



FORCE 2020



FOREWORD

The opening events of the 21st Century have prompted many of us in the Australian Defence Organisation to reflect on the challenges, opportunities and uncertainties that the future may hold, and how we will meet these as an organisation.

In a time of unprecedented change, the Australian Defence Force must be many things: combat-capable, rapidly deployable, highly adaptive, responsive to change, and thoroughly professional. It is equally important that we share a common understanding of the way in which we will meet our future challenges and what we must do today to prepare for them. In other words, we must all be striving towards the same goal.



FORCE 2020 guides our progress of our Defence force towards the future world of 2020. It is a vision that applies to *everyone* in Defence, and has been developed in consultation with several working groups representing a wide cross-section of our Defence Force and the wider Department. *FORCE 2020* is more than just words on a page; the challenge now lies with each of us to share, own, communicate and implement our vision in everything we do.

We must strive to maintain ourselves as a formidable fighting force so that if we are called upon to act, we can do so decisively and successfully. In living up to this aim, it is important that we have a clear understanding of where our Defence Force is heading over the long-term and how we will uphold our important place in the nation well into this new century. This is my vision for the future Australian Defence Force, fully supported by the three Service chiefs and the Secretary of Defence, and I commend this publication to you.

C. A. BARRIE
Admiral, RAN
Chief of the Defence Force
Canberra
2002

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INTRODUCTION

A vision statement challenges and inspires an organisation's members to stretch their expectations, aspirations and performance to achieve its mission. It gives our work a common guide to action. As our future vision, *FORCE 2020* aims to gain and sustain the willing cooperation of our people to better create and implement change, in pursuit of mission success.

Defence 2000: Our Future Defence Force highlighted the need to "look a long way ahead" since "decisions about the development of our armed forces can have time frames of 20 years or more". *FORCE 2020* takes the challenge to look beyond the here and now, and builds upon the senior leadership's contemporary vision statement "**a force for good** • **a force to be reckoned with** • **a force to win**".

Within this vision, a force means all of us: our permanent and reserve forces, our civilian colleagues, and contractors. In this vision statement, it is clear that we are seeking the moral high ground – **a force for good**. We are also seeking to be taken seriously – **a force to be reckoned with**. And finally – **a force to win**: we should never lose sight of this ultimate objective.

Our Defence Organisation is large, complex and diverse, and positioning ourselves for the future does not come easily. *FORCE 2020* therefore seeks to develop a shared understanding of future opportunities and challenges, and identify what we must do today to prepare for them. In practical terms, it is intended to be an overarching guidance document that:

- develops a common understanding throughout the Australian Defence Organisation of where the Defence Force is heading over the long-term and how we intend to get there;
- shapes subordinate planning documents such as the emergent Future Joint Warfighting Concept; and
- guides single Service and joint experimentation processes.

FORCE 2020 adopts a 'building block' approach to positioning ourselves for the future. In this way, there is a continuum that will drive us towards 2020.

- The foundation block is our past. We ask ourselves '**What do we need to carry forward?**' This section seeks to build on our past by describing which characteristics we must take with us on our journey to the future force.
- We then seek to build on this by asking '**What do we need to do now?**' By understanding our present, we can identify contemporary issues that will need to be successfully resolved in order to progress towards our vision for the future force.
- The third building block asks '**What do we want to be like?**' When defining our future, we need to embrace bold and innovative ways of operating. This section outlines key concepts that will guide us towards our goals.

Many of the judgements and developments in *FORCE 2020* are necessarily broad. No doubt we will discover new things and acquire new perspectives. In particular, the adoption of concept-led long-range planning and experimentation will inform our way ahead in coming years (as discussed in more detail in the *From Vision to Reality* section). As a result, our vision must develop with our changing context, and we will need to review *FORCE 2020* in the years ahead.





SECTION 1

BUILDING ON OUR PAST

What do we need to carry forward to 2020?

