DEFENCE LONG-TERM DEVELOPMENT PLAN

UPDATE
September 2008

New Zealand Government

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MINISTRY OF DEFENCE
Manatū Kaupapa Waonga

Defence Long-Term Development Plan

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Preface by the Minister of Defence

I am delighted to release this fourth update of the Defence Long-Term Development Plan (LTDP) which is intended to provide a snapshot as at September 2008 of progress in re-equipping the New Zealand Defence Force (NZDF). One of the guiding principles of the Government's Defence Policy Framework released in June 2000 was that the NZDF must be equipped and trained for combat as well as peacekeeping. The LTDP, which commenced in 2002, is the Government's blueprint for equipping the NZDF as a combat capable force.

The LTDP provides a ten year planning framework from 2002-2012 which allows decisions on defence acquisitions to be prioritised and taken in the context of the Government's defence policy, and funding envelopes.

Key features of this update include:

- reporting on the major progress in acquiring and introducing into service equipment procured under the LTDP, reflected by the creation of a new category, *Capability Delivered*;
- the addition of a Network Enabled Capability strategy to guide the management of information technology-based projects on the LTDP; and
- the listing of a new project 'Night Vision Equipment' which will ensure the NZDF can operate and train more effectively at night or in conditions of reduced light.

The remaining four years of the LTDP will see the introduction into service of a number of significant new capabilities including the Project Protector fleet, NH90 medium utility helicopters and A109 training and light utility helicopters. These sit alongside a series of projects that are well underway, including modifications to the Boeing 757s and upgrades to the C-130 and P-3 fleets, and will join the Army's Light Armoured Vehicles and Light Operational Vehicles, already in service.

Since 1999, the Government has made a substantial investment in Defence. This is underlined by the update of the LTDP which shows that the NZDF is becoming a modernised, effective and deployable force.

The Government is committed to the overall affordability of the LTDP. Defence is working to address the challenges posed by inflation and currency fluctuation to the overall cost of projects. With careful management, the remaining funding will be used to complete priority projects on the LTDP.

Hon Phil Goff
Minister of Defence

1. Introduction

1.1 First released on 11 June 2002, and publicly updated in 2003, 2004, and 2006 the *Defence Long-Term Development Plan* (LTDP) is the main capital planning tool to enable decisions on defence acquisitions to be taken in the context of the Government's defence policy, the priority of projects and affordability. The LTDP links the Government's defence policy objectives, which were set out in the Defence Policy Framework released in June 2000, with the capability requirements announced in the Defence Statement of 8 May 2001. This version, the fourth public update of the plan, contains a comprehensive list of projects, with costings (some of which are estimates only), timings, and priorities.

1.2 The LTDP:

a. describes major acquisition projects required to provide military capabilities to meet the Government's defence policy objectives;

b. reflects relative priorities of the projects, measured against the Government's defence policy and requirements;

c. works within agreed financial limitations; and

d. summarises the planning and decision making processes used to ensure that investment in defence provides the best value for money.

Funding Parameters

1.3 The LTDP is managed within approved financial parameters. These include:

a. a commitment from the Government of around $4 billion over 10 years, comprising a capital injection of $1.209 billion, proceeds from assets sales, and retained depreciation.

b. consideration of leasing options where there is a fiscally neutral trade-off between capital and operating expenditure.

1.4 Capital costs cited represent the estimated cost of purchasing the assets and bringing them into service (excluding GST). For projects where it has been possible to estimate whole-of-life costs, albeit with some uncertainty, these estimates have also been provided.

Project Summary Sheets

1.5 Project summary sheets have been prepared for those projects in sections 5 to 12 of the LTDP. Each summary sheet describes the project, how it contributes to the Government's defence policy, links to other projects and capabilities, timing issues, estimated costs and possible options where these are known. Options and trade-offs for defence acquisitions are investigated, costed and presented to Ministers as projects are brought forward for approval.

2. The LTDP and Defence Policy

2.1 The LTDP sets out the major capital acquisition projects that will enable the NZDF to implement the Government's defence policy objectives.

2.2 In the 8 May 2001 Defence Statement, the Government stated that it is:

> "building a modern, professional and well-equipped Defence Force with the necessary military capabilities across all three services to meet New Zealand's objectives... the New Zealand Defence Force is being reconfigured so that it is sustainable and affordable over the long-term. It will be able both to meet New Zealand's own defence and security needs, and to make a useful contribution when it is deployed."[1]

2.3 The Government's defence policy objectives are:

- to defend New Zealand and to protect its people, land, territorial waters, Exclusive Economic Zone, natural resources and critical infrastructure;
- to meet our alliance commitments to Australia by maintaining a close defence partnership in pursuit of common security interests;
- to assist in the maintenance of security in the South Pacific and to provide assistance to our Pacific neighbours;
- to play an appropriate role in the maintenance of security in the Asia-Pacific region, including meeting our obligations as a member of the Five Power Defence Arrangements; and
- to contribute to global security and peacekeeping through participation in the full range of UN and other appropriate multilateral peace support and humanitarian relief operations.[2]

LTDP Projects

2.4 LTDP projects are grouped in terms of:

- the stage they have reached in their acquisition cycle (categories A and B below); or
- whether they have received approval in principle from the Government (category C below); or
- projects that are under development (categories D-G below); or
- projects that are being managed under the Defence Capital Project Minor Programme and are either under acquisition or under development (category H below).

A. Capabilities Delivered [3]

- Boeing 727 Replacement
- Defence Headquarters Building
- Medium Range Anti-Armour Weapon

[1] Government Defence Statement, 8 May 2001, A Modern, Sustainable Defence Force Matched to New Zealand's Needs, p.2

[2] Defence Policy Framework, June 2000, para.19.

[3] Projects within this category have progressed through the acquisition cycle, and have been or are being Introduced Into Service.

- Very Low Level Air Defence Cueing System
- Light Operational Vehicles
- Multi-Role Vessel
- Improvised Explosive Device Disposal

B. Projects Approved and in Acquisition Phase[4]

- Boeing 757 Modification
- Patrol Vessels
- Special Operations Capability
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- C-130 Life Extension
- NZDF Medium Utility Helicopter Capability
- Ohakea Essential Infrastructure Programme
- Ohakea Base Taxiways Reconstruction
- Replacement of Devonport Naval Base 60hz Naval Power Generation and Reticulation
- Replacement of Devonport Naval Base Fuel Installation Facilities
- C-130 Self-Protection
- ANZAC Class Close-In Weapon System Upgrade and Refurbishment
- NZDF Training/Light Utility Helicopter Capability
- Night Vision Equipment

C. Projects Approved in Principle by the Government

- Advanced Pilot Training Capability (B200 Replacement)
- ANZAC Class Platform Systems Upgrade
- Joint Command and Control System
- Ohakea Consolidation
- ANZAC Class Self-Defence Upgrade

D. Projects Critical to Avoid the Failure of Policy

- Joint Communications Modernisation
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance

E. Projects Essential to Avoid the Failure of Policy

- P-3 Self-Protection
- Land Transport Capability Programme

[4] Projects within this category are being acquired.

F. Projects Necessary to Avoid the Failure of Policy

- P-3 Air-to-Surface Weapons
- NZDF Torpedo Replacement
- NZDF Satellite Communications Capability

G. Projects that have Benefit but are Less Critical to Achieving Policy Objectives

- Remote Mine Detection
- Indirect Fire Support Weapon
- Infrastructure Projects

H. Projects Previously on the LTDP and Moved to the Defence Capital Programme Minor

- High Preparedness Infantry Company
- Army Manoeuvre Range
- Army Engineering Equipment
- Combat Service Support Vehicles
- Direct Fire Support Weapon
- NZDF Weapon Replacement

2.5 The list does not indicate the order in which projects will be completed.

3. Funding

3.1 The NZDF manages its funding through two envelopes: the LTDP for capital expenditure; and the *Defence Sustainability Initiative* (DSI) for operating expenditure.

3.2 The LTDP capital envelope is defined by the sum total of funds from depreciation, asset sales and available capital injections, and the operating envelope by the baseline and annual increments under the DSI.

3.3 Should these fiscal envelopes be unable to fund all projects on the current LTDP, prioritisation will be required with some projects being deferred, scaled down, or cancelled.

Affordability of the LTDP

3.4 Affordability depends on matching approved and planned expenditure for LTDP projects against the NZDF's inward cash flows. The cash flows for some of these projects are already known since contracts have been approved and contractual payments have been determined. For those projects that have not yet gone out to tender, cash flows reflect estimates of how contractual payments are likely to be structured once negotiations have been concluded with the successful tenderer.

3.5 Cost estimates for planned projects are made on the best evidence at the time and are updated regularly, but by definition, are less accurate for projects planned for later time periods. As such, there is a degree of uncertainty surrounding the cost of those projects within the LTDP that have not yet been the subject of a request for proposal or request for tender. In this update, estimates for projects not under contract are provided in bands rather than in the form of a point estimate.

Defence Sustainability Initiative

3.6 In December 2003 the Government initiated a review to identify both current and optimum configuration and resource requirements for the defence organisation to undertake the roles and tasks set out in the Government's statements of defence policy and in the LTDP. The resulting Defence Capability and Resourcing Review was presented to Ministers in February 2005. It confirmed that operational and organisational capabilities in a number of areas of the NZDF and Ministry of Defence were below what is required by government policy. This led to the May 2005 DSI policy statement which outlined a major remedial programme and a firm commitment of increased resources over the next 10 years to achieve long-term sustainability for Defence. It saw additional funding being provided (excluding GST) of $4.6 billion (operating) and $209 million (capital) over the period 2005 through to 2015.

