be decommissioned to make way for the first Air Warfare Destroyer scheduled to enter service in 2014.

The RAAF was forced in 2007 to spend almost \$3,000,000,000 to buy 'interim' F/A-18F Rhino aircraft after its F/RF-111 strike reconnaissance fleet became unsustainable and its announced replacement, the F-35A Lightning II, was unavailable due to project delays.

The RAAF is gambling that it can keep its surviving fleet of F/A-18A/B+ classic Hornets in the air until it can introduce serious numbers of F-35As beyond 2020. So far hard orders for only 14 F-35As have been placed and the first Lightning II will not touch down at RAAF Williamtown until 2017. With an expected cost of \$16 billion, Australia's Future Air Combat

Capability is still very much in the future.

The RAAF is also awaiting the delivery of its first of five KC-30A Multi Role Tanker Transports which are still in Spain two years after their scheduled delivery. To add salt to the wounds, prime systems contractor Airbus Military damaged one of the aircraft during continual trials. The RAAF has been forced to rely on contractors or lease available US Air Force tankers since 2008 when the last of the old B707s was retired.

The long awaited E737 Wedgetail Airborne Early Warning & Control aircraft are approaching five years late. The aircraft's next generation Northrop Grumman Multi Role Electronically Scanned Array is still next generation. The RAAF now has four of its eventual six Wedgetails on the ground at RAAF Williamtown but no mention is being made of full mission capability any time soon.

While not in the same financial league as the RAAF and the RAN, the Army has serious problems too. Army's biggest headache is its new battlefield mobility and reconnaissance helicopters which it ordered off a brochure and which have not met requirements. They will cost considerably more than predicted. Some critics contend that they may never reach the capabilities of the helos they replace.

The Army's next generation Eurocopter ARHTiger Helicopters are nowhere to be seen almost four years after their original Full Operation Capacity was scheduled. Some helicopters are flying out of Darwin and one ARH participated in Ex Hamel last year, but the project has not produced a deployable capacity ten years after production of the helicopters commenced in Australia and more than six years after the first two Tigers were accepted at the Army Aviation Centre at Oakey.

The new Eurocopter MRH90 helicopters bought to replace the Black Hawks are not winning any hearts at AAAvn either. Engine problems, lack of spares and operational limitations and the German Army's freeze of its NH90 TTH project has made the Army default platform lead agency. And what a platform. Crazy reports that the floors dented and needed to be covered with plyboard and that the seats and winch couldn't take the weight of the average Dig and that the helo could not land on an LZ with obstacles more than 150mm turned out to have substance. If the MRH90 is ever to deploy ADF troops in battle a lot more work and money are required.

As you can imagine this has cost billions, not to mention the wastage of personnel who were recruited and trained at high cost to fly, sail, drive or maintain the new aircraft/ships/vehicles that were never issued to combat units.

Getting out of this mess will be neither cheap nor easy.

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