We have had some great successes throughout our history. It is essential that we continue to emphasise the enduring characteristics of our Defence Force that have underpinned our success in the past, and will continue to enable success in the future. *FORCE 2020* seeks to reaffirm these traditions and characteristics, and use them as a foundation for our plans to meet our future challenges.

Our 'Contract' with the Community

For much of our military history, our Defence Force has relied heavily on the 'citizen soldier'. In World War II for example, four in five Australian men of military age were in uniform, with close to a million Australians serving in the Armed Forces. In a very real sense, the forces were part of the community.

In the modern era of largely professional forces, those links need to be reaffirmed; we cannot assume them. We need to guard against attitudes of separateness and superiority, which can only weaken our Defence Force: as an employer, as a user of social infrastructure (such as industry), and as an institution attracting popular support.

We must ensure that our people can work comfortably with other parts of Government and industry. The *education* of our uniformed people will continue to emphasise their dependence on the surrounding society, and the importance of working with others. Our *dialogue* with the rest of society needs to be proactive: we must ensure that people understand our purpose, and are part of the discussion about what we do and where we are heading.

Our *values* and *conduct* are part of this contract with our community. Our treatment of each other in the work place, and our treatment of others, must be beyond reproach. We need to carry out our daily work in a way that reflects the high expectations of the Australian community.



ANZAC Day is an important part of Australia's national life, and shows the high regard in which Australians hold their defence forces.

We must maintain a link with community values, attitudes, beliefs and expectations, and remain worthy of the community's trust. We must also continue to engage in close dialogue with the community.

Our Flexibility, Adaptability and Resourcefulness

We must continue to draw upon these key characteristics of our Defence Force. Our flexibility and adaptability allows us to meet significant challenges across the spectrum of operations. It also presents itself in our state of mind – we are not bound by dogma. Our resourcefulness allows us to develop smart ideas, test them, and implement them, and more generally, to do the best we can with our limited resources.

Our Professional and Disciplined Force – People First

It is not technology, systems or platforms that generate the real capabilities for our Defence Force, it is the strength of our *people*. The power of Australia's Defence Force has always been the quality of its members. We have a history of achievement and excellence, which provides a firm foundation for our current activities as well as those of the future. However, this foundation may be eroded if we do not give our people the high priority they deserve.

The way we treat each other as respected team members is underpinned by our tradition of mateship, based upon shared hardship overcome by mutual trust and perseverance. Our Defence Force should never lose sight of these strengths. Importantly, this outlook extends to member's families – we must remember that, in a sense, we have our own micro-community based on shared experiences and our unique conditions of service.

Our training and experience have also fostered important values that include teamwork, initiative, courage, compassion and respect for the individual.

'The key to maintaining the ADF as a first-class military force is having the right people, with the skills and experience they need to succeed in complex military operations.'

Defence 2000: Our Future Defence Force.

Our International Partnerships

One of our Defence Force's great strengths is its professional links to other forces abroad. Our close strategic relationships with the United States, the United Kingdom, New Zealand and others, provide invaluable professional development and knowledge. We are sharing knowledge with the world's leading armed forces. These links are wide ranging: exchange postings, senior-level meetings, technical collaborations, combined exercises, and so on. We need to protect them, and build on them.

Our defence relationships in the region are unique. We have built up, over the decades, an extraordinary professional network with our neighbours. These relationships have fostered strong connections, mutual respect, transparency and understanding. We must not lose sight of the significance of face-to-face relationships in shaping a favourable strategic environment.

Our advantage will continue to come from military-to-military international links – the key to enhancing mutual understanding.

Working with others we can do a lot more than we can do by ourselves.

Defence 2000: Our Future Defence Force.