Whole-of-Life Costing

3.7 Whole-of-life costing incorporates both capital and operating costs for a project or capability. This provides a way of determining the overall affordability of projects or new capabilities for the NZDF.

3.8 LTDP cost estimates need to be consistent with the new Capital Asset Management (CAM) requirements, which have been developed by Treasury in conjunction with the State Services Commission. CAM is designed to achieve greater value for money from capital purchases by assessing the cost of an asset through its entire life, with life cycle costing forming a vital part of this process.

3.9 Project sheets, where applicable, include the estimated life of the capability, their estimated acquisition cost, and their estimated whole-of-life cost. The whole-of-life cost figures in the project sheets are provisional and are being further refined. This will ensure that CAM requirements are fully met. In addition, for this LTDP update, the figures for whole-of-life costs are based on the total estimated cost in nominal dollars rather than being discounted.

Financial Risks

3.10 In addition to the uncertainty surrounding the cost of projects within the LTDP that have not yet entered their acquisition phase, there are several financial risks associated with the LTDP that have to be managed to ensure the LTDP remains affordable. These include:

a. **Inflation.** Estimated costs of projects reflect the impact of military inflation, and where appropriate consumer price index and construction price inflation.

b. **Foreign Exchange Movements.** Project costs in this LTDP update have been converted from USD/EURO into NZD using exchange rate projections advised by Treasury (below). Notably, these are official forecast rates based on a Treasury model. Actual rates at the time when contracts are signed are likely to differ from these forecasts resulting in changes to actual project costs. Ministers have recently agreed to a foreign exchange policy which extends the methods by which foreign exchange risk can be managed. This should help to reduce, but will not eliminate the uncertainty of project costs. The policy includes the establishment and maintenance of a "Foreign Exchange Risk Register" to record and monitor foreign exchange exposures. Work is underway to make the register operational.

	Fiscal Year 08/09	**Fiscal Year 09/10**	**Fiscal Year 10/11 Onwards**
USD	0.7567	0.7031	0.6554
EURO	0.4966	0.4513	0.4158

c. **Upgrades.** Military equipment requires regular upgrading to ensure that it is able to provide the required capability. Upgrades are also important to keep pace with technological changes, and to maintain interoperability with other defence forces. When the actual cost, or timing, of an upgrade differs from what was expected there are financial repercussions for both the capital and operating envelopes. Known upgrades have been included in the LTDP. Other unpredicted upgrades as a result of unexpected obsolescence, urgent operational requirements or the introduction of new technologies may be required in the life of military equipment. These will also be managed and prioritised against the current LTDP, or its replacement.

d. **Personnel and Operating Costs.** The NZDF is aware of the need to manage the fiscal risks that result from:

- Operating baseline changes that will need to take account of pay increases and changes in NZDF personnel numbers, training requirements, maintenance and the actual operating costs resulting from new equipment.
- Changes in operational tempo which impact on both capital and operating costs.

e. **Asset Revaluations.** Most of the NZDF's capital equipment is purchased in USD or EURO. Changes to New Zealand Financial Reporting Standards dictate that all assets are to be revalued annually, with a consequential impact on the funding arising from depreciation. Should the depreciation funding be greater than that forecast, the NZDF is able to seek this additional funding from the Government up to and including 2009/10. Future arrangements for the management of depreciation are under consideration.

4. Managing the LTDP

4.1 The Defence Capability Management Framework (outlined below) is the key process used by Defence to ensure that the LTDP remains a core decision making tool for the Government and that projects are well managed and consistent with government policy.

4.2 The LTDP is updated regularly to provide the best information possible to inform decisions on defence acquisitions and the budget cycle. LTDP updates and accompanying reports to Ministers may be warranted:

a. by the availability of new information;

b. whenever acquisition proposals are submitted for the Government's consideration;

c. when significant financial or policy developments occur;

d. by the need to support the financial impact of NZDF asset revaluations; and

e. by the need for Ministers to consider the overall context of total planned acquisitions with a clear view of priorities, risks and trade-offs.

Capability Management Framework

4.3 The Capability Management Framework (CMF) is a joint Ministry of Defence/ NZDF governance and management system for capability development. The CMF outlines responsibility, accountability and processes for identifying capability requirements, capability definition, delivery of capability – including acquisition, introduction into service, maintaining in service, obsolescence and disposal.

4.4 The CMF guides the capability development process starting with broad estimates of capability requirements and rough estimates of costs. At each step in the capability development process more information is added resulting in requirements and costs gaining greater fidelity. The CMF also allows HQ NZDF, single Services and the Ministry of Defence to plan for, and allocate appropriate resources to, those projects that have a higher priority on the LTDP.

4.5 Ministers must also have confidence that projects are well managed and that acquisition activity is consistent with the Government's direction. This is achieved by the Ministry of Defence and the NZDF following the processes outlined in the CMF. These include:

a. **Project Initiation: Ministerial Note.** On the completion of preliminary work within Defence, the Minister of Defence is invited to note that work is to commence on a LTDP project.

b. **Initial Gate: Approval to Initiate.** The outcome of the Definition Phase is the Initial Gate Investment Case. This presents a high level cost-benefit and risk analysis of the status quo and other conceptually different options. The analysis is submitted to government seeking its Approval to Initiate a capability project and conduct a detailed assessment of an agreed set of options.

   Following approval, the options are explored. The exact equipment to be acquired to meet the capability requirements has still not been decided at this point. Cost and delivery estimates developed at this stage are, therefore, still significantly uncertain, albeit somewhat less uncertain than those made when approval to initiate was sought.

c. **Main Gate: Approval to Commence Acquisition.** Following assessment of capability options, the Main Gate Investment Case is prepared. This describes in detail the proposal for investment, supported by links to strategy, a risk analysis and options for mitigating risk, a cost-benefit analysis, an implementation or procurement plan, and a specification of expected performance.

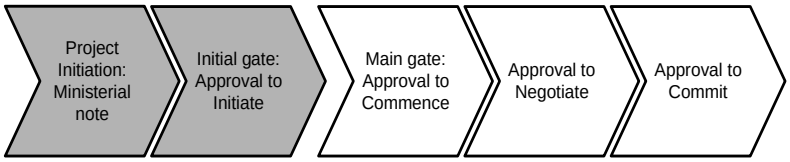
The exact equipment to achieve the capability needed has not been decided at this point, but real options for the kind of equipment to be acquired have been identified and examined. While Defence will make an assessment of potential solutions and their possible costs, the most cost effective solution is only identified once industry has been formally approached in the next phase.

Once Cabinet's approval to commence has been given, the market will be approached and, generally, a process of competitive tendering will be undertaken. Industry will be invited to propose solutions to meet the capability requirement, as expressed in a set of functional performance specifications that set out what the capability is to achieve. Defence does not call for tender against specific or identifiable products.

d. **Approval to Negotiate:** Following an evaluation of proposals or tenders, Defence will seek Approval to Negotiate with potential supplier(s). This may include seeking approval for the NZDF to acquire all other functional components of the capability described in the proposal.

e. **Approval to Commit:** Once negotiations with the preferred tenderer are complete, government approval is sought to commit funds. The approval to commit contains the financial authority that specifies the amount to be spent on the acquisition (usually the contract price and Defence's associated project management costs).

4.6 Below is a diagrammatic representation of the development of LTDP projects consistent with the requirements of the CMF.



Diagrams are used in this update to indicate the status of projects not yet in the acquisition phase, with shading indicating the stage which the project has reached.

4.7 The CMF is to be reviewed to ensure that projects on the LTDP are defined, costed and presented to Ministers in accordance with the Government's new Capital Asset Management principles.

Network Enabled Capability Strategy

4.8 The networking of military capabilities is essential for a modern defence force. Reflecting developments in this field the NZDF introduced its Network Enabled Capability Strategy (NEC) in 2007. This strategy was introduced in recognition of the need to use modern information technology to link sensors, decision makers and weapon systems to help people, units and platforms work together more effectively to achieve the NZDF Joint Effect. The NZDF NEC recognises that there are four key component capabilities namely: infrastructure, Command and Control (C2) systems, equipment, and sensors. Future capabilities (new assets, replacements or upgrades) within the NZDF network will be required to operate effectively regardless of location, platform or operational partner.

4.9 Infrastructure projects underpin all future NEC developments so there is a need for such projects to progress ahead of, or in parallel with, the C2 equipment and or sensor system projects. In recognition of this requirement the NZDF is intending to initiate projects that will deal with network architecture, fixed networks, and mobile access to a range of broadband communications systems. Such projects include Joint Communications Modernisation and NZDF Satellite Communications Capability. Collectively, these projects when completed will deliver a modern global communications system which is estimated to cost around $100 million to be implemented over the next 5 to 10 years.

4.10 The NZDF also needs to be able to collate, process, and disseminate a wide range of information as rapidly and securely as possible. Collectively, the NZDF has characterised this processing system as the Joint Command and Control System (JCCS). A programme of work to implement JCCS is currently being developed and will be based on discrete components. Whilst the core component will be the C2 system, the collective components will enable the NZDF to process and disseminate information quickly. The JCCS Programme is expected to take up to five years to implement at an estimated cost of $35 - $55 million.

4.11 In parallel with the infrastructure projects and the JCCS programme, systems will be developed that will enable information to be processed and analysed. Such systems include, or are a part of, the following projects:

- P-3 Mission Management, Communication, and Navigation Systems Upgrades;
- ANZAC Class Self Defence Upgrade; and
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance.

5. Capability Delivered

Boeing 727 Replacement

Royal New Zealand Air Force Boeing 757

Description

5.1 This project replaced the Boeing 727 aircraft with the Boeing 757 aircraft, which have a greater range and payload capacity.

