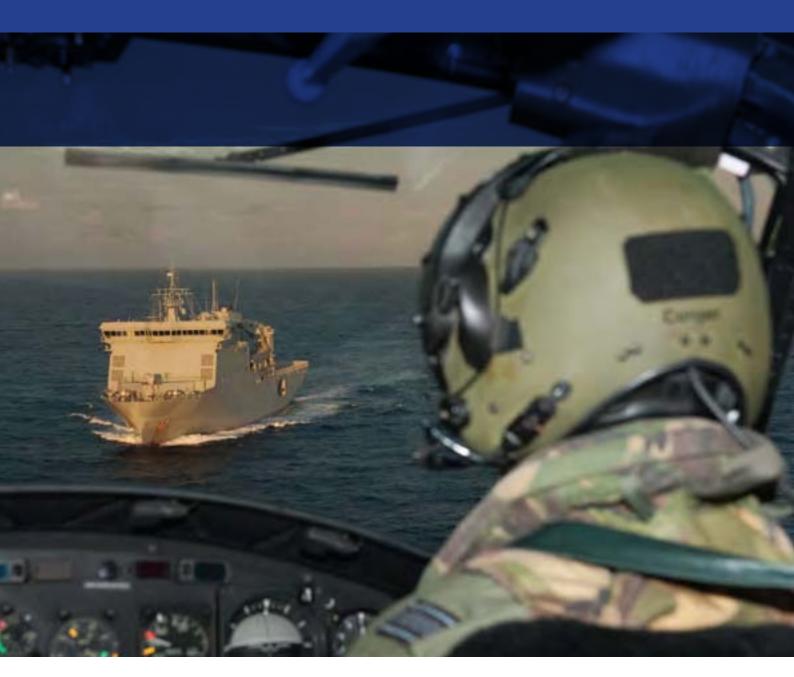


# Defence Capability Plan





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Ministry of Defence.
Defence House
2-12 Aitken Street, Wellington
Wellington 6144, New Zealand
Website: www.defence.govt.nz

Headquarters New Zealand Defence Force Defence House 2-12 Aitken Street, Wellington Wellington 6144, New Zealand Website: www.nzdf.mil.nz

Website: www.defence.govt.nz Email: info@defence.govt.nz

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# **Foreword**



# From the Minister of Defence

Launched by the Prime Minister in November last year, the *Defence White Paper 2010* was a comprehensive statement of the Government's defence policy goals. It set the Government's plan for a modern Defence Force that will meet our defence and security needs over the coming 25 years.

The Government is committed to retaining, and in some cases enhancing, the New Zealand Defence Force's current capabilities. The release of this *Defence Capability Plan* is an important step in doing that. Its purpose is to provide a framework for acquiring the capabilities needed to deliver the Government's defence policy. In doing so, it gives the NZDF certainty, while also signalling opportunities for industry. It also gives assurance to the public that the ability of the New Zealand Defence Force to undertake the tasks required of it by the Government will continue despite difficult fiscal circumstances.

Some of the major new projects include:

- a new pilot training capability
- an upgrade of the ANZAC frigate systems
- an upgrade or replacement of the Seasprite maritime helicopter
- a maritime replenishment and sustainment capability
- a network-enabled Army
- a land transport capability programme

A key feature of this Plan is the total capability effect it seeks to deliver. What follows is not merely a list of individual projects. Total Defence Capability 2020 focuses on ensuring a deployable Army, the ability to transport and sustain that Army overseas, the use of real-time technology to provide the entire Defence Force with a common operating picture, and capabilities that are able to fulfil a credible combat role. The end goal is an expeditionary Joint Amphibious Task Force that is capable of working independently in the South Pacific or as part of a larger coalition operation further afield.

A focus of this Plan, particularly after 2015, is the transition to a network-enabled Defence Force. This involves building a more coherent and better integrated force, in which front-line operational and support units work together as one. A key to achieving this will be the use of modern sensor and communications technology to allow better quality information to be collected and distributed throughout the organisation, on operations, and in daily decision-making.

At the time the *Defence White Paper 2010* was published last year, New Zealand's fiscal position was under pressure. In the months since, it has worsened. This Plan must therefore be affordable. The following projects can be funded for the next ten years from accumulated depreciation, with no need for capital injections.

But the period after 2020 will be more challenging. While a decision on the replacement of the C-130 Hercules and B-757 transport aircraft falls inside the timeframe of this Plan, the bulk of expenditure falls outside it. The period after 2020 will also see the P-3 Orion maritime patrol aircraft and the ANZAC frigates reach the end of their service life. Managing these fiscal pressures will be the focus of the next Defence Review, scheduled for 2015, and a subsequent future capability plan.

Hon Dr Wayne Mapp Minister of Defence



# From the Chief of Defence Force and the Secretary of Defence

The principal common purpose of our two organisations is to ensure that the Government has effective military capability to use.

Decisions on defence capability are amongst the most significant that any Government makes.

- The decisions have to produce a credible military effect.
- They send strong signals about New Zealand's international profile, and thus are looked at closely by our security partners.
- They are of great interest to industry, both within New Zealand and beyond.
- They can have a material effect on the Government's capital and operating budgets.
- And in 40 years time, our successors will likely be living with the consequences of decisions taken now.

Balancing these factors means that decisions on capability have to be well planned and well executed. Just as units of the Defence Force come together to deliver a joint operational effect, so do the individual contributions of the participants in the capability life cycle combine to achieve more together than each can on his or her own.

We are in this business to provide the Government of the day with the best advice and the best execution of decisions that we possibly can. The new arrangements for capability management that we have put in place since the *Defence White Paper 2010* have that as their primary objective. That means following through a logical sequence from thinking....

- Assessment: what is out there in the world that can affect New Zealand's security
- Policy: what accordingly the Government wants the Defence Force to do
- · Selection: what accordingly are the capabilities that are needed and how should they be procured

#### To acting.....

- Acquiring assets and recruiting people
- · Getting them operationally capable and ready
- Using them

#### To reviewing.....

- Is the Government getting the operational benefit intended?
- Is the Government getting value for money?



It also means being conscious of the expenses incurred throughout the whole life cycle of a defence capability. While attention naturally focuses on the upfront cost of a ship or an aircraft, the capability cannot be delivered without people, without technical systems, and without good structures of management and support. All these ingredients have to be melded into decisions so that the life cycle proceeds as seamlessly as possible. The Capability Management Board we have established is the means through which we exercise our joint and individual accountabilities for this array of tasks.

The Capability Management Board also serves the wider purposes of the Government. Many defence capability decisions, because of their scale, have to sit within the framework of the Government's overall management of capital assets—the Capital Asset Management regime. This regime gives stakeholders the opportunity to test the merits of a capability proposal and compare it against other claims on the taxpayers' dollar. External gateway reviews at set stages monitor progress of projects against agreed benchmarks and risks. We also provide an annual update to Parliament on the major defence projects.

The capability programme set out in this Plan is militarily credible, is affordable and is achievable. Ultimately, however, it is our highly trained and committed people who deliver military capability and are central to our operational success. The integration of equipment, people, doctrine and infrastructure—all underpinned by sound decision-making—means that Defence will be positioned to support and sustain current operations and the future capabilities outlined in the *Defence White Paper 2010*. It will ensure that the New Zealand Defence Force will have the tools to do the jobs required of it by the Government and people of New Zealand.

J.W. McKinnon Secretary of Defence

R.R. Jones Lieutenant General Chief of Defence Force



# Section 1

# Introduction

The *Defence White Paper 2010* set the overall direction for Defence for the next 25 years. Fundamental to the White Paper is a commitment to maintaining a New Zealand Defence Force (NZDF) that is able to deliver the range of policy outcomes expected of it.