“There has been no finer feat in this war than this sudden landing in the dark and storming the heights”

“The Australians who were about to go into action for the first time in trying circumstances were cheerful, quiet and confident. There were no sign of nerves, no excitement...They did not wait for orders, or for the boats to reach the beach, but sprung into the sea and, forming a sort of rough line, rushed the enemy trenches. Their magazines were not charged, so they went in with cold steel... I have never seen anything like these Australians in war before.

Ellis Ashmead-Bartlett
 British War correspondent
 Gallipoli
 May 8, 1915

Study of Australian troops disembarking at Alexandria after the evacuation of Greece (World War Two) by Ivor Hele.

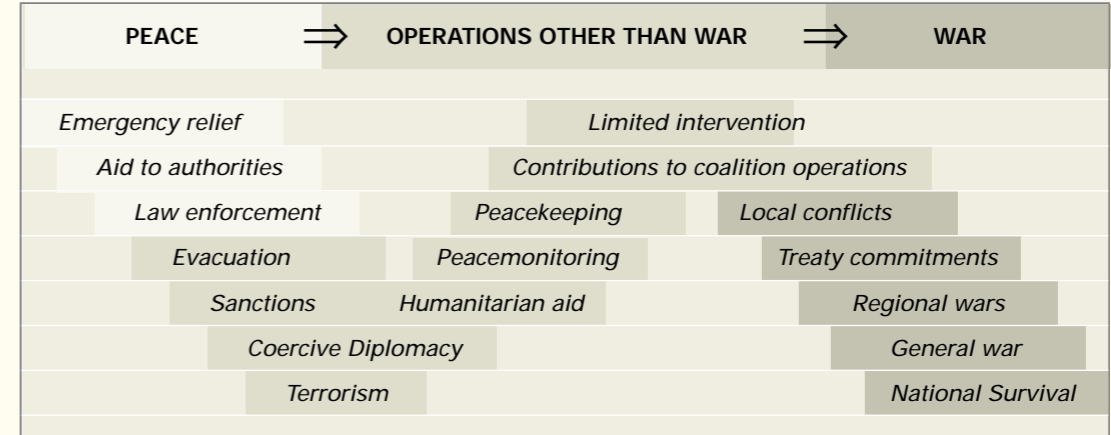
Our Warfighting Ethos and Fighting Spirit

Even though the spectrum of operations (see opposite) in the future is likely to be increasingly broad and diffuse, warfighting will remain at the core of our preparation and training. Only a disciplined armed force capable of ‘high-end’ warfighting has the necessary skills to contribute to the full range of possible contingencies and peacetime tasks in the spectrum of operations.

The maintenance of a warfighting ethos and a fighting spirit are vital in delivering combat power to win in battle, and will continue to be of the highest importance.

We must maintain warfighting as our core business. We will remain the only option for government for warfighting tasks.

FIGURE 1: THE SPECTRUM OF OPERATIONS



FORCE 2020 is based on the recognition that we will increasingly be involved across the full spectrum of operations. But it also recognises that our core business will remain defending Australia and its interests. The ‘spectrum of operations’ extends from assisting with emergency relief to matters of national survival. It is underpinned by the concept of ‘likelihood versus consequence’ – operations to the left of the spectrum are more likely, but their consequences are relatively limited. The reverse is true for those operations to the right of the spectrum, where although they might be relatively unlikely, the consequences may be catastrophic for Australia.



SECTION 2

UNDERSTANDING OUR PRESENT
TO SECURE OUR FUTURE

What do we need to do now?

In positioning ourselves for the future, we must understand and resolve the contemporary challenges we face before we can move towards our vision for the future force.

Our Technological Strengths

We are well placed to capitalise on the opportunities offered by technological advances. We are increasingly well educated, technically literate and have demonstrated high aptitude for technological innovation.

We must continue to exploit superior technology to maintain our status as a highly capable defence force. We need to foster a 'technology bias', particularly given the small size of our population, our large geography, and our modern economy. However, we must also remember that our advantage over potential adversaries will not come from technological solutions alone. Our strategic advantage will come from combining technology with people, operational concepts, organisation, training and doctrine. We must be careful to ensure that technology does not give an illusion of progress – we cannot afford to maintain outdated ways of thinking, organising, and fighting.