Policy Value

5.2 A strategic air transport capability is a critical enabler for many operations and has a high degree of utility across all of the Government's defence policy objectives.

Capability Gaps

5.3 In addition to the C-130s, New Zealand requires a strategic airlift capability provided by jet transport aircraft. This was previously provided by two Boeing 727 aircraft and is now provided by two Boeing 757 aircraft.

5.4 The capability provides essential air transport for the deployment of NZDF personnel and equipment within New Zealand, to the South Pacific, Australia, the Asia-Pacific region and globally.

Links to other Capabilities

5.5 This project has links to the following projects and capabilities:

- Boeing 757 Modification

Current Status

5.6 The two Boeing 757 aircraft have been introduced into service. To meet the Government's policy requirements, they are currently being modified in a combination freight/passenger configuration and will be re-introduced into service when completed (see also page 24).

Timing

5.7 The replacement project was completed in 2005.

Costs

5.8 The total purchase price for the Boeing 757 fleet was $108.3 million.

Defence Headquarters Building

Defence Headquarters Building

Description

5.9 This project provides new Wellington headquarters accommodation for the Defence organisations. The building is owned by AMP Capital Investors Ltd. Defence owns the internal fit out.

Policy Value

5.10 The new Defence Building has accommodated the Defence organisations in a modern energy efficient environment.

Capability Gap

5.11 The lease on the former Defence building expired and the Defence organisations were required to relocate.

Current Status

5.12 Staff relocated to the new premises in February 2007.

Timing

5.13 Building construction commenced in August 2004. The fit out was completed in early 2007.

Costs

5.14 The fit out project cost around $22 million. The initial lease term is 18 years. Whole-of-life costs are estimated to be around $140 million.

Medium Range Anti-Armour Weapon

New Zealand Javelin detachment in action in Waiouru

Description

5.15 This project provides protection for New Zealand's land forces from armoured threats.

Policy Value

5.16 The Medium Range Anti-Armour Weapon (MRAAW) provides land forces with a medium-range capability against armoured vehicles and other targets. It is a critical part of any contribution to operations where land forces may face an armoured vehicle threat. The MRAAW also has some utility in peacekeeping operations in the Asia-Pacific region and globally for self-protection in the event of an escalation in the threat to ground forces.

Capability Gap

5.17 The Army only had a short-range anti-armour weapon that was limited in range and lethality. New Zealand land forces were very vulnerable to threats from tanks, armoured vehicles or other anti-armour weapons. There was a need for a capability to engage these threats at the greatest distance practicable.

Links to other Capabilities

5.18 This project has links to the following projects and capabilities:

- Light Armoured Vehicle
- Light Operational Vehicle
- Direct Fire Support Weapon
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
- Night Vision Equipment

Current Status

5.19 A Life Cycle Contractor Support Agreement is under negotiation.

Timing

5.20 Project components including weapons, equipment and ammunition have been delivered and the systems have been introduced into service. Delivery was completed in December 2006.

Costs

5.21 This project cost around $24 million. The estimated life is around 15 years. Whole-of-life costs are estimated to be around $45 million.

Very Low Level Air Defence Cueing System

Description

5.22 This project involves the purchase of additional equipment to bring the Mistral air defence system up to operational standard.

Policy Value

5.23 An air defence capability is necessary to protect critical land force elements from air threats such as low flying aircraft and armed helicopters.

Capability Gap

5.24 The very low level air defence system acquired in the 1990's was not fully operational as target detection, identification and tracking relied on visual observation. To be fully effective and minimise risk to friendly aircraft, this project has delivered an auto cueing and identification friend or foe capability.

Links to other Capabilities

5.25 This project has links to the following projects and capabilities:

- Light Armoured Vehicles
- Light Operational Vehicles
- Direct Fire Support Weapon
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance

Current Status

5.26 The capability has been introduced into service.

Timing

5.27 Delivery was completed in December 2006.

Costs

5.28 This project cost around $14 million. The estimated life is around 10 years. Whole-of-life costs are estimated to be around $30 million.

Light Operational Vehicles

Light Operational Vehicle

Description

5.29 This project provides the Army and Special Forces with a modern, light operational, military vehicle.

Policy Value

5.30 The Light Operational Vehicle (LOV) provides an essential capability to enable the Army and Special Forces to train and participate in operations in the South Pacific, the Asia-Pacific region and globally. LOVs are the primary means of transport used by the Army and Special Forces on operations, including in support of the Light Armoured Vehicle. In addition, the LOVs may provide support for evacuation operations in the South Pacific.

Capability Gap

5.31 The LOVs meet the Army's contemporary and future requirements for a light operational vehicle.

Links to other Capabilities

5.32 This project has links to the following projects and capabilities:

- Light Armoured Vehicle
- Multi-Role Vessel
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
- Medium Range Anti-Armour Weapon
- Direct Fire Support Weapon
- Special Operation Capability
- Night Vision Equipment

Current Status

5.33 321 (248 non-armoured, 60 armoured, and 13 special operations) Pinzgauer LOVs were delivered from Automotive Technik Ltd (ATL) of the United Kingdom.

5.34 LOVs have been deployed to Timor-Leste and Solomon Islands. LOV special operations variants were deployed as part of the third SAS rotation to Afghanistan.

Timing

5.35 Delivery of the LOVs has been completed.

Costs

5.36 This project cost around $93 million. The estimated life is around 15 years. Whole-of-life costs are estimated to be around $130 million.

Multi-Role Vessel

HMNZS Canterbury

Description

5.37 The Multi-Role Vessel (MRV), HMNZS *Canterbury*, provides a tactical sealift and amphibious capability for the NZDF. The MRV's design also allows for a strategic sealift capability by way of a port to port capability. The MRV acquisition is part of Project Protector, which also involves the acquisition of two offshore patrol vessels and four inshore patrol vessels (see also page 26).

Policy Value

5.38 The MRV will be used primarily in the South Pacific and the Asia-Pacific region for peace support operations, evacuation of personnel during civil emergencies, and disaster relief. A tactical sealift capability to off-load people and equipment both day and night without access to a port facility increases the utility of the MRV.

5.39 The MRV will be able to undertake patrol and presence operations in New Zealand's Exclusive Economic Zone and the South Pacific, and will provide the Government with an additional option for regional commitments such as the Five Power Defence Arrangements and for global deployments. The MRV will provide additional berths for sea training purposes.

Capability Gap

5.40 Previously, the NZDF had no tactical sealift capability nor could it easily deploy land force personnel and their equipment, including helicopter support, into areas without port facilities. Tactical sealift vessels cannot be chartered. The MRV will provide an independent tactical sealift capability, able to deploy to peace support operations; evacuate our nationals from trouble spots; and contribute to regional disaster relief and humanitarian assistance.

5.41 In conjunction with the frigates and the offshore patrol vessels, the MRV will also provide additional capacity for tasks such as patrolling, sea training, support to land operations, and defence diplomacy.

Links to other Capabilities

5.42 This project has links to the following projects and capabilities:

- Patrol Vessels
- Light Armoured Vehicle
- Light Operational Vehicle
- NZDF Medium Utility Helicopter Capability

- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- Night Vision Equipment

Current Status

5.43 The MRV is undergoing its operational release programme. Some issues are being pursued with the contractor.

Timing

5.44 Delivery was completed in mid 2007.

Cost

5.45 The approved project cost for the entire Project Protector fleet is currently $500 million. The estimated life of the MRV is around 25 years. Whole-of-life costs for the MRV are estimated to be around $1.080 billion.

Improvised Explosive Device Disposal

IEDD capability demonstration

Description

5.46 This project provides an enhanced national Improvised Explosive Device Disposal (IEDD) capability and a credible Improvised Explosive Device Disposal - Chemical, Biological and Radiological (IEDD-CBR) capability.

Policy Value

5.47 An IEDD and IEDD-CBR capability is part of the NZDF's role to counter threats posed by terrorism or acts of sabotage. The NZDF IEDD capability is an essential component of the wider whole-of-government approach to an IEDD or IEDD-CBR emergency, managed by the New Zealand Police. The potential consequences of IEDD incidents range from limited but costly, inconvenience and disruption of activities through to the loss of life.

Capability Gap

5.48 The NZDF's previous IEDD capability was derived from the skills of Ammunition Technical Officers. These personnel had limited training for extreme circumstances and limited equipment. The types of terrorist threats that now exist require more capable and effective responses.

Links to other Capabilities

5.49 This project has links to the following projects and capabilities:

- Land Command & Control, Communications, Computers, Intelligence Surveillance, and Reconnaissance
- Army Engineering Equipment
- Special Operations Capability

Current Status

5.50 Equipment purchased under this project has been delivered and is being introduced into service. A new Explosive Ordnance Disposal (EOD) squadron has been formed and is operational.

Timing

5.51 The EOD Squadron Headquarters was officially opened in May 2008. Subordinate troop facilities in Auckland, Wellington and Christchurch are scheduled to be completed in 2008.

Cost

5.52 This project is expected to cost around $22 million. The estimated life is around 10 years. Whole-of-life costs are estimated to be around $35 million.

6. Projects Approved and in Acquisition Phase

Boeing 757 Modification

A Royal New Zealand Air Force Boeing 757

Description

6.1 This project is a modification programme that includes freight capability, engine enhancements and upgraded communication and navigation equipment to configure the aircraft to meet the strategic airlift capability required by the NZDF.

Policy Value

6.2 An effective air transport capability is a critical enabler for many operations and has a high degree of utility across all of the Government's defence policy objectives. The capability provides essential air transport for the deployment of NZDF personnel and equipment within New Zealand, to the South Pacific, Australia, the Asia-Pacific region, and globally.