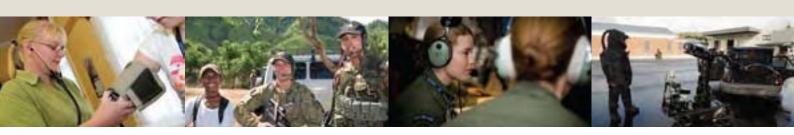
To do this, the White Paper mapped a capability pathway designed to ensure that the NZDF remains a useful, versatile, and cost-effective force able to execute the tasks required of it now and in the future.

The *Defence Capability Plan* is designed to give shape to the first ten years of capability development under the policy framework provided by the *Defence White Paper 2010*. The Plan will therefore be the primary guide for NZDF capability development out to 2020.

In the *Defence White Paper 2010* the Government balanced policy (what the Defence Force is to do), capability (how it is to do it), and funding (how it is to be paid for). It recognised that in order to pursue affordable capability development and growth, the capability programme for the first ten years, and into the future, would need to be carefully prioritised and phased.

An initial process of prioritisation has led to the capability priorities laid out in this document. Meeting these will entail a mix of enhancing existing capabilities, bringing into service capabilities currently under acquisition, and some new acquisitions. The priorities detailed within reflect those capabilities required to deliver on Government defence policy in the next decade.

"The Defence Capability Plan is designed to give shape to the first ten years of capability development under the policy framework provided by the Defence White Paper 2010."



# Defence Policy

Before outlining in detail the proposed defence capability projects out to 2020, it is important to situate these in the broader policy context of the *Defence White Paper 2010*, beginning with the role of Defence and the strategic outlook.

### SECURITY INTERESTS AND THE ROLE OF DEFENCE

The *Defence White Paper 2010* confirmed that Defence, acting in a lead or supporting role, makes a particular contribution to the following national security interests:

- a safe and secure New Zealand, including its border and approaches;
- a rules-based international order which respects national sovereignty;
- a network of strong international linkages; and
- a sound global economy underpinned by open trade routes.

The core task of the NZDF is to conduct military operations. But it is also able to undertake or support a range of tasks, including maritime resource protection, humanitarian assistance and disaster relief, and search and rescue, as part of a whole-of-government effort directed by civil authorities.

## STRATEGIC ENVIRONMENT

The central theme of the *Defence White Paper 2010* is of a strategic environment that is increasingly uncertain. It is likely that the next 25 years will be more challenging for the international system than the 25 years just past.

The *Defence White Paper 2010* pointed to a strategic environment in which New Zealand was unlikely to face a direct military threat, but other significant security events were possible. These include increased pressure on maritime resources and a risk of illegal migration.

Our interests, however, are much wider. We must consider more than just the direct impact of strategic uncertainty on New Zealand. There will be an impact on our neighbours, and on our wider international interests. Key issues include:

- the emergence of new centres of economic strength, which are shifting the balance of military power;
- a rules-based international order that has served New Zealand well, but which is under increasing pressure;
- international institutions which are struggling to forge consensus on a range of trans-boundary problems;
- the emergence of new technologies which are capable of narrowing some aspects of the military advantage enjoyed by New Zealand's traditional partners;
- weapons proliferation; and
- the continuing challenge posed by terrorism to state authority.

The outlook for the South Pacific is one of fragility. Many Pacific Island states face difficult social, economic, environmental, and governance stresses. Together with Australia, New Zealand will continue to play a leadership role, acting as a trusted friend to our South Pacific neighbours.

The uncertain strategic outlook for the next 25 years means that this is not a time to be reducing the utility of the NZDF, or narrowing its capabilities. The principal tasks which the Government expects the NZDF to be able to conduct over the next 25 years are:

- to defend New Zealand's sovereignty;
- to discharge our obligations as an effective ally of Australia;
- to contribute to and, where necessary, lead peace and security operations in the South Pacific;
- to make a credible contribution in support of peace and security in the Asia-Pacific region;
- to protect New Zealand's wider interests by contributing to international peace and security, and the international rule of law;

- to contribute to whole-of-government efforts at home and abroad in resource protection, disaster relief, and humanitarian assistance;
- to participate in whole-of-government efforts to monitor the international strategic environment;
- to be prepared to respond to sudden shifts and other disjunctions in the strategic environment.

#### THE STARTING POINT FOR CHOOSING MILITARY CAPABILITIES

Meeting the Government's security objectives in New Zealand's maritime zone and the South Pacific should be the starting point for selecting New Zealand's military capabilities. As the *Defence White Paper 2010* points out, not only is this the area where the Government has the least discretion, but structuring the NZDF's capabilities in this way should provide the resources needed to address New Zealand's own likely security requirements. It would also add weight to Australia in an area of continuing common interest.

The capabilities required for the range of possible operations in the near region should also give the Government options for making a credible contribution to stability in Asia, as well as further afield.

To this end, the *Defence White Paper 2010* determined that the existing range of NZDF capabilities should be retained. Over the last twenty years these capabilities have served the Government well. However, reflecting that the demands on the NZDF are likely to intensify, the *Defence White Paper 2010* also identified some targeted enhancements to address operational pressures, and to take advantage of new technologies.

#### **MUTUALLY REINFORCING CAPABILITIES**

The investment decisions under this Plan will be guided by the capability sets required to deliver Government policy. To conduct the tasks the Government expects of it, the NZDF will focus on maintaining:

- capabilities able to fulfil a *credible combat* role in support of our sovereignty, our obligations to Australia, and in other operations as determined by the Government;
- *deployable ground forces*—suitably equipped and in sufficient numbers—including supporting elements such as offensive support engineers and medics;
- strategic projection and logistic capacity to get the force to where it is needed and sustain it once there; and
- network-enabled *intelligence, surveillance and reconnaissance* capabilities to understand and interpret the operational environment.

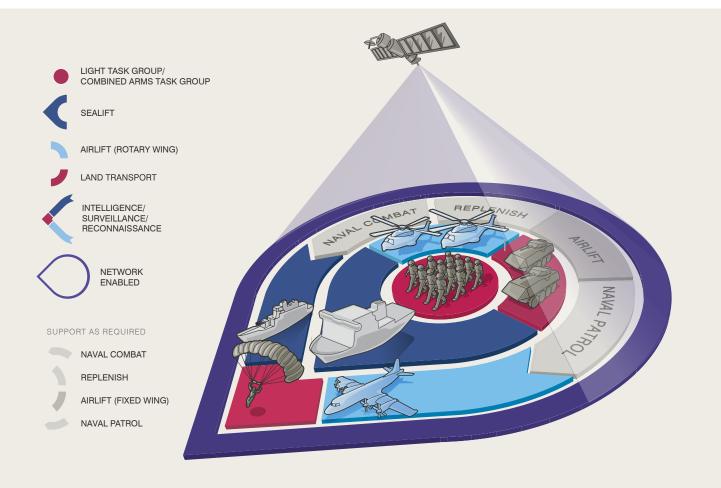
To maximise the effectiveness of NZDF interventions, these capability sets must be embedded in network-enabled *command and control* structures which support:

- joint activity between the Services;
- independent action by New Zealand in certain circumstances;
- interoperability with security partners; and
- responsiveness to whole-of-government requirements.

Section 4 describes these capability sets in more detail.

The result is a future force structure which will see the NZDF retain and enhance its current mix of capabilities, enabling it to operate in places similar to where it is today, alongside current partners and friends.