An RQ-4A Global Hawk high-altitude, long-endurance Uninhabited Aerial Vehicle (UAV) arrived at RAAF Base Edinburgh after flying from Edwards Air Force Base in the US. Australia has joined the US in the development and demonstration of the Global Hawk system. This type of arrangement illustrates our willingness to capitalise on the opportunities offered by technological advances.

Civil Military Partnership

As the nature and scope of national security becomes more challenging, we are experiencing an increased merging of Defence and civil society. In this environment, it is no longer practical to act in isolation. We can expect an increased interdependency between military and civil capabilities, and between military, economic, political and social factors at a national and international level.

Therefore, we will need to engage in strategic partnerships with organisations outside Defence to a greater extent than we currently do. We will require a better understanding of the non-military agencies and organisations involved in whole-of-nation responses and seek more innovative associations with our other traditional partners. We must also develop long-term collaborative relationships, conduct joint planning in advance of potential crises, and develop compatible processes and procedures.

Our Defence Force is now exploring more innovative and strategic relationships with industry, a process that challenges our traditional ways of doing business. In the future, we should see larger numbers of contracts that are longer term, covering a broader range of activities, and which are based on partnering principles rather than narrow product-based relationships. Industry will need to be brought earlier into our planning processes for responding to potential crises.

The challenge is to draw upon strategic collaborative partnerships with the range of non-military agencies and organisations responsible for national security to a greater extent than we currently do.

Commonwealth Heads of Government Meeting (CHOGM) 2002

In March 2002, 2,400 ADF personnel worked with the Queensland Police Service, Australian Federal Police, Air Services Australia, and other government agencies to provide support for CHOGM. The ADF provided basic security, counter-terrorism, air defence, logistics and communications support for the duration.

Increasing Tempo of Operations / Dynamic Command and Control

Contemporary technology enables around-the-clock conflict, placing greater demands on commanders and subordinates for speed of decision and action (tempo). Our traditional decision making methods will not always be appropriate or effective. We must seek to employ more flexible models of command and control. In more intense combat operations a 'flatter' process (ie. less hierarchical and more direct) will often be appropriate. Likewise, more traditional hierarchical models will suit other situations.

The challenge is to optimise our organisational structure and its approach to decision making for the tempo and 'real time' demands of 21st century conflict.

The 'CNN Effect'

Public demand for immediate information on military operations will likely remain high. Technology will enable the media to collect and transmit data in real-time, and the media will act as a powerful tool in shaping public perceptions throughout the world. This capability, while generally beneficial, can pose a risk to operational security if not appropriately managed.

"The Right People with the Skills and Experience They Need to Succeed"

Defence 2000: Our Future Defence Force

The Australian population is aging, yet we are dependent on the under 40's more than most other organisations. In the next decade we will face increasing competition for a shrinking pool of young Australians. Our workforce has shifted more towards the high-skill end of the competencies spectrum where competition for labour is keenest. This presents a number of challenges, including:

- maintaining employment conditions which are at least competitive with community standards, and can be flexibly applied;
- examining new non-monetary benefits that will make Service life attractive;
- increasing mobility between our full-time Defence Force and other components of the Defence workforce (Reserve, Defence Australian Public Service (APS), other civilians including Defence industry);

- improving our ability to forecast and manage shortages in critical trades/competencies; and
- closer integration of workforce planning, especially recruiting and retention initiatives, as an essential part of capability planning.

The challenge is to reconcile our 'demand' requirements with increasing 'supply' constraints.

Resolving these personnel issues alone will not be sufficient. We must seek the best mix of Permanent Force, Reserve Force, APS, and industry to deliver capability. We will actively experiment with innovative technologies, force structures, and processes to achieve this.

