It’s been said that every generation faces its own challenges.

But I know that my fellow Chiefs of Navy sometimes wonder whether we are confronted by greater challenges than most of our predecessors, as we deal with fundamental changes in the global political and economic order; structural changes in our national demographics; and national economic pressures that sit at the intersection of rising community expectations and technological discontinuities.

So, what I would like to touch upon this afternoon is the conceptual architecture that enables our navies to meet traditional and emerging challenges with greater efficiency and effectiveness.

In my view, the key elements of this new conceptual architecture are: the navy as a national enterprise; the navy as a system; the centrality of decisive lethality; the significance of deterrence as a consequence of that lethality; the importance of availability and sustainment, and, of course, affordability.

Individually, these conceptual anchor points are nice catch-phrases. But when we connect them up as a policy platform, their impact is profound.

I hope to demonstrate this later in this speech by unpacking what I mean by continuous naval shipbuilding.

**The Navy as a National Enterprise**

I suppose that the most significant difference between the navies that we command and those of our predecessors is the fact that the navy is increasingly embedded in the sinews and muscles of our nation.

The navy, as indeed the army and the air force, are not just some kind of reserve national capability to be brought out in time of need, and then put back into the cupboard of neglect.
Rather, the navy is an intrinsic national capability, intimately connected to the social, economic, industrial and educational drivers of national well-being.

The modern navy is a national enterprise, bringing together the private and public sectors of the economy to deliver a fundamental national objective – security above, on and under the sea.

**The Navy as a System**

For the navy to re-visualise itself as a national enterprise, both promoting and protecting the national interest, it is critically important that we see ourselves as a fighting system, not just as a collection of platforms.

This is not, of course, an entirely novel idea – the most successful of our operational predecessors have grasped that instinctively.

What I am driving at here is synergy as a core doctrinal concept, whereby decisive lethality is delivered by our entire system operating in a focused, networked and “joined up” way.

This means that our civilian intelligence personnel, our dockyard workers, our naval architects, our enlisted and commissioned personnel act collectively to maximise the strategic effect of our platforms and their capabilities.

**Lethality and Deterrence**

Now to understand this properly, I need to briefly discuss some key strategic themes.

Some might think I am being too academic, but I’m not; bear with me. It’s all about lethality and deterrence.

Ultimately our government wants to deter conflict and contribute to the maintenance of peace and security around the world.

They can only achieve that, however, if they are able to deploy decisive lethality to sanction anyone who might wish to use armed force against us.

Lethality is indeed the ultimate purpose of the navy.
Fear of the consequences of that lethality is what deters armed adventurism – deterrence is a consequence of lethality.

Lethality is the ability of Navy’s fleet to generate decisive outcomes in conflict.

This is relatively straightforward. But often the word is used without comprehending its implications for the manner in which we design, operate, and sustain our maritime capabilities.

I gave an address in the US in April, where I discussed the core issues of deterrence and lethality and their inherent interconnection to the legitimacy of government.

As I said then, Navies are a manifestation of purposeful government.

And the defence of our nations’ legitimacy, authority and credibility in the 21st century depends on our ability to project strategic lethal force over, on and beneath the sea. Lethality is the key to our nations’ ability to wage war.

Clauswitz knew this!

The constant that underpins the state’s ability to continue policy by other means is the armed force available to it and its willingness to use that force.

Deterrence, and for that matter, sea control, power projection and naval presence are all consequences of the state’s ability to deliver strategic lethality, either singularly or in coalition.

A fifth Generation Navy will deliver the requisite lethality to meet Australia’s objectives now and into the future.
Now all of this may seem esoteric when you are only interested in building ships. But my next point is that it’s also all about availability and sustainability.

**Availability and Sustainment**

I can have the best weapon system in the world, but it is useless if it can’t leave the wharf.

Deterrence can only have effect if our ships can sail; if our submarines can dive; and if our aircraft can fly.

Without forces available for tasking, Government can’t fulfil its global objectives; it can’t contribute; it can’t deter; and it definitely can’t defend.

So let’s move to the business part of navies. We need to talk about availability and sustainment.

My first point is this. It is my role to ensure that the strategic purpose, operational concepts, and capability requirements are designed into our ships and aircraft.

I make the clarifying point that lethality also extends to the manner in which we sustain our maritime capabilities. This is of fundamental importance.

The efficacy of our sustainment arrangements is essential to our ability to generate both availability (the ability to be at sea) which we call Seaworthiness, and capability (the ability to achieve assigned missions), which we call Battleworthiness.

The availability of our future fleet will depend on a new enterprise approach to acquisition and sustainment that Navy, the Capability Acquisition & Sustainment Group, and industry will need to develop and uphold.

Of course, robust sustainment arrangements need to be complemented by the reliability in the first instance.
This points to the fact that we must build sustainment into both the design and operation of our fleet.

If I have a criticism of the rhetoric of the past few decades, it is that it focused too much on theoretical capability without due recognition of the capabilities actually available. I aim to change this.

The obvious question is “How do we do this?” How do we ensure that we can manage our assets to deliver to government the forces necessary for our national security.

There is no one answer, but what I can tell you is that there is a growing appreciation within Defence that different capabilities need to be managed in different ways to ensure success.

Moreover, there is a growing appreciation that the effectiveness of the entire system cannot depend on any single point of capability failure.