# 2015: JOINT AMPHIBIOUS TASK FORCE

In order to effect the vision of the *Defence White Paper 2010* as outlined above, capability development within the NZDF out to 2015 will focus on reorienting existing units and assets into a Joint Amphibious Task Force to provide an integrated and effective response to our security needs.

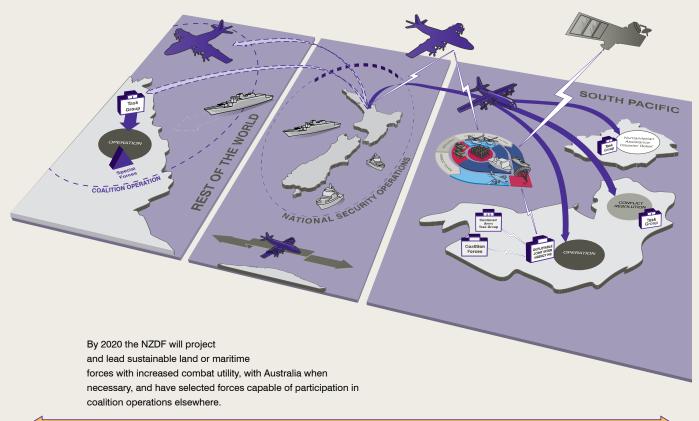
With the Joint Amphibious Task Force at its core, the NZDF will become a more coherent and integrated force in which existing front-line operational and support units from across the three Services work together as one. The Joint Amphibious Task Force will be able to work independently, or as part of a larger force.

Individual components will be deployable, and they will be able to more effectively integrate with other nations and with civil capabilities.

The NZDF amphibious capability will be deployable across all of the NZDF's operating environments. Its primary focus, however, will be on responding to security challenges and defence tasks in New Zealand and its environs, security challenges to New Zealand's interests in the South Pacific, and challenges to New Zealand and Australia's common security interests.

The NZDF intends to have the Joint Amphibious Task Force at the core of its force structure by 2015. From 2015 to 2020 capability development will focus on enhancing the NZDF's ability to sustain operations and expanding its intelligence, surveillance and reconnaisance capabilities.





SUSTAIN ENDURING MILITARY OPERATIONS AND RESPOND TO EMERGENCIES

# **TOTAL DEFENCE CAPABILITY 2020**

By 2020, with the Joint Amphibious Task Force at its core, the NZDF will be capable of conducting amphibious military operations and responding to emergencies at home and abroad.

The NZDF of 2020 will be capable of projecting and sustaining land or maritime forces with increased combat utility, either on its own or as part of a wider coalition. This combat capability will act as an effective and credible deterrent to any likely challenges to New Zealand's sovereignty and to stability in the wider South Pacific region. At the same time, the NZDF will have selected forces capable of participating in coalition operations elsewhere in the world.

Concurrently the NZDF will be able to continue to provide effective military assistance to the Government, within areas of New Zealand's responsibility, in times of emergency.

By 2020 the NZDF will have a range of integrated intelligence, surveillance and reconnaissance assets available to provide all-weather, 24-hour capable surveillance in New Zealand's Exclusive Economic Zone and over any deployed NZDF elements.

# RESOURCE PROTECTION, DISASTER RELIEF, AND HUMANITARIAN ASSISTANCE

The Joint Amphibious Task Force will also enable the NZDF to carry out the non-combat tasks often expected of it. These tasks, which are conducted at home and overseas, include search and rescue, humanitarian assistance and disaster relief, resource protection in the Exclusive Economic Zone, maritime border security, and evacuating New Zealand and approved foreign nationals from high-risk environments.



# Fiscal Context

Reflecting the current fiscal outlook and the Government's fiscal strategy, the programme in this document will deliver on the primary capability development objectives of the *Defence White Paper 2010* without any capital injections until 2020/21 or any increases in operating expenditure until at least 2014/15.

Careful reprioritisation of the platforms and equipment that will be purchased over the next ten years has ensured that no capital injections will be required. All purchases over the next ten years will be funded from accumulated depreciation.

Several mechanisms have been used to achieve this level of affordability. In some instances data from the market has indicated that capability can be purchased at a lower than expected cost. For example, industry responses to a Request for Information for the ANZAC Frigate Systems Upgrade project showed that an effective capability could be purchased for in the vicinity of \$350 million, rather than the \$625 million initially anticipated.

In other cases, developments in technology have allowed certain capabilities to be retained for longer, thus deferring expenditure until after the ten-year period.

Innovative practices, including spiral development, whereby a modest capability is purchased initially but the possibility of future enhancement is left open, allows investment to be spread over time. It also ensures that technological developments not seen at the time the project was initiated can be taken advantage of. Spiral development will be used for the Network Enabled Army project outlined in Section 5.

The need for increases in operating expenditure will be avoided by achieving cost reductions and efficiencies through the NZDF's reform programme. This programme is targeted to free up between \$350 million and \$400 million by 2014/15. This will be reinvested:

- to absorb cost increases such as Consumer Price Index inflation;
- to meet the increased operating expenditure necessary to bring into service new platforms that are currently being acquired; and
- to fund the other developments in capability that are set out in this programme.

#### **GUIDING PRINCIPLES**

In light of the fiscal situation, development of the capabilities detailed in Section 5 will be guided by the following principles:

- a) capital acquisitions must be funded from accumulated depreciation without the need for additional capital injections until at least 2020;
- b) the impact on operating expenditure of any new capabilities and the ability of the NZDF to live within its means must be considered as part of any capital investment in capability;
- c) any additional funding requirements will be met by the NZDF reprioritising and reallocating existing resources, and by prioritising the capability programme;
- d) innovative ownership options for capital assets should be explored where appropriate; and
- e) Cabinet will be presented with a detailed business case for each significant capital acquisition. The business case will be fully costed including whole-of-life capital and operating expenditure, as well as options for ownership.

Careful reprioritisation of the platforms and equipment that will be purchased over the next ten years has ensured that no capital injections will be required.



# Section 4

# Capability Sets

In order to reach the goal of Total Defence Capability 2020, and thereby deliver the tasks outlined in the *Defence White Paper 2010*, the NZDF will focus on developing capability sets that combine a variety of military capabilities from across the three Services. These capability sets are grouped as:

- credible combat capabilities;
- deployable ground forces;
- · strategic projection and logistics;
- · command and control; and
- network-enabled intelligence, surveillance and reconnaissance.

The capability sets, which are not mutually exclusive, will comprise both existing and new or enhanced capabilities. Maintaining these capabilities will require ongoing investment in NZDF infrastructure, including information communications technology. Modern facilities that meet contemporary needs will provide quality support to NZDF operations.

This Section outlines the main components of each capability set and illustrates how they relate to the Joint Amphibious Task Force and Total Defence Capability 2020 concepts. Further detail on the individual capability priorities within these capability sets is provided in Section 5.

On occasion, individual components of these capability sets will deploy on their own, such as the Special Operations Forces, which currently are in Afghanistan. But for the majority of situations, be it a combat or peacekeeping deployment, or a humanitarian assistance and disaster relief operation, the Joint Amphibious Task Force is a planning concept which enhances the utility of the individual NZDF elements it comprises.

The emphasis within the Joint Amphibious Task Force is on a joint approach, integration, and having a wider understanding of the mission as a whole.