The challenge is to ensure that we strike the right balance.

We will test the factors that limit the use of Reserves and civilians (APS and industry) in lieu of Permanent Force. We must learn from our experiences in recent operations, and maintain our focus on warfighting requirements when it comes to administrative and support arrangements. We cannot allow any risk to capability.

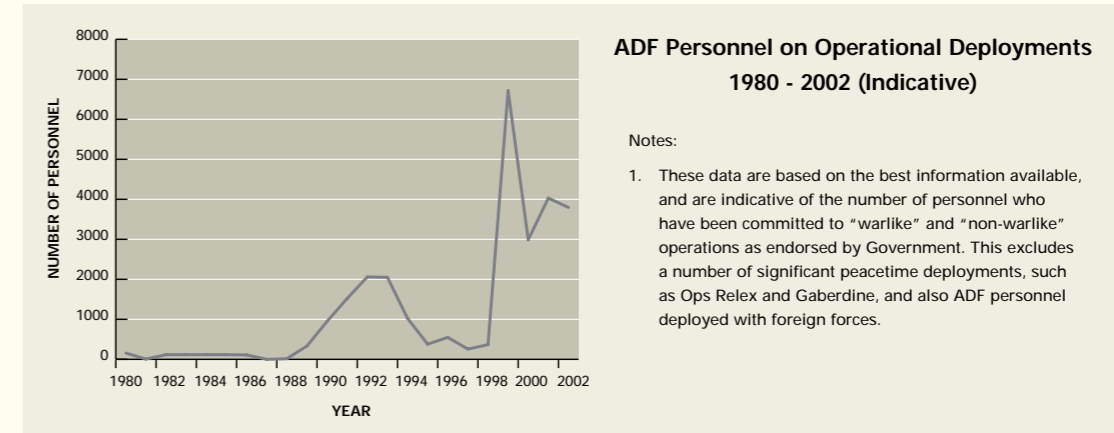
We must be careful not to let our drive towards the more efficient use of resources overshadow our ability to fight and win.

Concurrency of Operations

We are currently faced with significant demands arising from operational concurrency. Of all the challenges that have become features of the post-Cold War environment, this has the most potential to impact upon the way we structure and organise our Defence Force into the future. To complicate the issue further, the type of operational commitments we have made over the last decade – and are likely to continue making into the future – have required sustained commitments over several years, and have often placed additional demands on force elements that are already stretched (such as sealift). Subject to government direction, our ability to contribute forces to several concurrent operations, varying in nature from warlike to non-warlike and peacetime, will be one of our most significant challenges over the next few decades. It calls for a dynamic and flexible planning process that has the measure of our fluid strategic environment.

The challenge will be meeting the potentially significant demands of increasing operational concurrency.

Figure 2:



We are likely to face more frequent deployments, with multiple operations over protracted periods.

Interoperability

Australia has never undertaken significant military operations alone. Future operations – as in the past – will probably be conducted alongside the defence forces of other nations. This requires the ability to operate effectively alongside forces whose military capabilities, doctrine, and cultural backgrounds differ from our own.

In so doing, we face some significant challenges. The biggest of these is to remain interoperable with the US. At the same time, we will need to remain interoperable with our regional neighbours. Therefore, we must have the high level of interoperability required to allow us to operate with more powerful armed forces, as well as meeting the needs of regional coalition operations and peacekeeping.

We must also increase our understanding, through experimentation and exercises, of our internal capability to operate as a coherent force.

The challenge is to develop and maintain sufficient interoperability with both our more capable allies and regional coalition partners.



SECTION 3

OUR FUTURE

What do we want to be like?

Our ambition for 2020 is simple: we will be a highly capable force whose culture of innovation will allow us to adapt to change. Our people will be fundamental to our capability, and our seamless approach to warfighting will enable us to maximise the strengths of the individual Services. We must draw upon the defining characteristics of our past and the challenges of the present to embrace **bold** and **innovative** ways of operating. The key concepts outlined below will guide us toward our goals.