6.3 To meet the Government's policy requirements, two Boeing 757 aircraft in a combination freight/passenger configuration are required.

Capability Gaps

6.4 In addition to the C-130s, New Zealand requires a strategic airlift capability provided by two Boeing 757 aircraft. Strategic airlift is a critical enabler for the NZDF and complements roles and tasks provided by the C-130, particularly the deployment and sustainment of NZDF forces on overseas deployments and the evacuation of New Zealand citizens.

Links to other Capabilities

6.5 This project has links to the following projects and capabilities:

- C-130 Life Extension

Current Status

6.6 One Boeing 757 has been delivered to the NZDF and the second aircraft is undergoing modification in the United States.

Timing

6.7 The project is scheduled for completion in 2008.

Costs

6.8 Modification of the Boeing 757 aircraft is expected to cost around $110 million. The Boeing 757 is scheduled to remain in service until around 2023. Whole-of-life costs are estimated to be around $640 million.

Patrol Vessels

Inshore Patrol Vessel HMNZS Rotoiti

Description

6.9 This project involves the acquisition of two offshore and four inshore patrol vessels to meet requirements for maritime surface surveillance in New Zealand's Exclusive Economic Zone (EEZ), the Ross Sea and the South Pacific.

Policy Value

6.10 Patrol vessels are an important element in the surveillance of New Zealand's EEZ and other maritime areas of interest. They will work in conjunction with the P-3 airborne surveillance and reconnaissance force to protect natural resources and detect and deter maritime transnational threats.

6.11 The patrol vessels will meet many government agencies' needs, including the Ministry of Fisheries, the New Zealand Customs Service, the Department of Conservation, the Police, Maritime New Zealand and others. The offshore patrol vessels will be able to support maritime counter-terrorism operations and provide a presence in the South Pacific to support peace and stability and help with disaster relief.

Capability Gap

6.12 New Zealand currently has a very limited maritime surface patrol capability provided by the two frigates and that inherent in the various specialised vessels.

Links to other Capabilities

6.13 This project has links to the following projects and capabilities:

- Multi-Role Vessel
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- NZDF Medium Utility Helicopter Capability
- Special Operations Capability
- Night Vision Equipment

Current Status

6.14 Construction of the two offshore and four inshore patrol vessels is well advanced, with some vessels having completed their first round of contractor sea trials.

Timing

6.15 The vessels are expected to be offered for acceptance by the contractor in the coming year.

Cost

6.16 The approved project cost for the entire Project Protector fleet is currently $500 million. The estimated life of the Patrol Vessels is around 25 years. Whole-of-life costs for the Patrol Vessels are estimated to be around $1.970 billion.

Special Operations Capability

Description

6.17 This project will provide New Zealand's Special Forces with equipment to undertake special operations.

Policy Value

6.18 Army special operations capabilities have broad utility in meeting a range of the Government's defence policy objectives.

Links to Other Capabilities

6.19 This project has links to the following capabilities:

- Improvised Explosive Device Disposal
- Light Operational Vehicle (Special Forces variant)
- Land Command & Control, Communications, Computers, Intelligence Surveillance, and Reconnaissance
- NZDF Medium Utility Helicopter Capability
- NZDF Training / Light Utility Helicopter Capability
- C-130 Life Extension
- Night Vision Equipment
- NZDF Weapons Replacement

Current Status

6.20 Most of the equipment purchased under this project has been delivered and is being introduced into service.

Timing

6.21 Delivery of most equipment has been completed. Two items remain under acquisition.

Cost

6.22 This project is expected to cost around $14 million. The estimated life of the various equipment ranges from 2 to 10 years. Whole-of-life costs are estimated to be around $20 million.

P-3 Mission Management, Communication, and Navigation Systems Upgrades

P-3K Orion flying on a routine patrol of the New Zealand coast

Description

6.23 This project will upgrade the mission management, communications, and navigation systems for the P-3 Orion airborne surveillance and reconnaissance aircraft.

Policy Value

6.24 The capability provided by the P-3 Orion is central to the NZDF meeting the Government's five defence policy objectives and a broad spectrum of civilian roles and tasks. The P-3 Orion airborne surveillance and reconnaissance force undertakes surveillance of New Zealand's Exclusive Economic Zone (EEZ) and the Southern Ocean; meets our South Pacific search and rescue obligations; and provides surveillance assistance to South Pacific nations.

6.25 The P-3 Orion is one of the primary force elements contributing to our defence relationships with Australia and Five Power Defence Arrangements (FPDA) partners.

Capability Gap

6.26 The obsolescent systems onboard the P-3 Orions limited the availability of surveillance flights and other missions due to repeated equipment failures. Without an upgrade, the NZDF would be increasingly unable to meet Government objectives for the EEZ and Southern Ocean surveillance and assisting South Pacific countries with surveillance of their EEZs. There could also be difficulties in meeting wider commitments to Australia and FPDA partners.

Links to other Capabilities

6.27 This project has links to the following projects and capabilities:

- Patrol Vessels
- Multi-Role Vessel
- Land Command & Control, Communications, Computers, Intelligence Surveillance and Reconnaissance
- Joint Command and Control System
- NZDF Torpedo Replacement
- P-3 Air-to-Surface Weapons

- P-3 Self-Protection
- ANZAC Class Self-Defence Upgrade

Current Status

6.28 Upgrade work on the aircraft is underway.

Timing

6.29 In October 2004, a contract was awarded to L-3 Communications Integrated Systems of the USA as the prime contractor for the project. Development of the prototype aircraft is underway in the USA. The other five P-3 Orion aircraft will be upgraded in Blenheim, New Zealand in association with Safe Air Ltd.

6.30 The first upgraded aircraft is scheduled to be delivered in 2009, with fleet modernisation expected to be completed in 2011.

Costs

6.31 This project is expected to cost around $373 million. The P-3 fleet is scheduled to serve until around 2025. Whole-of-life costs are to be confirmed.

C-130 Life Extension

C-130 Hercules

Description

6.32 This project will extend the life of the C-130 aircraft by upgrading the avionics and self protections systems as well as undertaking some structural refurbishment work.

Policy Value

6.33 The C-130 is a critical enabler for many NZDF operations. The C-130 has particular utility where runways are short or in poor condition. It provides essential air transport for the deployment of NZDF personnel and equipment within New Zealand, to the South Pacific, Australia, the Asia-Pacific region and globally. Air transport is a critical capability across a spectrum of military operations including: supporting counter-terrorist operations; peace-support operations; evacuations of New Zealanders from trouble spots; disaster relief and humanitarian operations; undertaking tasks within New Zealand; and supporting New Zealand's Antarctic programme.

Capability Gaps

6.34 The declining availability of C-130 air transport presented a major capability gap that would have impacted on the NZDF's ability to deploy and support personnel. If this project was not carried out, the NZDF would have insufficient air transport to support deployments or to perform other tasks. This situation would lead to a risk of policy failure, particularly in the New Zealand, South Pacific, and Asia-Pacific contexts.

Links to Other Capabilities

6.35 This project has links to the following projects and capabilities:

- C-130 Self-Protection
- Boeing 757 Modification
- Special Operations Capability
- Night Vision Equipment
- Deployment of NZDF capabilities

Current Status

6.36 The prototype aircraft is undergoing modification.

Timing

6.37 The first upgraded aircraft is scheduled for delivery in 2008, with fleet modernisation expected to be completed in 2011.

Cost

6.38 This project is expected to cost around $234 million. The C-130 fleet is scheduled to serve until around 2017. Whole-of-life costs are estimated to be around $670 million.

NZDF Medium Utility Helicopter Capability

NH90 helicopter

Description

6.39 This project will replace the Iroquois utility helicopters with the NH90.

Policy Value

6.40 Utility helicopters provide essential support to the Army, particularly in the South Pacific and in peace support operations. Helicopters are also important for supporting police operations, counter terrorism operations and for providing a range of support functions within New Zealand and the South Pacific, such as search and rescue, and disaster relief.

6.41 The introduction into service of HMNZS *Canterbury* has created an additional role for utility helicopters in supporting the lodgement of personnel by amphibious means, especially in the South Pacific.

Capability Gap

6.42 The current helicopter fleet is unable to meet the contemporary and future requirements of a modern, mobile land force. The UH-1H Iroquois helicopter is becoming increasingly difficult to support because of its age. With helicopters assuming greater importance for mobility and tasks in peace support operations, there is a risk that the NZDF will be unable to adequately perform its roles and tasks if the Iroquois were not replaced with a medium utility helicopter capability.

Links to other Capabilities

6.43 This project has links to the following projects and capabilities:

- NZDF Training / Light Utility Helicopter Capability
- Special Operations Capability
- Multi-Role Vessel

- Night Vision Equipment
- A range of Army capabilities

Current Status

6.44 A resident Defence project team is in France monitoring the manufacturing programme. The first aircraft is undergoing assembly and NH Industries will undertake the first test flight in early 2009.

Timing

6.45 The first NH90 is scheduled to enter into service in 2010 with full operational capability expected by 2013.

Costs

6.46 This project is expected to cost around $771 million which includes logistics and support. The estimated fleet life is thirty years. Whole-of-life costs are estimated to be around $2.050 billion.

Ohakea Essential Infrastructure Programme

RNZAF Base Ohakea

Description

6.47 This project will provide essential infrastructure at RNZAF Base Ohakea and some minor work at Whenuapai.

Policy Value

6.48 RNZAF Base Ohakea will receive extensive improvements to its infrastructure. This will provide facilities to house the new NH-90 and A109 helicopters and modern workshops to provide engineering and maintenance for RNZAF squadrons. A new Air Movements terminal to facilitate passenger and cargo movement will meet international standards and provide capacity for the Boeing 757 aircraft. An upgrade of the security of the airbase will be in accordance with international airport security requirements.