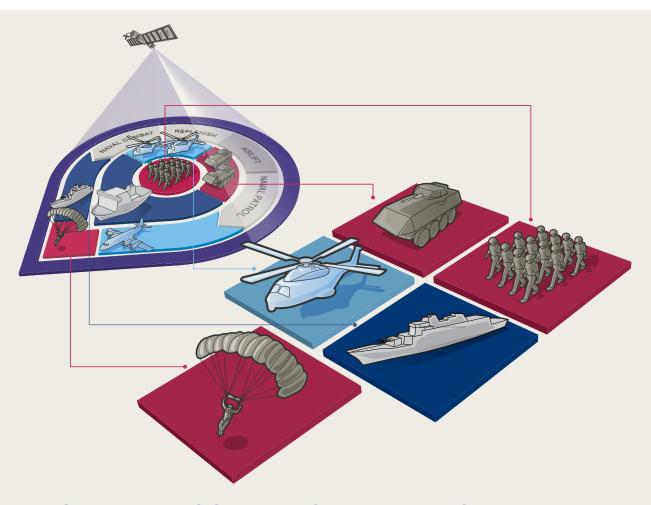












# CREDIBLE COMBAT CAPABILITIES

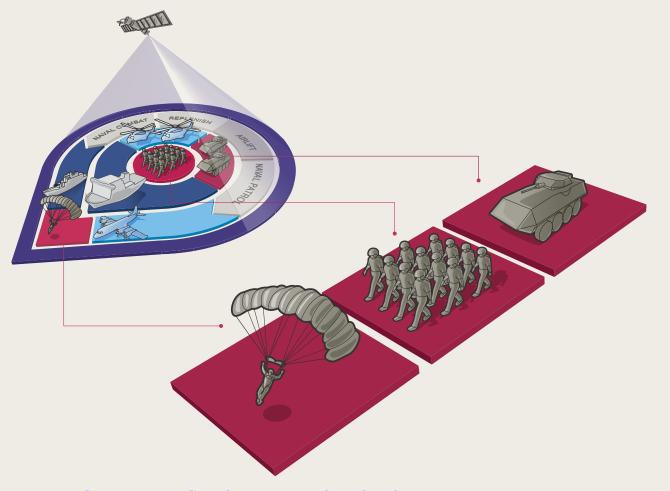
The importance of the combat capabilities of the NZDF, in the South Pacific and further afield, cannot be understated. It is these capabilities which underpin the overall utility, depth, and effectiveness of the NZDF, and thus its value to the Government and our partners. The NZDF must have the combination of personnel, equipment, training, and experience of working with other forces to allow the Government to make a credible, valued contribution when it needs or wishes to do so, including in higher intensity environments.

Well trained and operationally prepared ground forces, which includes Combat Units, Special Operations Forces, and Combat Support Units such as Engineers and Artillery, provide effective, credible, ground combat capabilities which the Government can deploy at short notice for a wide range of military tasks, including tasks alongside partner forces.

The ANZAC frigates and their integrated capability systems (guns, missiles, radars, sonar and electronic monitoring systems, and embarked helicopters) represent the only maritime force element capable of operating across the spectrum of operations from constabulary and humanitarian aid tasks to combat roles in a multi-national response to security events. The frigates also provide credible protection of forces afloat including amphibious sealift and logistical support platforms on passage and in location.

Helicopters provide a range of support, which includes tactical troop transport, command and control, search and rescue, and light utility roles. Planned integration with the naval platforms will enable support to amphibious tasks.

Embarked naval helicopters provide extended reach, surveillance, and air-delivered weapon capabilities (air-to-surface missile and anti-submarine torpedo) for the frigates.



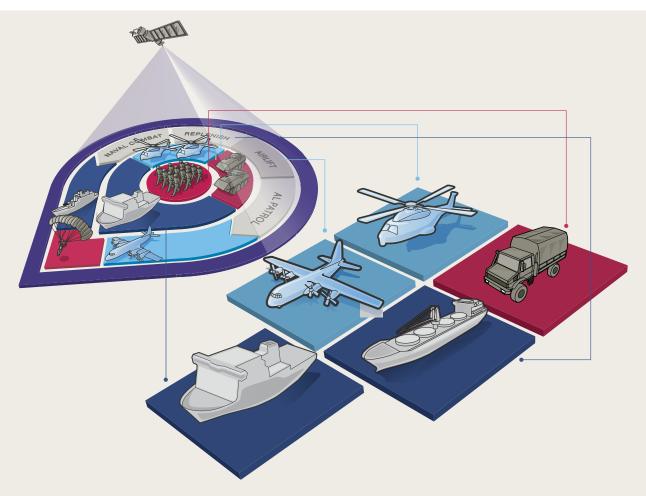
# **DEPLOYABLE GROUND FORCES**

At the centre of the Joint Amphibious Task Force are deployable ground forces. They may be required to deploy into unstable, potentially hostile environments. They will be capable of combat tasks but will also be used for tasks such as humanitarian assistance, disaster relief, or the evacuation of nationals. The circumstances in which New Zealand would have to lead such operations or undertake them alone will not be frequent, but our ability to do so will be at a premium when that occurs.

Having the flexibility to deploy ground forces in different configurations that are matched to the task is key to maximising their utility. In order to achieve this flexibility, emphasis is placed within this capability set on ensuring that the deployable elements of the NZ Army have the right combination of structures, training and equipment.

Deployable ground forces require more than just personnel in sufficient numbers. To successfully deploy, our ground forces will require a range of support capabilities and self-protection equipment. To this end, the protected mobility provided by the New Zealand Light Armoured Vehicle (NZLAV) continues to be an important element of this capability set.

A number of capability priorities will be pursued that will enhance the means by which our Land Force Elements can operate in future environments. These are detailed in Section 5.



# STRATEGIC PROJECTION AND LOGISTICS

In our immediate region the ability to deploy forces across large maritime spaces, by both air and sea, into unstable, potentially hostile environments, and sustain them once there, is crucial to the conduct of NZDF tasks. The ability to respond quickly and effectively to humanitarian and disaster relief situations across our region is of particular importance.

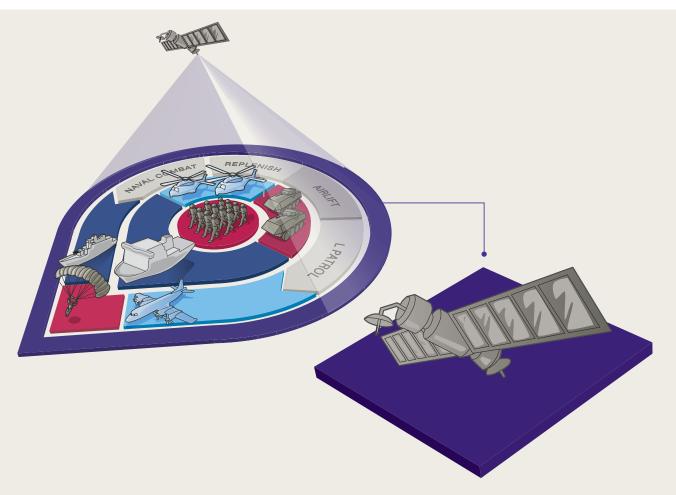
Sealift for deployable forces is provided by the Multi-Role Vessel, HMNZS *Canterbury*, which is capable of embarking land forces and an air component, including helicopters and equipment. The ship can also provide a limited health support role through the embarkation of a surgical team. C-130 Hercules and B757 aircraft provide tactical and strategic airlift for personnel, equipment, and logistics, both inter- and intra-theatre.

The naval combat force and other deployed NZDF assets are supported by a maritime projection and sustainment capability (currently the fleet replenishment ship, HMNZS *Endeavour*) enabling them to operate at greater distances than if they were operating independently. This capability carries supplies and fuel for the NZDF and its partners. It can re-supply ships at sea, or in overseas ports.