A Seamless Force - 'Beyond Joint'

A defining feature of *FORCE 2020* is that it is driven by the concept of a 'seamlessly integrated force'. This concept goes beyond the contemporary understanding of 'jointness', but it does not signify a merger of the three Services, nor does it seek to undermine their identities and cultures. Given our relatively small size, the main reason why we must aspire to be a *Seamless Force* is to maximise our collective warfighting capabilities and specialisations.

A Seamless Force embraces not only our permanent and part-time members across the three Services, but also includes Defence civilians, our embedded contractors and defence industry, and where necessary, our allies and coalition partners. As such, the concept of a *Seamless Force* looks towards a future where our traditional forces are not only seamlessly integrated with each other, but also externally integrated with a wider range of supporting organisations, agencies, and to an extent, the community.

We will be a seamlessly integrated force on two levels: internally, with each other, and externally – or 'cross-functionally' – with the range of providers, supporting entities, and the community.

A Seamless Force – The Bougainville Example



Op BEL ISI – the Peace Monitoring Group in Bougainville – is a present-day example of the possibilities for a *Seamless Force*. The operation is inherently joint at all levels, civilian peace monitors from several government departments serve alongside their ADF colleagues, and contractors now provide aviation support. The operation also works closely with humanitarian agencies and the UN. Op BEL ISI provides a successful template for future operations of this type.

A Seamless Force will remain fundamentally dependent upon single Service competencies and maximising the synergies between our capabilities as a Defence Force.

Becoming a Seamless Force means that:

- some units are ‘born joint’ (tri-Service units based along functional lines).
- some force elements would be joint and inter-agency on a permanent basis.
- there will be a different and/or greater degree of joint asset management and employment. For example, Naval amphibious assets might have jointly operated helicopter support attached.
- we expect to see greater Defence civilian and contractor contributions within an Area of Operations (where conditions and the nature of the operation allow, such as that already being carried out in East Timor, Bougainville, and the Solomon Islands).
- we will embrace the concept of ‘shared stewardship and ownership’. This affects all of us – from our senior leaders to our sailors, soldiers, airmen, and airwomen. It means that in carrying out our duties, we are not only motivated by what is best for our unit, our corps / branch / mustering, or even our Service, but what is best for our *force*.
- ‘Commonality’ will be a key component: at single Service level, ‘commonality’ is usually associated with less of a training burden, ease of spares management, lower initial and life cycle costs, and the like. A *Seamless Force* employs this concept at the *inter-Service* level, meaning that where feasible, we seek commonality of platforms, systems, training, and engineering across the entire force, and thereby gain the benefits associated with this concept on a much wider scale than currently.

Importantly, we must develop people to operate in this new environment, and reward those who display skills and attitudes that are relevant to this seamless force.

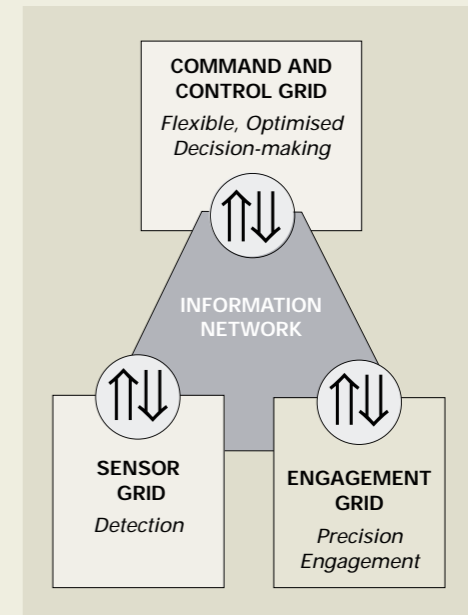
Network-Enabled Operations

In the force of 2020, we will have transitioned from ‘platform-centric’ operations to ‘Network-Enabled Operations’. As the name suggests, Network-Enabled Operations derive their power from effectively linking different elements of the organisation to conduct warfare more effectively. Network-Enabled Operations treat platforms as ‘nodes’ of a network. Since all elements of the network are securely connected, they can collect, share, and access information. This shared information is used to create a common, real-time battlespace ‘picture’ across all components and all Services, which in turn allows a greater level of situational awareness, coordination, and offensive potential than is currently the case.