Capability Gap

6.49 The current infrastructure is becoming degraded. It does not provide adequate housing and maintenance facilities for the NH-90 and A109 helicopters.

Links to Other Capabilities

6.50 This project has links to the following projects and capabilities:

- NZDF Medium Utility Helicopter Capability
- NZDF Training / Light Utility Helicopter Capability
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- C-130 Life Extension
- Boeing 757 Modification
- Advanced Pilot Training Capability

Current Status

6.51 The Government has approved the NZDF proceeding with an Essential Infrastructure Programme at Ohakea. This programme is underway.

6.52 Projects included in this programme are:

- New 3 Squadron helicopter facilities: to house the new NH-90 and A109 helicopters due to arrive from 2010.
- New Maintenance Support Squadron facilities: modern workshops to provide engineering and maintenance for RNZAF squadrons.
- New Air Movements terminal: to facilitate passenger and cargo movement.
- PABX/server room: new facilities for communications and information support.
- New in-flight kitchen: to support all flights from Ohakea.
- Perimeter Fence and Main Gate reconstruction: to upgrade the security of the airbase.

Timing

6.53 The Essential Infrastructure Programme is being completed over the financial years 2007/08 to 2012/13.

Costs

6.54 The Essential Infrastructure Programme is expected to cost around $130 million.

Ohakea Base Taxiways Reconstruction

Description

6.55 This project will reconstruct the Ohakea Base Taxiways 'A' and 'C' and their associated hard standings to keep the airfield fully operational for military and commercial use and ensure that the airfield meets International Civil Aviation Organisation (ICAO) standards.

Policy Value

6.56 The reconstructed taxiways will support the operation of maritime surveillance aircraft, air transport aircraft, helicopters, and flying training aircraft at Ohakea.

Capability Gap

6.57 The taxiways have reached a stage where their use by larger aircraft is limited. In particular, the taxiways are no longer suitable for routine operation of jet transport aircraft. Restrictions on aircraft operations at Ohakea affect the ability of the Air Force to operate effectively. There is also an impact on the base's ability to handle and accommodate civil aircraft when required as a diversion airfield.

Links to Other Capabilities

6.58 This project has links to the following projects and capabilities:

- Ohakea Runway Reconstruction (now completed)
- Ohakea Essential Infrastructure Programme
- NZDF Medium Utility Helicopter Capability
- NZDF Training / Light Utility Helicopter Capability
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- C-130 Life Extension
- Boeing 757 Modification
- Advanced Pilot Training Capability

Current Status

6.59 To avoid having two projects running at the same time, Taxiway C will be completed before the construction of the facilities for the NH90 helicopters commences. To meet this constraint and allow the bulk earth works to be completed during the summer construction period, Taxiway C work commenced in December 2007, with completion targeted for late 2008. The Taxiway A work will occur during 2010/11.

Timing

6.60 Taxiway C works will be completed in late 2008 and the design for Taxiway A will commence in 2010.

Costs

6.61 This project is expected to cost around $18 million. The estimated life of the taxiways is 50 years.

Replacement of Devonport Naval Base 60Hz Power Generation and Reticulation

Devonport Naval Base

Description

6.62 This project is upgrading the 60 hertz (Hz) power generation and reticulation system at the Devonport Naval Base.

Policy Value

6.63 All Royal New Zealand Navy ships are equipped with an onboard capacity to generate 60Hz power. When berthed, it is highly desirable for this power to be generated independently using a shore-based system. Not proceeding with the upgrade of the 60Hz power generation and reticulation system at the Devonport Naval Base would have made it very difficult for the Navy to maintain its current fleet and Project Protector vessels at the level required to meet the Government's defence policy objectives.

Capability Gap

6.64 The Devonport Naval Base was equipped with a generation and reticulation system that converted 50Hz power supplied from the national grid to 60Hz. The infrastructure was old and unable to fully support the existing fleet. For example, each ANZAC frigate consumed half the total output. Temporary generating capacity was hired at considerable cost whenever a high proportion of the fleet was berthed at Devonport. A modernised generation and reticulation system was needed with the arrival of the Project Protector vessels.

Links to other Capabilities

6.65 This project has links to the following projects and capabilities:

- Multi-Role Vessel
- Patrol Vessels
- ANZAC Class Self-Defence Upgrade
- ANZAC Class Platform Systems Upgrade

Current Status

6.66 The upgrade of facilities is underway.

Timing

6.67 This project will be completed in 2009.

Costs

6.68 This project is expected to cost around $10 million. The estimated life is 20 years. Whole-of-life costs are estimated to be around $11 million.

Replacement of Devonport Naval Base Fuel Installation Facilities

Description

6.69 This project is rationalising and modernising the marine fuel installation (storage, defueling and bilge cleaning capabilities) at the Devonport Naval Base.

Policy Value

6.70 The Naval Fuel Installation provides an essential strategic fuel storage capability to enable the Navy to condition and distribute the correct fuel to its ships. This has added significance with the arrival of the Project Protector vessels.

Capability Gap

6.71 After the decommissioning of the original fuel bunker tunnels which had become obsolescent, the Navy's fuelling arrangements in Auckland have been provided through a commercial supply and waste product disposal contract. HMNZS *Endeavour* has also been utilised when available.

6.72 The loss of the bunkers has affected the Navy's ability to hold contingency reserves and operational stocks and control the quality of marine fuel. It is also unable to defuel vessels when required.

Links to other Capabilities

6.73 This project has links to the following projects and capabilities:

- Multi-Role Vessel
- Patrol Vessels
- ANZAC Class Self-Defence Upgrade
- ANZAC Class Platform Systems Upgrade
- HMNZS *Endeavour*

Current Status

6.74 The construction of modernised facilities is underway.

Timing

6.75 This project will be completed in 2009.

Costs

6.76 The project is expected to cost around $15 million. The estimated life is around 50 years. Whole-of-life costs are to be confirmed.

C-130 Self-Protection

C-130 Hercules

Description

6.77 This project is upgrading the C-130 Hercules self-protection system to provide the ability to detect and counter likely threats, primarily man-portable infrared (IR) missiles.

Policy Value

6.78 The C-130 Hercules is a critical enabler for many NZDF operations. It provides essential air transport for a number of roles and tasks, including supporting counter-terrorist operations, peace support operations, and evacuations of New Zealanders from trouble spots. These operations may involve the C-130s landing in locations where there is the threat of hostile air defence weapons. In places such as Afghanistan, coalition forces expect aircraft to operate with an effective standard of self-protection.

6.79 C-130s and their crews are high value assets. They carry mission critical cargo and personnel. It is therefore important to protect those assets and minimise the risks to personnel and to payloads.

Capability Gaps

6.80 The current C-130 self-protection fit was installed in the early 1990s. Since that time there has been a significant increase in the sophistication, availability and employment of missiles by combat forces, terrorists and other non-government actors in a range of operating environments. The current system is therefore no longer appropriate for today's threat environment.

6.81 In recent years, the majority of fixed wing aircraft lost to hostile fire in unstable regions of the world have fallen to IR guided man portable missile systems. These shoulder-launched systems have proliferated widely across the globe. Lack of an effective self-protection capability could therefore limit the use of our C-130s in humanitarian or peace support operations globally.

Links to Other Capabilities

6.82 This project has links to the following projects and capabilities:

- P-3 Self-Protection
- C-130 Life Extension

Current Status

6.83 Modification to the first aircraft is underway. The first C-130 with an upgraded self protection system is scheduled to be delivered in 2009 and be operational in the same year.

Timing

6.84 This project is underway and is being completed in conjunction with the C-130 Life Extension.

Costs

6.85 This project is expected to cost around $21 million. The C-130 fleet is scheduled to serve until around 2017. Whole-of-life costs are estimated to be around $30 million.

ANZAC Class Close-In Weapon System Upgrade and Refurbishment

Description

6.86 This project upgrades the ANZAC Class Phalanx Close-In Weapon System (CIWS), the last line of defence and protection from Anti-Ship Missiles (ASM) and strike aircraft. It also has the potential to defend against Fast Inshore Attack Craft (FIAC).

Policy Value

6.87 The ANZAC Class Frigates must be able to operate in environments where there is a risk of attack from ASM and FIAC. To be able to operate in such environments without undue risk or constraint, the frigates must be equipped with a level of self-defence against such threats. The CIWS provides a substantial proportion of this self-defence capability.

Capability Gaps

6.88 The CIWS systems require refurbishment to rectify capability shortfalls, and will be upgraded to counter advances in the ASM threat and increasing risk of FIAC attacks.

Links to other Capabilities

6.89 This project has links to the following projects and capabilities:

- ANZAC Class Self-Defence Upgrade

Current Status

6.90 This project is underway.

Timing

6.91 A contract has been signed with Raytheon to upgrade the two CIWS mounts to counter ASM and FIAC.

6.92 The first CIWS mount is scheduled for installation in late 2009/early 2010 with the second mount scheduled for installation approximately 12 months later.

Costs

6.93 This project is expected to cost around $25 million. The estimated life is around 7 years. Whole-of-life costs are estimated to be around $65 million.

NZDF Training/Light Utility Helicopter Capability

A109 training/light utility helicopter

Description

6.94 This project will replace the Sioux training helicopters with the A109 Training/Light Utility Helicopters (T/LUH).

Policy Value

6.95 A modern training helicopter is critical to transition pilots and crew to the NH90 medium utility helicopters and the Navy's SH-2G Seasprite helicopters. In a light utility role, the T/LUH helicopters will support a range of government and civil agencies in New Zealand and offshore.