The replenishment capability is a key regional enabler especially in projecting and sustaining an NZDF Joint Amphibious Task Force into the South Pacific. In the future this replenishment capability may be enhanced to supplement and provide redundancy for HMNZS *Canterbury*, thus enabling an Amphibious Task Force to carry additional vehicles and equipment required by the ground force.

Deployable ground forces require integrated capabilities that address land mobility, logistics, and medical support. These capabilities will meet the challenges of the contemporary operating environment and future operating concepts both at home and abroad.

Utility helicopters provide a range of logistic support, which includes troop transport and sustainment. Planned integration with the naval platforms will enable logistical support to amphibious tasks.



# COMMAND AND CONTROL

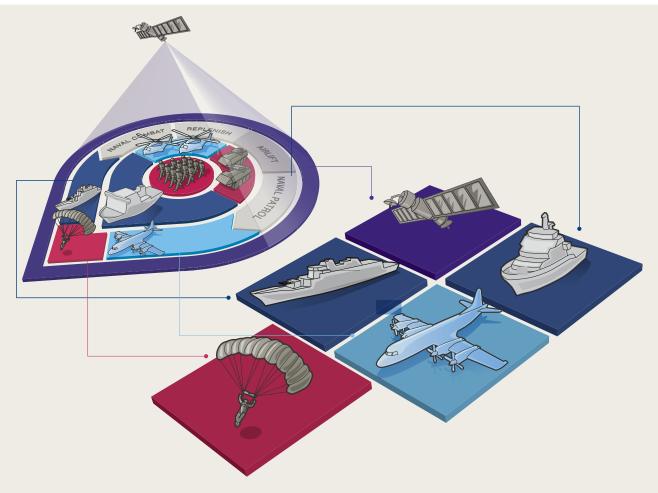
The Defence White Paper 2010 highlighted the need to improve the efficiency and effectiveness of command and control systems within the NZDF. It recognised that the NZDF currently relies on the creation of ad hoc command and control arrangements for operational deployments. A modern command and control system is a key enabling capability for meeting all of the policy roles and tasks required of the NZDF.

In order to maximise the effectiveness of the NZDF, including through the ability to understand and interpret the operational environment, the NZDF's mutually reinforcing capabilities must be embedded within comand and control structures which allow:

- joint activity between the Services;
- independent action by New Zealand in certain circumstances;
- interoperability with security partners; and
- responsiveness to whole-of-government requirements.

Integrated and complementary command and control, and intelligence, surveillance and reconnaisance capabilities, support deployed assets, including ground forces, by allowing them to conduct effective independent and coalition operations. Battlefield command and control systems with support communications and intelligence, surveillance and reconnaisance sensor networks are key to this. These systems incorporate both personnel and technical equipment.

The Defence White Paper 2010 identified the improvement of offshore communications capabilities as a priority to ensure deployed personnel are better supported. A guaranteed secure communications satellite bearer and an ultra-high-frequency satellite communications capability in the Pacific region are integral to this capability set.



# NETWORK-ENABLED INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE

Intelligence, surveillance and reconnaisance forms a key enabling function for any military operation, whether New Zealand is acting alone or jointly. This capability set also includes air and sea maritime patrol capabilities.

A network-enabled intelligence, surveillance and reconnaisance capability will allow the NZDF to turn an information advantage into a competitive advantage through the networking of independent intelligence, surveillance and reconnaisance capabilities into a system that seeks to understand and interpret the overall operational environment.

To enable effective independent and combined operations, the NZDF's network systems need to be interoperable within joint, interagency, and multinational environments.

The P-3K Orion aircraft and Inshore and Offshore Patrol Vessels form an integral part of this capability set, providing security and protection of New Zealand's border and Exclusive Economic Zone. Satellite and analytical resources will improve targeting through intelligence-led operations.

In the future, space-based platforms and Unmanned Aerial Vehicles could be acquired to conduct intelligence, surveillance and reconnaisance in support of the Joint Amphibious Task Force, of ground forces, and of surveillance of the Exclusive Economic Zone.



# Section 5

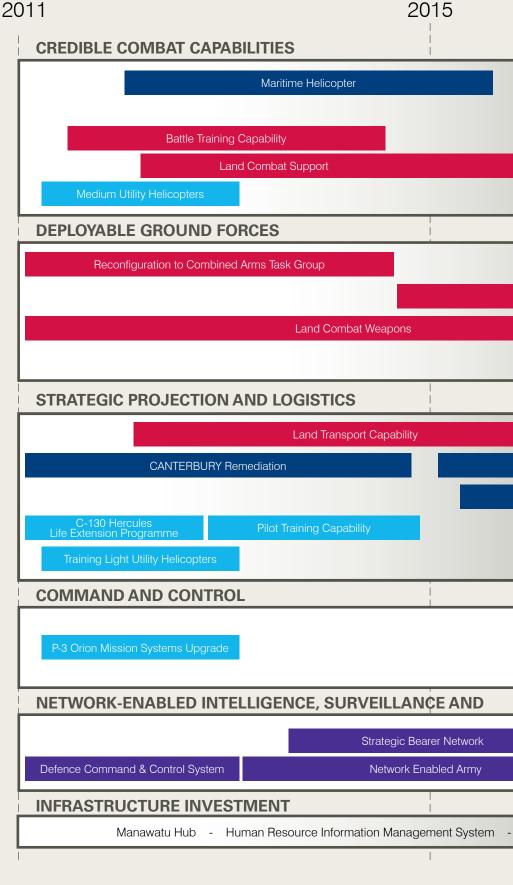
# Capability Priorities

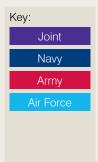
The priorities contained within this Plan are integral to achieving the capability pathway laid out in the *Defence White Paper 2010*, and the Total Defence Capability 2020 vision.

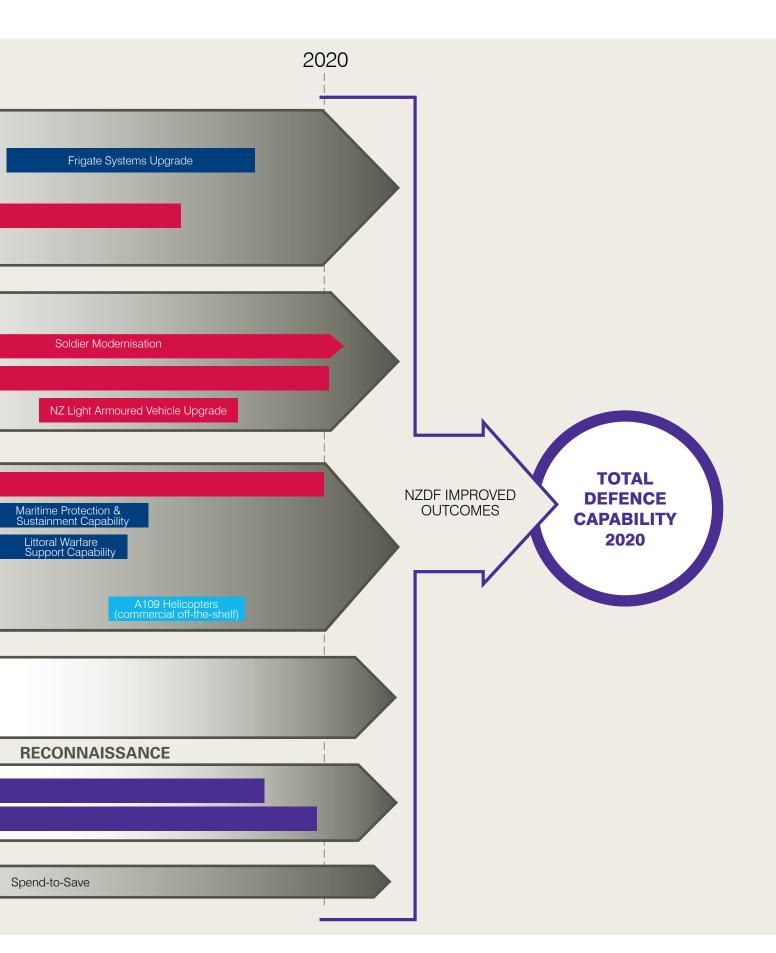
Priorities are grouped in terms of the capability sets described in Section 4. Within each capability set, emphasis will be placed on developing, or acquiring, capabilities in the following areas:

- People and skills
- Equipment and platforms
- Infrastructure

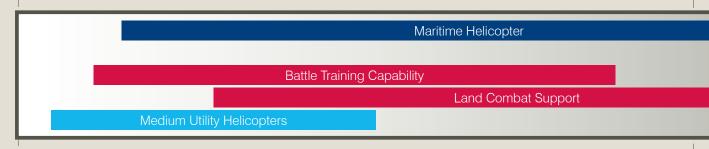
Programmes comprise a number of individual projects designed to contribute to the achievement of an overall capability effect. It is not the intention of this document to detail the specific individual projects within a programme.







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# CREDIBLE COMBAT CAPABILITIES

# **PEOPLE AND SKILLS**

Credible combat capabilities are the fundamental element of the NZ Army's deployable ground forces. The 800 person Combined Arms Task Group, and supporting air, naval, and command and control personnel, will form the key combat capability of deployable ground forces.

The Special Operations Forces element of the NZDF's credible combat capability will be enhanced to give it a more sustainable footing.

# **EQUIPMENT AND PLATFORMS**

#### Existing capabilities

The *Defence White Paper 2010* proposed that naval combat capabilities be upgraded, to ensure that the ANZAC frigates continue to provide a valued contribution to coalition operations. An **ANZAC Frigate Systems Upgrade** project will see the ANZAC frigates given a systems upgrade to address sensor and weapon obsolescence and to improve their capability against contemporary air and surface threats. The upgrade is scheduled to be completed in mid-2017.

#### Capabilities under acquisition

New **NH90 Medium Utility Helicopters** will provide the NZDF with a significantly enhanced tactical troop lift helicopter, fitted with self-protection systems. They will replace the existing Iroquois helicopters. The NH90 is a step change in the tactical airlift support provided to our land forces. It will be integrated with HMNZS *Canterbury*, providing a core component of the Joint Amphibious Task Force and contributing to a range of support functions and operations within New Zealand and the South Pacific. The first two helicopters are expected to be delivered in late 2011. In preparation for the arrival of the aircraft, training of aircrew and maintainers within the Royal New Zealand Air Force has already commenced.

#### Capabilities under development

The Kaman SH-2G Seasprite forms part of the ANZAC frigates' capability and may also embark on the two new Offshore Patrol Vessels and the Multi Role Vessel when their tasking requires the use of an aircraft. The *Defence White Paper 2010* confirmed that naval helicopters will continue to provide extended reach, surveillance, and air-delivered weapon capabilities (air-to-surface missile and antisubmarine torpedo) for the frigates. A **Naval Helicopter Capability Project** will look at options for upgrading or replacing the existing SH-2G (NZ) Seasprite helicopters. This project will deliver the capability over the 2012-2016 period.

A number of discrete **Land Combat Support** projects will deliver a range of combat support capabilities that have either been lost, will shortly reach the end of their life, or are new. The projects will serve to enhance mobility, provide appropriate force protection against contemporary threats, and ensure that the NZDF's domestic explosive ordnance disposal capability remains effective. This includes improvised explosive device detection, and bridging and expedient surfacing system equipment.

# Frigate Systems Upgrade

The *Defence White Paper 2010* specifically noted the need to improve the combat effectiveness, protection, and mobility of land forces. The land combat support projects will ensure that NZDF land forces are seen as an effective partner as well as being capable of independent action. The projects will deliver capability progressively over the 2012-2018 period.

# Infrastructure

In order to allow our Special Operations Forces to maintain and enhance a high level of operational readiness, a new **Battle Training Capability** will be established. This project, which has been approved, will provide a high quality, modern, accessible, multi-functional training facility to increase the efficiency, effectiveness, and maintenance of special operations skill sets.

The facility will prepare Special Operations Forces for widely varying mission scenarios. The building will allow for differing configurations, better representing a range of operational environments in which Special Operations Forces may have to operate. Versatility can extend beyond Special Operations Forces to incorporate other NZDF units, and specialist operators from other government agencies, such as the NZ Police. The facility is scheduled to be completed in 2014.

# LINKS TO OTHER CAPABILITY SETS

Credible combat forces can be successful only when supported by deployable, capable, and responsive strategic projection and logistics capabilities. They also rely on effective command and control arrangements, and intelligence, surveillance and reconnaisance support.



2011 2015

Reconfiguration to Combined Arms Task Group

Land Combat Weapons

# **DEPLOYABLE GROUND FORCES**

# **PEOPLE AND SKILLS**

The NZ Army will be reshaped around a Combined Arms Task Group to increase the combat utility, sustainability, and potential scale of deployments. This will include an increase in front-line Army personnel.

This reconfiguration will provide sufficient depth to sustain a maximum land force for deployment of 800 personnel for up to three years in a mid-intensity environment. To facilitate sustainable force rotation options, a third manoeuvre unit will be established.

One infantry company will be trained with a wider range of higher-end skills, allowing it not only to operate as a regular infantry company but also to undertake some more demanding tasks and, if needed, support Special Operations Forces operations.

### **EQUIPMENT AND PLATFORMS**

#### Existing capabilities

Supporting firepower to deployed land forces will be maintained, with the existing Light Guns and Mortar capabilities. Special Operations Forces will continue to be resourced by regular replacement and enhancement of specialist equipment, including training facilities.

# Capabilities under development

A **land combat weapons** programme is currently underway through a series of replacement and upgrade projects, which will ensure NZDF ground forces are suitably equipped with appropriate and sustainable modern small arms, and direct and indirect fire weapon systems. The programme will see the replacement of current equipment and the purchase of new improved equipment sufficient to meet operational and training requirements. The upgraded or replacement weapons will enhance the means by which deployable ground forces can survive, protect, and achieve mission success in future conflict environments.

Projects within the programme will support all three Services. They include Light Support Weapons, Personal Protective Weapons, Sniper Rifles, Grenade Launchers, Sustained Fire Machine Guns and Short Range Anti Armour Weapons. These projects are scheduled to take place over a 25-year period beginning in 2011/12.

To complement the land combat weapon system programme, a **soldier modernisation** programme is also under development to ensure that NZDF personnel have appropriate and sustainable soldier systems (including support, lethality, protection, situational awareness, and mobility) in order to achieve mission success across the spectrum of conflict.

Examples of equipment covered under this programme include a rolling upgrade and replacement of key individual protective equipment such as helmets and body armour. The programme is scheduled to be completed over five yearly intervals beginning from 2015/16.

# Soldier Modernisation

# NZLAV Upgrade

This programme will see the replacement of current equipment and the purchase of new improved equipment sufficient to meet operational and training requirements. This programme will support all three Services.