Sailors everywhere know the importance of the adage “don’t spoil the ship for a ha’penny’s worth of tar”. This may sound like a statement of the ‘bleeding obvious’, but somehow too many people overlooked it over previous decades.

That is why we have been subject to review after review over the last thirty years.

This is where continuous shipbuilding comes to play.

**Continuous Shipbuilding – Significance/Implications to Innovation**

Continuous shipbuilding is how the nation can ensure its naval vessels are acquired and sustained to guarantee preparedness. It is about building evolution into availability.

Continuous shipbuilding also provides certainty for industry not just for the life of one project, but for sustained capability into the future. It is an initiative of national significance.

Defence will shortly negotiate a way forward to reduce the depth of skills loss across the ship building workforce and mitigate against a "cold re-start" after the completion of the current three ship Air Warfare Destroyer program.
This is a significant strategic initiative for our Navy and for our Nation.

The government has set the head-mark, now we must steer the course we have charted.

We also know that we need to “ring on more revolutions” if we are going come up to speed and meet the demanding timeline set.

How is this different from before?

Now we’ve heard commentators talk of the success of the Anzac project and how we need to replicate that project again. In some ways, this has merit. But our future planning needs to do so much more.

The Anzac project was a success. But it started, then stopped. It was a project not a continuous program.

Continuous shipbuilding will place naval construction in the sinews of national industrial capability, giving real and continuing meaning to navy as a national enterprise.

It is an opportunity for Government, Navy, Defence, and industry, working together, to cement the foundations of capability across the economy thereby creating an industrial inheritance for future generations of Australians.

So what do I ask of Industry?
As you all know, I am responsible to Government to provide trained, mission-ready vessels. That means the ships, submarines and aircraft in the Fleet must be available when planned; their maintenance and sustainment must be conducted predictably, reliably, on time, and on budget.

As a result, I am looking for partners in industry that will not only deliver the required levels of readiness but, will translate cost effectiveness into enhanced readiness.

To support this outcome, industry needs to understand the importance of optimising the readiness of the current systems and capturing and managing the required knowledge.
Industry needs to bring to the Naval Enterprise the latest in effective techniques to improve affordability, such as Total Asset Management.

In saying this, I am not implying loading-up industry with all this! We in Navy have our share of responsibility for meeting this outcome.

But as an industry audience you need to know that Navy sees you not just as a valued partner but as a central part of the modern naval enterprise.

If we, together, do not fully appreciate this enterprise approach we will never capture the opportunities generated by this ambitious program we are about to embark upon.

In supporting this outcome, industry needs to understand technology growth paths and the long-term implications of systems and technology providing operational availability at an affordable cost.

And industry needs to invest for itself; not just invest for the next project.

I call it horizontal enabling—programmatic planning for the long-term.

I cannot over-emphasise the importance of this point, because in my mind it is not just about the first ship to roll off the production line. Rather, its about ship 5; ship 11; ship 18…..

Now do you understand where I am coming from?!

It is about innovation. It is about continuous improvement. It is about Navy and the Nation. It is about the future.

Continuous shipbuilding recognises that we truly understand the nature of systems on ships and how they impact our planning for sustainment and availability.

Some of these systems can be expected to last the life of the asset. Others will need to be updated several times throughout the life of the platform.
At the outset of design, industry will need to be aligned with this concept.

**Benefits of Continuous Build Program**

In addition to maintaining and developing industry over the long term, I want to highlight the important role that the continuous build program plays in supporting the delivery of innovation into the Naval Enterprise.

One of the greatest opportunities that continuous shipbuilding provides is the ability to look at analysis, design, construction and sustainment collectively, or, as I would prefer to describe it: thinking, designing and doing, not as a series of sequential activities, but as concurrent activities.

Continuous shipbuilding offers many cost effective opportunities to be innovative in the way we build and sustain our fleet.

However; let me inject a note of caution.

We cannot disconnect from the fact that we will inevitably begin with a mature design.

Where we take benefit is in managing the system that supports that design - data recording, real time maintenance management, capability and systems evolution, the exploitation of disruptive technologies.

This is inherently about availability! Looking beyond the build, we must design for sustainment.

This means taking advantage of new technologies and systems, whether they are domestic or from the global market so that they can be integrated into both the build and sustainment activities.

This will enable the continuous building plan to evolve because, while the program will be enduring, the technology will advance.
To this end, I look to Capability Acquisition & Sustainment Group, industry and the tertiary educational sector to help create a twenty-first century naval enterprise. This is about networked collaboration.

The Continuous Build Program will not only change the way that business cases are developed, but it will also change the way that business is done.

Industry must be attuned to this and grasp its implications for the investment decisions made regarding both technology and people.

So in summing up.

The continuous build plan provides a critical opportunity to reorient our national naval enterprise to address the strategic demands of the twenty-first century.

In some respects, this is a make or break opportunity – we either realise it together, or our navy drifts off into the world of regret for what might have been and recrimination against those who failed to capture the moment.

Regret and recrimination do not feature in my operating lexicon. I know they don’t in yours.

The navy that I lead is innovative, imaginative and professional. It is also totally dedicated to the great national enterprise of protecting and promoting Australia’s interests.

And that, ladies and gentlemen, is an enterprise that engages all of us. Thank you.