Capability Gap

6.96 The Sioux training helicopter is of 1950s vintage and is inadequate to meet contemporary training needs. It does not provide an adequate step in pilot training progression from the basic CT4E Airtrainer aircraft to utility and maritime helicopters, nor does it contribute to the training of other helicopter aircrew.

6.97 The acquisition of the NH90 medium utility helicopter creates a requirement for a complementary light utility helicopter capability not met by the Sioux training helicopter.

Links to other Capabilities

6.98 This project has links to the following projects and capabilities:

- NZDF Medium Utility Helicopter
- Special Operations Capability
- Multi-Role Vessel
- Night Vision Equipment
- A range of Army Capabilities

Current Status

6.99 Contract negotiations have been concluded and a contract signed. A resident Defence project team has been established in Italy to monitor the manufacturing programme.

Timing

6.100 Five Agusta Westland A109LUH (NZ) helicopters and a flight training device are scheduled to enter service in 2010.

Costs

6.101 This project is expected to cost around $139 million. The estimated fleet life is around 30 years. Whole-of-life costs are estimated to be around $400 million.

Night Vision Equipment

Description

6.102 This project involves the purchase of Night Vision Equipment (NVE) for NZDF force elements to operate and train effectively at night or in conditions of reduced light.

Policy Value

6.103 NVE assists in meeting a range of the Government's defence policy objectives. NVE enhances safety and force protection for NZDF force elements through improved situational awareness. NVE provides an important enabling capability for the Army, Navy and Air Force to operate and train at night or in conditions of reduced light.

Capability Gap

6.104 The NZDF possessed a limited night operating capability. Recent major capital acquisitions such as the Light Armoured Vehicle, NH90 Medium Utility Helicopter and A109 Training / Light Utility Helicopters, the C-130 Life Extension, Multi-Role Vessel and Medium Range Anti-Armour Weapon have seen platforms being acquired that either contain advanced night operating capabilities, or could realise a significant increase in capability with the addition of NVE.

6.105 This project includes the following systems:

- Individual NVE such as night vision goggles
- Night weapons sights for both personal and crew served weapons
- Hand held observation devices
- Night vision ancillaries such as aiming devices, thermal markers and infrared strobe lighting

Links to other Capabilities

6.106 This project has links to the following projects and capabilities:

- Light Operational Vehicles
- Medium Range Anti-Armour Weapon
- Direct Fire Support Weapon
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
- High Preparedness Infantry Company
- NZDF Medium Utility Helicopter Capability
- NZDF Training / Light Utility Helicopter Capability
- C-130 Life Extension
- Multi-Role Vessel
- NZDF Weapon Replacement
- Special Operations Capability
- Light Armoured Vehicles

Current Status

6.107 The Government has approved this project and an acquisition strategy is being prepared.

Timing

6.108 This project will be approached as a phased procurement to take advantage of technology developments and to avoid block fleet obsolescence. The first phase of this programme is expected to begin in 2008/09.

Costs

6.109 The first phase of this project is expected to cost around $15 million from 2008/09. Whole-of-life costs are not yet able to be calculated.

7. Projects Approved In Principle by the Government

Advanced Pilot Training Capability (B200 Replacement)

Beech King Air B200

Description

7.1 This project will maintain the ability to conduct advanced pilot training after the expiry of the present B200 King Air lease.

Policy Value

7.2 RNZAF pilot training is a core enabling capability for all our operations. The Advanced Pilot Training Capability (APTC) is critical to graduate pilots for the Air Force and Navy with the skills needed for transition to the upgraded and new operational aircraft of the NZDF. The replacement APTC will provide a multi-engine platform that bridges the skill gap, aircraft performance and cockpit technology between the basic CT4E Airtrainer aircraft and the larger, more complex force element aircraft.

Capability Gap

7.3 With the upgraded and new aircraft delivering 'state of the art' systems presented in 'glass cockpits', there is an ongoing requirement for multi-engined advanced pilot training on systems with appropriate technology and complexity. The capability includes a requirement for a flight training device.

Links to other Capabilities

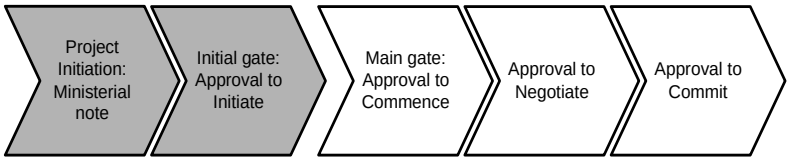
7.4 This project has links to the following projects and capabilities:

- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- C-130 Life Extension
- Boeing 757 Modification
- NZDF Medium Utility Helicopter Capability

- NZDF Training/Light Utility Helicopter
- Ohakea Consolidation
- Maritime Helicopter Capability
- RNZAF Flying Training

Current Status

7.5 Lease and purchase options are under consideration as part of moving towards the Main Gate Investment Case.



Timing

7.6 The tender process for the new APTC is scheduled to take place in 2008 so that the new capability can be introduced into service by 2010. An extension of the current lease will provide continuity of training until the replacement capability is delivered.

Costs

7.7 Capital and operating costs will be dependant on whether lease or purchase options are selected. The estimated project cost is expected to be between $65 - 75 million. Whole-of-life costs are not yet able to be calculated.

ANZAC Class Platform Systems Upgrade

Machinery Control Room

Description

7.8 This project seeks to ensure that ANZAC class platform systems remain viable. Platform systems, as distinct from combat systems, provide those elements of a warship's capability that enable it to move, float, generate power, recover from damage, and accommodate people.

Policy Value

7.9 A platform systems refit is required to ensure that the ANZACs remain capable of meeting policy objectives. The role of the Naval Combat Force is to meet military tasks, particularly in support of the Government's regional and global objectives. The ANZACs are critical to the protection of Australia/New Zealand territorial sovereignty, for participating in Five Power Defence Arrangements activities, supporting our relationships with regional partners, and undertaking peace support operations in the Asia-Pacific region and beyond.

Capability Gap

7.10 Equipment obsolescence, tighter environmental legislation and manpower constraints drive the need for a platform systems upgrade. The project involves upgrading the existing propulsion systems, and heating, ventilation and air-conditioning systems, as well as modifications to the hull. A replacement machinery control system will reduce technical manpower needs.

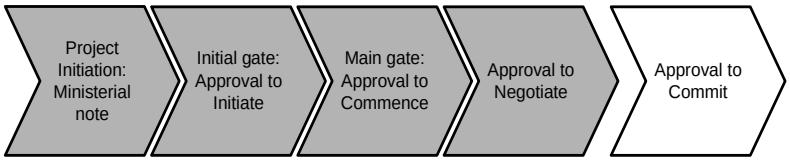
Links to other Capabilities

7.11 This project has links to the following projects and capabilities:

- ANZAC Class Self-Defence Upgrade
- ANZAC Class Close-in Weapon System Upgrade and Refurbishment

Current Status

7.12 The project has government approval to commence. Work has begun on developing proposals with industry.



Timing

7.13 This project will be progressively rolled out across both ANZACs coinciding with scheduled maintenance periods. Work is expected to commence on HMNZS *Te Kaha* in early 2009 and early 2010 on HMNZS *Te Mana*.

Costs

7.14 This project is expected to cost around $57 million. Whole-of-life costs are not yet able to be calculated.

Joint Command and Control System

Description

7.15 This programme is intended to implement an information technology enabled command and control system for the NZDF. This system will collect, collate, process, display, store, disseminate and protect command and control information in near real-time.

7.16 This programme is being progressed through four sub-component projects Defence Command and Control System, Logistics, Air Command and Control, and Joint Military Appreciation Process.

Policy Value

7.17 A modern Joint Command and Control System (JCCS) is a key enabling capability for meeting all of the policy roles and tasks required of the NZDF. A JCCS will enable force elements from all three Services to work together efficiently and effectively by enhancing their situational awareness and decision-making processes.

Capability Gap

7.18 The NZDF's current command and control systems are largely manual and paper based. NZDF experience in recent operations and military exercises has shown that the current command and control systems are obsolete and inefficient. This has impacted on the effectiveness of the Joint Force Headquarters. The slower and less accurate decision making cycle currently available to commanders is likely to lead to policy failure as it becomes increasingly difficult for the NZDF to plan and effectively coordinate operations.

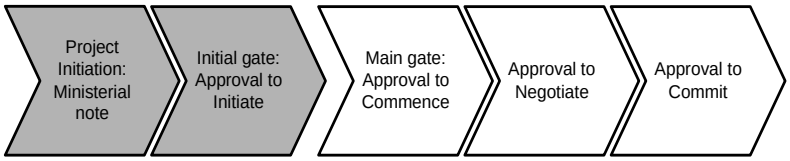
Links to Other Capabilities

7.19 The JCCS is an overarching capability that contributes to all NZDF outputs by giving the NZDF the ability to manage all forms of command and control information. The components of JCCS will utilise current NZDF communications systems and networks to transfer data. Linked projects are:

- Joint Communication Modernisation
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
- P-3 Mission Management, Communication, and Navigation System Upgrades
- NZDF Satellite Communications Capability