The NZDF undertakes a continual refresh programme of Night Vision equipment to ensure an appropriate sustainable and modern capability is maintained.

# Prospective capabilities

The NZLAV provides firepower, manoeuvre, and protection to ground forces. The *Defence White Paper 2010* confirmed that a reduced fleet of the current NZLAVs will be retained, and some reconfigured to provide variants such as battlefield ambulances and command and control vehicles. Vehicles from the reduced fleet will be upgraded as operational requirements necessitate.

A **LAV upgrade** project will address the requirement for NZLAV variants and provide upgrades to the survivability, mission systems, running systems and training support systems. As a result, the NZLAVs will be able to effectively conduct a range of tasks, including in conflict environments when higher threat levels are prevalent.

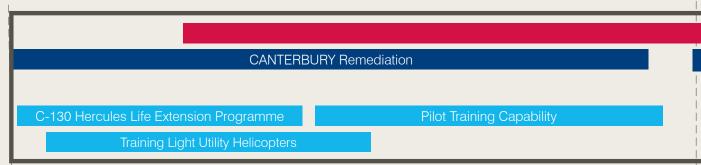
The upgrade of NZLAVs is scheduled to be completed in two tranches. The first will be conducted over the period 2016-2019 and the second over the period 2026-2029.

## LINKS TO OTHER CAPABILITY SETS

Deployable ground forces can be successful only when supported by capable and responsive strategic projection and logistics capabilities. They also rely on effective command and control arrangements and intelligence, surveillance and reconnaisance support.



2011 2015



# STRATEGIC PROJECTION AND LOGISTICS

# **PEOPLE AND SKILLS**

Logistic support to land forces will be restructured to increase the efficiency of support elements, improve the 'teeth to tail' ratio, and reduce costs.

Medical support to deployed forces will be enhanced. A Forward Surgical Team (surgeon, anaesthetist, emergency doctor, and nurses) will be resourced from within the NZDF, including the Reserves. This will enable the NZDF to provide a surgical capability, and to prepare patients for evacuation to out-of-theatre medical facilities for further care.

#### **EQUIPMENT AND PLATFORMS**

### Existing capabilities

HMNZS *Canterbury* provides a core tactical sealift and amphibious capability for over the shore operations, as well as providing a strategic sealift capability by way of port-to-port operations. As such, the ship will be a key enabler of the NZDF of 2020, providing support to the NZDF's Joint Amphibious Task Force. The *Defence White Paper 2010* confirmed that over time the operational effectiveness of this ship will be maintained, and that it will be replaced with a similar capability at the end of its life. The White Paper also confirmed that there is a lack of sealift capacity. This will be taken into account in the planned replacement of HMNZS *Endeavour*.

Some remedial work is being carried out on HMNZS *Canterbury* to rectify deficiencies in its operational capability. This is due to be completed in December 2015. The structure of the remediation programme means that capability will be progressively released as it is completed during routine maintenance and modification periods. An additional dedicated remediation maintenance period is programmed for the last quarter of 2012 and first quarter of 2013.

The C-130 Hercules provides a key airlift capability for the deployment of personnel and equipment for the NZDF both within our immediate region and further afield. It is crucial for the deployment of high-readiness personnel abroad. A **C-130 Hercules Life Extension Programme** to upgrade the C-130s' existing mechanical, avionic, and self protection systems, as well as undertake some structural refurbishment of the aircraft, is near completion.

The life extension programme will allow the NZDF to maintain an independent airlift capability. The upgrade of all aircraft is scheduled to be completed in late 2013, with the upgraded aircraft expected to be in service until about 2020. The aircraft will be replaced at end of life with an equivalent—or better—capability.

# Capabilities under acquisition

The NH90s will work in conjunction with new **A109 Training/Light Utility Helicopters.** These helicopters will replace the Sioux training helicopter. They will provide a combined rotary wing pilot training and light utility transport capability to support a range of government and civil agencies in New Zealand and overseas. The A109s will also provide vital support to counter-terrorism activities and Special Operations Forces, and be integrated with HMNZS *Canterbury*. All A109 helicopters will be delivered by November 2011.

# Land Transport Capability

Maritime Protection & Sustainment Capability

Littoral Warfare Support Capability

A109 Helicopter (commercial off-the-shelf)

### Capabilities under approval

The NZDF pilot training system is a key enabler of airborne capability, training both fixed wing and rotary wing pilots. The *Defence White Paper 2010* noted that the future NZDF pilot training capability needs to match the full range of operational demands made on aircrew. A project to deliver a new **pilot training capability** for the NZDF has been approved. A detailed business case is being developed to seek options for delivery from market.

Particular emphasis will be placed on acquiring a replacement aircraft for the provision of advanced pilot training, and exploring opportunities for increased use of simulators. The new A109 helicopters will form part of the new pilot training capability by providing rotary wing training. Some multi-engine pilot training capability will be provided via a separate aircraft. The pilot training capability project is expected to be delivered in 2014/15.

#### Capabilities under development

HMNZS *Endeavour* will soon reach its end of life. A **Maritime Projection and Sustainment Capability** project is under development. Among the options to be considered in this project will be a more versatile vessel, which incorporates supplementary sealift capacity to enhance the utility of the capability.

Such a vessel would be capable of refuelling and sustaining the Joint Amphibious Task Force or similar entity both at-sea and from-the-sea. It would also offer options in terms of projection and sustainment of ground forces, and for humanitarian assistance and disaster relief missions, primarily within the Pacific. The new capability is scheduled to be in service by mid-2019.

Currently diving support, hydrographic surveying and other littoral warfare support activities are carried out by the ships HMNZS *Resolution* and HMNZS *Manawanui*. A **Littoral Warfare Support Capability (LWSC)** project is currently under development to replace these ships with a single capability. The new capability will have the deployability to support operations. Able to quickly establish shipping and landing points, the LWSC will be a key enabler to the lodgement of land forces from the sea.

The capability also allows for the safe transit of maritime vessels by ensuring channels and harbours are clear of obstacles and hazards, either man-made or as the result of a natural disaster. In order to project forces from the sea, the LWSC will be a key enabler to proceed ahead of the task force so that lodgement forces will get to the required destination safely and efficiently. It will be a central element of the 2020 force that will have utility in both warfare and disaster relief. It is expected that the new LWSC will be delivered in 2018.



A **Land Transport Capability Programme** will see the acquisition of a combination of commercial and military vehicles that will enable the NZDF to meet its operational outputs, garrison support, and training needs. The programme will provide a capability that enables agile responses to rapidly changing threat environments.

Platforms to be acquired under this programme, and their associated systems, will deliver a cost-effective integrated capability to the NZDF through the delivery of vehicles, equipment, training and support that will replace the current vehicle fleets.

This will be a rolling replacement programme over a 22 year period, currently planned to commence in 2013/14.

# Prospective capabilities

The *Defence White Paper 2010* states that strategic airlift will remain a core supporting capability of the NZDF and will be maintained. A **Future Air Mobility** project will be established to review NZDF airlift requirements and make recommendations for the appropriate replacement of the C-130 Hercules and B757 fleets. The replacement of the Fixed Wing Transport Forces is intended to occur between 2018 and 2025. In order to inform decisions on these replacements the study will be concluded before the next Defence Review in 2015.

In considering the appropriate airlift fleet mix, this study will consider the most cost-effective use of the jet airlift currently provided by the two B757s. Assets recommended by the project will be expected to carry out all of the present fixed wing transport roles including strategic and tactical transport of people and cargo, airland and airdrop, low level and high level missions, aeromedical evacuation, and backup search and rescue capabilities.