The aim of Network-Enabled Operations is to obtain common and enhanced battlespace awareness, and with the application of that awareness, deliver maximum combat effect.

The fundamental building block of Network-Enabled Operations is a comprehensive ‘information network’. This network comprises a tiered system of ‘grids’, each with a specific purpose:

- A **Sensor Grid** collates real-time information from every kind of sensor – from satellites to soldiers – to create a shared picture of battlefield conditions. The ability to connect to this grid will emerge as the primary source of combat power.
- A **Command-and-Control Grid** will collate, analyse, and make the rapid manoeuvre and target allocation decisions based on the picture of the battlefield.
- An **Engagement Grid** will execute the decisions of the Command-and-Control Grid, using whichever ‘shooter’ – regardless of Service – is best equipped and located to deal with the designated target.



Network-enabled operations will provide us with a new type of advantage. This advantage will enable our commanders to achieve 'decision superiority' – the ability to make better, faster decisions, based upon more complete information than an adversary.

A recent example of the effectiveness of Network-Enabled Operations is the use of Uninhabited Aerial Vehicles (UAVs) in Afghanistan in the War against Terror. UAVs were able to pass real-time video on targets to airborne weapon platforms. This direct sensor-to-shooter link, representing seamless integration of platforms, enabled a rapid engagement of time critical targets. Previously unachievable, this could not have occurred without the application of Network-Enabled Operation techniques.

In a Network-Enabled Force:

- Commander's intent and Rules of Engagement take the place of direct orders.
- The ability of *in situ* commanders to read the situation, respond with confidence, and *act decisively* is enhanced.
- A challenge will be achieving the necessary interoperability for effective coalition operations.

Fog and Friction Are Forever

Despite dramatic changes to how we fight, we should not expect that the fundamental nature of war itself will change. It is not a 'business'. As Clausewitz wrote, war will remain characterised by chaos, danger, violence and uncertainty.



An Effects-Based Approach

Effects-Based Operations (EBO) are defined as the application of military and other capabilities to realise specific, desired operational and strategic outcomes in peace and war. In an Effects-Based Operation, our planning focuses on the effects that we are trying to achieve, which allows us to plan our capabilities and operations more flexibly. It avoids assuming specific platform solutions: for example, we might identify a need for ‘supporting fire’ other than solely traditional solutions.

Put simply, EBO seeks to defeat an adversary’s strategy and resolve instead of merely attriting his armed forces. EBO means knowing which targets to select for maximum results in achievement of our national objectives. Although this idea is not new, new information technologies are enabling us to know an adversary and his centres of gravity better than in the past.

EBO also lends itself directly to long-term capability planning. Effects language helps to avoid focusing too early on specific platform solutions for our future force.

A National Effects-Based Approach is a preferred approach because it meets the emergent breadth of threat – not just military challenges, but also broader security challenges – and provides government with the most options.

In an Effects-Based Operation:

- The greatest challenge would be the much greater degree of integration/interaction with other national agencies. This will require people who have a working knowledge of how the role of the ADF fits into the whole-of-government approach to strategy.
- Operations must be supported by an effects-based planning process, rather than the existing planning process. In many situations headquarters will need to develop solutions associated with effects rather than the specific means.
- The ADF will need to develop a more sophisticated understanding, among a wider range of people, of the structures and culture of other countries.