Current Status

7.20 Business cases are being developed for the Government's consideration in 2008/09/10.



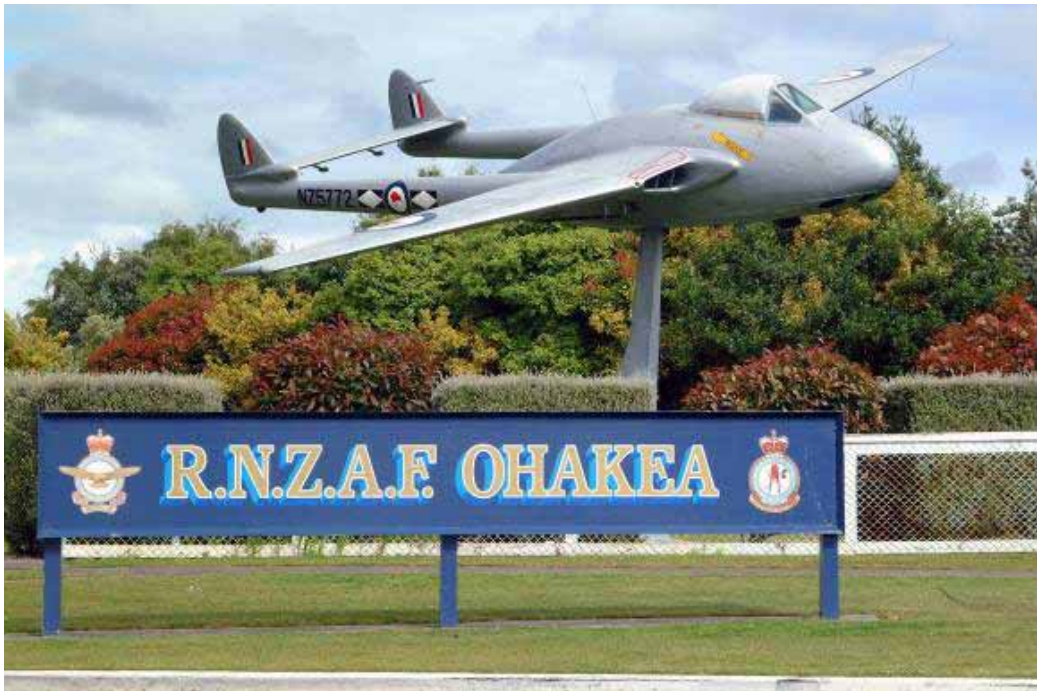
Timing

7.21 It is expected that JCCS will be phased into-service over the period 2009 – 2014.

Costs

7.22 This project is expected to cost between $35 - $55 million. Whole-of-life costs are estimated to be around $15.5 million annually from 2012.

Ohakea Consolidation



RNZAF Base Ohakea

Description

7.23 This project will consolidate the RNZAF's operational capability at RNZAF Base Ohakea.

Policy Value

7.24 The consolidation will optimise RNZAF real estate holdings and improve operational effectiveness.

Capability Gap

7.25 Ohakea will receive extensive improvements to existing infrastructure and additional buildings to accommodate personnel and functions transferring from Whenuapai. This work will be in addition to the projects underway for the Essential Infrastructure Programme. Units transferring to Ohakea will include operational squadrons and a range of technical and administrative support units and elements.

Links to Other Capabilities

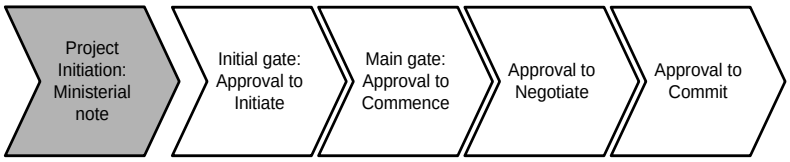
7.26 This project has links to the following projects and capabilities:

- Ohakea Essential Infrastructure Programme
- Ohakea Base Taxiways Reconstruction
- NZDF Medium Utility Helicopter Capability
- NZDF Training / Light Utility Helicopter Capability
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- C-130 Life Extension

- Boeing 757 Modification
- Advanced Pilot Training Capability

Current Status

7.27 The Government is scheduled to consider options regarding the timing and nature of consolidation in 2009.



Timing

7.28 The timing for this project is yet to be determined but the policy objective is for the consolidation to be completed by 2018.

Costs

7.29 Options and indicative costs of the consolidation will be reported to the Government in 2008.

ANZAC Class Self-Defence Upgrade

HMNZS Te Mana

Description

7.30 This project proposes to upgrade the ANZAC Class self-defence systems to protect the Naval Combat Force, and ships under its immediate protection from increasingly sophisticated anti-ship systems, and to address equipment obsolescence.

Policy Value

7.31 The role of the Naval Combat Force is to meet military tasks in support of the Government's regional and global objectives. The ANZACs are critical to the protection of Australian/New Zealand territorial sovereignty, for participating in Five Power Defence Arrangements activities, supporting our relationships with regional partners, and undertaking peace support and maritime interdiction operations in the Asia-Pacific region and beyond. These environments contain significantly higher threats to surface vessels, including air and sub-surface threats, when compared with New Zealand's immediate area. To continue operating in these environments at an acceptable level of risk, and therefore meet the Government's policy requirements, the ANZACs will require an upgrade to their defensive systems to meet the changing threat levels in these areas.

Capability Gap

7.32 By the end of the decade, the increase in air, surface and sub-surface threats, and the sophistication of these threats, within the Australia/Asia-Pacific region and beyond, will mean that the ANZACs defensive systems will become increasingly ineffective. Consequently, the operational capability of the ANZACs will decline to the point where operating in these environments would carry serious risks.

7.33 The design of the majority of self-defence equipment on the ANZACs will be approaching 25 years of age by 2010. Support will become increasingly difficult and operating costs will rise. In some cases, such as the anti-air missile, existing systems are becoming increasingly difficult to support.

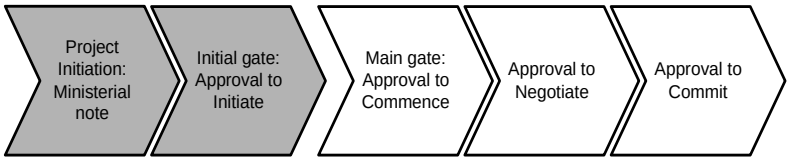
Links to other Capabilities

7.34 This project has links to the following projects and capabilities:

- P-3 Air-to-Surface Weapon
- ANZAC Class Close-in Weapon System Upgrade and Refurbishment
- ANZAC Class Platform Systems Upgrade
- Multi-Role Vessel
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- NZDF Medium Utility Helicopter Capability
- NZDF Training / Light Utility Helicopter Capability
- Special Operations Capability
- HMNZS *Endeavour*

Current Status

7.35 A range of options is being investigated as part of preparing the Main Gate Investment Case for the Government's consideration.



Timing

7.36 This project will be undertaken in several phases scheduled to commence from around 2010.

Costs

7.37 The estimated project cost is in the range of $287 – 845 million. This range reflects the fact that several options are being investigated in detail as part of preparing the Main Gate Investment Case.

8. Projects Critical to Avoid the Failure of Policy

Joint Communications Modernisation

Description

8.1 This project proposes to modernise the NZDF's long-range and medium-range communications capability to maintain a reliable, integrated, world-wide communications infrastructure.

8.2 The modernisation will support higher data transfer rates and modern communication protocols, with a mix of military and commercial communications services.

Policy Value

8.3 As communication is critical, the modernisation of the communications infrastructure is important in the achievement of defence policy objectives in New Zealand's environs, the South Pacific, the Asia-Pacific region and potentially in contributions to global security and peacekeeping. This proposed communications infrastructure will support NZDF deployed forces, ships and aircraft operating outside short-range radio coverage and enable communications between force elements deployed to different parts of a theatre of operations.

Capability Gap

8.4 Current communications systems are Single Service oriented, technologically dated, and comprise ad-hoc and short-term systems. The communications systems currently available between the Joint Force Headquarters and units deployed or operating beyond short-range radio coverage will not meet future requirements, resulting in an inability to exchange information between NZDF units and allies. Deferral of this project will limit the type and timeliness of information that can be exchanged. Thus it will limit the ability of the NZDF to develop a modern, integrated command and control, communications, and intelligence capability.

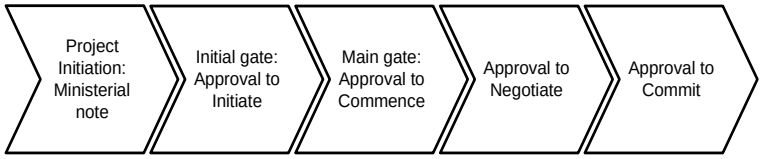
Links to Other Capabilities

8.5 Long-range and medium-range communication systems form an essential part of the NZDF communications infrastructure and contribute to all NZDF outputs. Linked projects are:

- Joint Command and Control Systems
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
- NZDF Satellite Communications Capability

Current Status

8.6 A preliminary study is underway to scope the programme of work required to achieve an integrated communications infrastructure.



Timing

8.7 Components of this project are scheduled for acquisition from around 2010.

Costs

8.8 This project has an indicative cost of between $40 - $60 million. Whole-of-life costs are not yet able to be calculated.

Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance

Description

8.9 This project proposes to acquire an improved Land Command and Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (Land C4ISR) capability to support the Command and Control of deployed land forces; and provide an enhanced ability to support the Intelligence, Surveillance and Reconnaissance (ISR) needs of the NZDF in the land environment.

8.10 The capability will comprise a land ISR system that will collect and analyse battlefield information. It will also provide a tactical battlefield Command and Control (C2) system (with its supporting deployable communications) providing commanders with improved situational awareness, messaging ability, a common operating picture, collaborative planning tools, and enhanced communications.

8.11 Two LTDP projects have been combined, the Land Intelligence, Surveillance and Reconnaissance (ISR) and the Tactical C4 project with the Army Tactical Trunk Communications project to form the Land C4ISR project

Policy Value

8.12 Land C4ISR is a key enabler of the Army's Network Enabled Army Concept and will provide the deployable land component of the NZDF's Network Enabled Capability. An improved Land C4ISR capability will enhance the situational awareness, command and control, and interoperability of deployed NZDF Land Forces in military operations.