The *Defence White Paper 2010* contains a provision for acquiring three additional **off-the-shelf A109 Training Helicopters**. These will undertake pilot training roles, freeing up the original helicopters to be operationally deployed in light utility roles in support of the NZDF and other government agencies, and to undertake search and rescue tasks. The three additional A109s are scheduled to be introduced into service in the period 2017-2019.

# LINKS TO OTHER CAPABILITY SETS

The capabilities listed above all form a core support role for both deployable ground forces and combat forces. Some of the assets within this capability set have multiple roles, for example HMNZS *Canterbury* also provides training and contributes to the intelligence, surveillance and reconnaissance capability set.











2011 2015

Defence Command & Control System

# COMMAND AND CONTROL

# **PEOPLE AND SKILLS**

A trained, equipped, and deployable headquarters organisation will be created, to be activated and staffed when required for operations. This will improve the NZDF's ability to lead operations, as well as its capacity to contribute to a combined headquarters.

# **EQUIPMENT AND PLATFORMS**

# Capabilities under acquisition

A programme to implement a new information technology enabled **Defence Command and Control System** (DC2S) is currently in the acquisition phase. This system will collect, collate, process, display, store, disseminate, and protect command and control information in near real-time. The system will enable force elements from all three Services to work together efficiently and effectively by enhancing their situational awareness and decision-making processes.

The project is shortly to commence its second phase with the deployment of the system across the higher security networks used for military operations. Delivery of the DC2S and other NZDF initiatives will meet requirements out to 2015/16.

# Capabilities under approval

A related programme, known as the **Network Enabled Army**, is currently in the initiation stage. This programme will support the command and control of deployed ground forces and provide an enhanced ability to support the intelligence, surveillance and reconnaisance needs of the NZDF in the land environment.

The Network Enabled Army will have mission command systems that are capable of collecting, synthesising and disseminating data, information and intelligence in a timely manner to allow ground forces to manoeuvre and report simultaneously. This programme will be delivered, and then refreshed, through a spiral acquisition process over the period 2013-2033.



Strategic Bearer Network

Network Enabled Army

A **Strategic Bearer Network** project (SBNP) has been initiated to provide a modern cost-effective solution to the NZDF's strategic (i.e. long and medium range) communications needs. These needs include communications between the area of operations and New Zealand, and communications with partners in both the immediate- and long-term. The SBNP will provide a global communications capability that meets NZDF's current needs while providing a framework that can grow to meet future needs.

The SBNP will provide a robust, secure, and adaptive network infrastructure that shares information reliably across the globe, providing interoperability with key defence partners, ensuring better decision-making, enabling the faster deployment of operationally agile forces.

The SBNP will be an important enabling capability, supporting a number of key NZDF functions across capability sets. Key capabilities that will benefit from the SBNP include the Network Enabled Army programme, Defence Command and Control System, the P-3 Orions and the ANZAC frigates. The SBNP is scheduled to be completed by mid-2018.

# LINKS TO OTHER CAPABILITY SETS

There are strong linkages between the command and control and the network-enabled intelligence, surveillance and reconnaisance capability sets. The upgraded P-3 Orion aircraft will benefit considerably from the DC2S capability, and the Network Enabled Army programme will enhance ground force intelligence, surveillance and reconnaisance capabilities to allow valuable contributions to independent and combined ground operations. Communications and intelligence, surveillance and reconnaisance sensor networks will support the DC2S system, and together these capabilities will be key enablers for the deployed ground forces.



P-3 Orion Mission Systems Upgrade

# NETWORK-ENABLED INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE

# **PEOPLE AND SKILLS**

An enhanced focus on developing network-enabled intelligence, surveillance and reconnaisance capabilities will also benefit from increased information processing and analytical support to make the best use of the information flows that the new capabilities will provide. An increase in the capacity of the NZDF and the National Maritime Coordination Centre to process and analyse collected information will be considered as part of the development of this capability set.

# **EQUIPMENT AND PLATFORMS**

# Existing capabilities

The Navy's Inshore and Offshore Patrol Vessels will continue to provide a significant maritime patrol capability. They will be replaced with a similar capability when appropriate to do so. The merits of enhancing the sensors and armaments of these vessels will be investigated.

The P-3 Orion airborne surveillance and reconnaissance aircraft will work with other intelligence, surveillance and reconnaissance assets to provide wide-area surveillance and operate in direct support of deployed land combat forces. They will contribute to the provision of 24-hour-capable surveillance over New Zealand's Exclusive Economic Zone.

The **P-3 Orion Mission Systems Upgrade** project currently underway is upgrading the aircrafts' mission management, communications, and navigation systems. The upgrade of all aircraft is scheduled to be completed in mid-2013. The P-3 Orions will be replaced with an equivalent level of capability, manned or unmanned, in about 2025.

#### Prospective capabilities

A satellite imagery capability will be introduced to provide sustained and longer-range surveillance, and to ensure maritime patrol assets are more effectively targeted on areas of interest.

The *Defence White Paper 2010* noted that a number of low-end regional surveillance tasks, for both defence and other agencies, could be performed more cost-effectively by using a **short-range maritime patrol aircraft** instead of the P-3K Orion aircraft. Opportunities for acquiring a suitable aircraft that would both increase surveillance capacity in the Exclusive Economic Zone and the South Pacific, as well as perform a transport and multi-engine flying training and consolidation function, will be investigated.

#### Links to other capability sets

The use of a short-range maritime patrol aircraft for multi-engine pilot training and light transport tasking would support those capabilities which form part of the strategic projection and logistic capability set.









# INFRASTRUCTURE INVESTMENT

Infrastructure is one of the central pillars and core enablers that supports all NZDF capabilities. The *Defence White Paper 2010* identified infrastructure as being expensive and suffering from underinvestment.

The NZDF will explore estate rationalisation in order to identify opportunities to make better use of its existing land, infrastructure, and facilities. The potential benefits to be realised from such infrastructure rationalisation are:

- reduced infrastructure footprint;
- economies of scale achieved by concentrating Defence activities on fewer sites;
- reduced travel costs;
- reduced inventory holdings resulting from co-location;
- modern, sustainable, energy efficient, fit-for-purpose buildings;
- reduced maintenance burden; and
- savings can be reinvested within NZDF to procure enhanced or new capability.

The NZDF will be operating from fewer camps and bases while the major training and exercise areas will be retained. NZDF personnel will be based at locations that support NZDF requirements while supporting family stability, employment, and education opportunities.

Key to this will be the consolidation of defence activities in the Manawatu region. An indicative business case is being developed to ascertain the most appropriate form for this consolidation. The future use of RNZAF Base Woodbourne will also be considered.

The *Defence White Paper 2010* noted that information and communications technology (ICT) is a key enabler for the NZDF, underpinning its effectiveness by linking communications, human resources, logistics, and finance. It also observed that the necessary levels of investment in ICT have not in the past been made.

In order to support the modernisation of the NZDF and to help improve its effectiveness and efficiency, greater investment in ICT will be an important part of capability development to 2020 and beyond.

A new Human Resource Management Information System is currently in the approval stage. This will transform human resource management, administration, and payroll by consolidating separate functions into a single industry standard system which is integrated with existing finance and logistics systems. A replacement NZDF data centre and improved offshore communications capabilities are also priorities.

A number of 'spend to save' initiatives will be pursued as part of this infrastructure investment. These will be designed to achieve efficiencies and produce further savings that can be invested in the development of the capability priorities within this Plan.