By focussing on effects, or outcomes, EBO can easily be distinguished from operations focused solely on specific levels of destruction of individual targets





SECTION 4

FROM VISION TO REALITY

As our future vision, *FORCE 2020* guides the progress of our Defence Force towards the world of 2020. One crucial aspect remains: *How do we turn this vision into reality?* How can we continue to improve our organisation and maximise the contribution of our people to ensure we are able to fulfil our vital mission to 2020 and beyond?

Concept-led Long-Range Planning

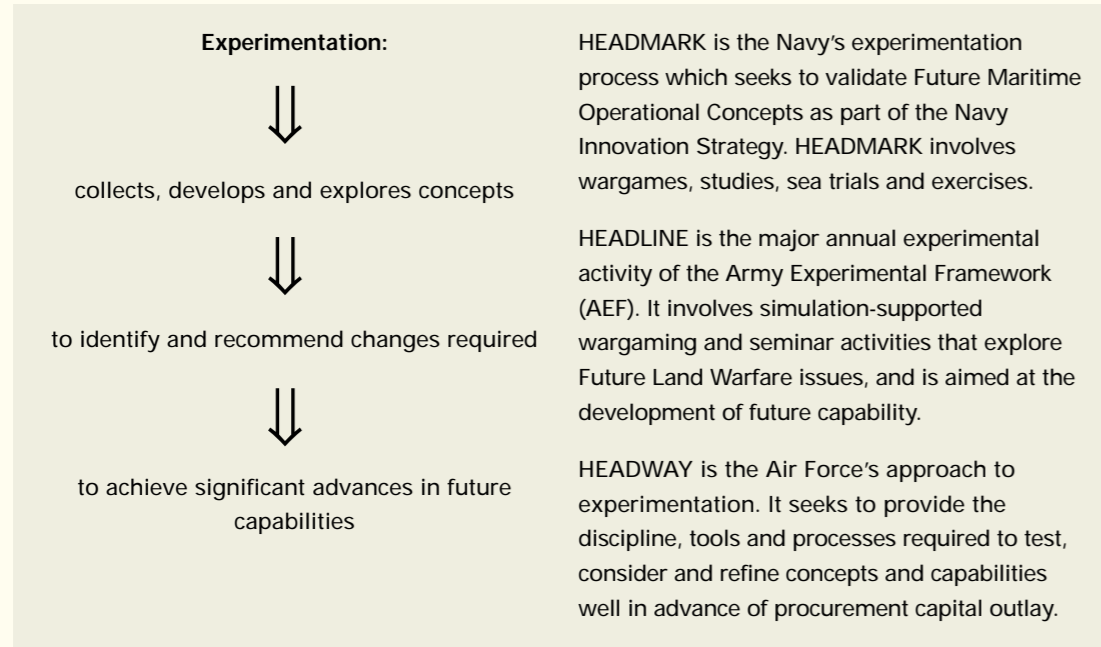
FORCE 2020 represents the initial step in a transition towards concept-led long-range planning. In essence, this involves identifying the major drivers and future missions for our Defence Force, and then developing operational concepts to enhance our ability to fulfil these missions and tasks. These operational concepts, such as the Future Joint Warfighting Concept, are then subjected to rigorous experimentation.

As such, *FORCE 2020* fulfils the role of an overarching 'capstone' document. The future concepts outlined in *FORCE 2020* will guide experimentation through the proposed strategic-level experimentation framework and within the single Services (under the auspices of HEADMARK, HEADLINE and HEADWAY – see Figure 4 next page). This experimentation effort closely links into the work of our Allies to maximise our combined operations capabilities.

Through experimentation and simulation, these key future concepts will become more than just words on a page. They will also require all of us to overcome organisational inertia, and embrace bold and innovative ways of operating. After all, it is up to each and every one of us to transform this conceptual vision into reality.

Force 2020 will build on our past, enhance our understanding of the present, and guide us towards this future.

Figure 4:



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