Capability Gap

8.13 Presently the Army does not at have an integrated tactical C2 system nor does it have an integrated Land ISR system although discrete components of both do exist.

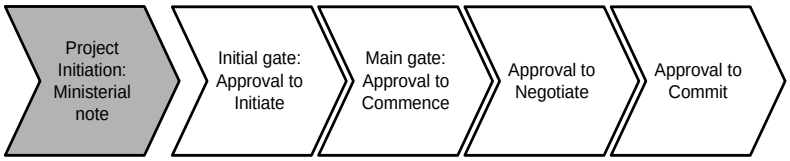
Links to other Capabilities

8.14 This project has links to the following projects and capabilities:

- Joint Communications Modernisation
- Joint Command and Control System
- NZDF Satellite Communications Capability
- Light Operational Vehicles
- Multi-Role Vessel
- Combat Service Support Vehicles
- High Preparedness Infantry Company
- General Service Vehicle Fleet Replacement
- NZDF Medium Utility Helicopter Capability
- NZDF Training/Light Utility Helicopter Capability
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- Light Armoured Vehicles

Current Status

8.15 Options are being developed for the Government's consideration as part of preparing the Initial Gate Investment Case.



Timing

8.16 This project is expected to follow an incremental introduction into service over a three-year period from 2010/11 - 2012/13.

Costs

8.17 The estimated project cost is in the range of $100 - 150 million spread over a three year period. Whole-of-life costs are not yet able to be calculated.

9. Projects Essential to Avoid the Failure of Policy

P-3 Self-Protection

Description

9.1 This project proposes to equip the P-3 with a self-protection capability to counter likely threats, primarily man-portable infrared (IR) missiles.

Policy Value

9.2 The P-3 Orion airborne surveillance and reconnaissance force undertakes surveillance of New Zealand's Exclusive Economic Zone and the Southern Ocean, meets our South Pacific search and rescue obligations, and provides surveillance assistance to South Pacific nations. The P-3 Orion has a high utility for a wide range of civilian and military operations. It is one of the primary force elements contributing to our defence relationships with Australia and Five Power Defence Arrangements partners. The P-3 Orion also has high utility as a niche contribution to global security operations.

9.3 P-3s are high value assets and can carry up to 21 people. It is important to protect those assets and minimise the risks to people onboard.

9.4 The upgraded P-3 Orion will be able to support international partners in a broader range of environments.

Capability Gaps

9.5 In recent years the majority of fixed wing aircraft lost to hostile fire has been to IR guided man-portable missile systems. These shoulder-launched systems have proliferated widely across the globe. Lack of an effective self protection capability could therefore limit the use of our P-3s globally.

9.6 The P-3 currently has no dedicated self-protection equipment. The aircraft's sensors inherently provide some early warning of long-range threats. However, man-portable missiles are difficult to detect and locate other than by sensing the signature produced by their motor burn. It is essential that these missiles are detected at launch and that appropriate countermeasures are used to defeat them.

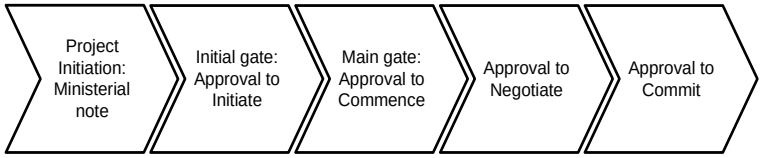
Links to Other Capabilities

9.7 This project has links to the following projects and capabilities:

- C-130 Self-Protection
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- P-3 Air-to-Surface Weapons

Current Status

9.8 Preliminary work is currently underway within Defence to scope this project.



Timing

9.9 It is intended that the self-protection equipment be fitted as soon as practicable after the delivery of the upgraded P-3 fleet from around 2011.

Costs

9.10 The indicative project cost is in the range of $30 - 40 million. Whole-of-life costs are not yet able to be calculated.

Land Transport Capability Programme

Description

9.11 Formerly known as the General Service Vehicle Replacement project, this programme will replace the NZDF's general service vehicle fleet, including medium and heavy vehicles, trailers and mechanical handling equipment. It will be an integrated vehicle system that may include associated weapons, communications, protection and night driving capabilities.

Policy Value

9.12 The general service vehicle fleet is a critical enabler for land force operations. This fleet sustains and resupplies forces with fuel, ammunition, rations, personnel and spares and provides maintenance support. The fleet has utility in meeting a wide range of policy objectives.

Capability Gap

9.13 The current fleet of vehicles is approaching 25 years of age and is reaching the end of its economic life.

9.14 The current fleet is not well matched to meet the Army's contemporary and future requirements. The majority of the fleet is cross country capable but has a limited payload of four tonnes. The vehicles have no armoured protection or self protection, and no integrated command and control or communication systems. The heavy vehicle component of the current fleet has a payload of eight tonnes but is not cross country capable.

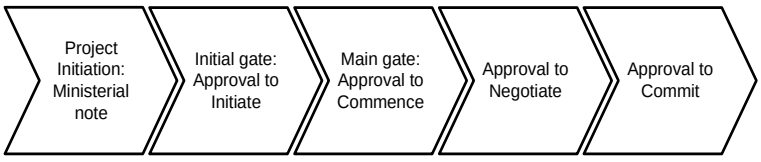
Links to other Capabilities

9.15 This project has links to the following projects and capabilities:

- Light Operational Vehicles
- Multi-Role Vessel
- Combat Service Support Vehicles
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
- Night Vision Equipment
- Light Armoured Vehicles

Current Status

9.16 Preliminary work is underway within Defence to scope this project.



Timing

9.17 A progressive vehicle replacement programme is expected to begin from 2011.

Costs

9.18 The indicative cost of this project is around $550 – 600 million. Whole-of-life costs are not yet able to be calculated.

10. Projects Necessary to Avoid the Failure of Policy

P-3 Air-to-Surface Weapons

Description

10.1 This project proposes to equip the P-3 aircraft with an air-to-surface weapon capability.

Policy Value

10.2 Equipping the P-3 aircraft with an air-to-surface weapon capability would significantly enhance the value of these aircraft in fulfilling policy roles relating to the territorial sovereignty of New Zealand and Australia, play an appropriate role in the maintenance of security in the Asia-Pacific region, and participating in Five Power Defence Arrangements.

Capability Gap

10.3 The P-3 provides targeting information but does not have an air-to-surface weapon capability. The inability to take immediate action against surface threats limits the P-3's ability to provide force protection for New Zealand naval vessels, particularly the ANZACs, Multi-Role Vessel and Patrol Vessels. This deficiency applies equally across the open ocean and littoral environments.

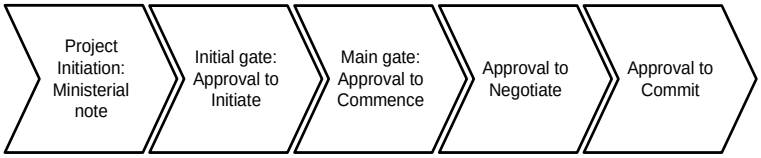
Links to other Capabilities

10.4 This project has links to the following projects and capabilities:

- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- Multi-Role Vessel
- Patrol Vessels
- ANZAC Class Frigates

Current Status

10.5 A study will be conducted to determine the most appropriate air-to-surface weapons for the P-3 Orion.



Timing

10.6 The timing of this project is dependent on the completion of the P-3 mission systems upgrade and needs to be considered in coordination with the P-3 Self-Protection project to ensure the availability of aircraft for operational tasking.

Costs

10.7 The indicative cost of this project is around $35 - 45 million. Whole-of-life costs are not yet able to be calculated.

NZDF Torpedo Replacement

Description

10.8 This project proposes to replace the torpedoes for the ANZAC frigates, P-3 Orions and SH-2G Seasprite helicopters to maintain the ANZACs basic self-defence and the P-3s capability against sub-surface threats. Together, these help to protect escorted vessels from sub-surface threats and the P-3s area anti-submarine capability.

Policy Value

10.9 The role of the Naval Combat Force with embarked SH-2G Seasprite Helicopters is to meet military tasks, in support of the Government's regional and global objectives. The ANZACs are important to the protection of Australia/New Zealand territorial sovereignty, for participating in Five Power Defence Arrangements, supporting our relationships with regional partners, and undertaking peace support and other operations in the Asia-Pacific and beyond. These environments contain significantly higher threats to surface vessels than New Zealand's immediate environs, including air and sub-surface threats. Torpedoes provide a basic self-defence capability against sub-surface threats, and enable the ANZACs and other escorted vessels to be safely deployed in these environments.

10.10 The P-3s require a torpedo replacement to maintain their current capability to fulfil the above policy roles.

Capability Gap

10.11 The current torpedoes are becoming increasingly obsolescent and will reach the end of their life between 2009 - 2014, increasing the risk to the ANZACs and other vessels they protect in areas where sub-surface threats may be encountered. The absence of a torpedo capability would impact on the ability of the NZDF to provide support for peace enforcement operations and limit the utility of the ANZACs as a contribution to the protection of New Zealand/Australia territorial sovereignty.

10.12 The absence of a torpedo capability would also mean that the P-3 aircraft would be unable to contribute to the protection for New Zealand naval or other friendly vessels against submarine threats.

Links to other Capabilities

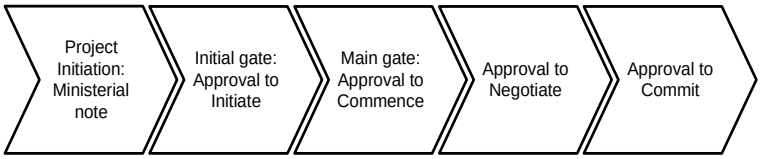
10.13 This project has links to the following projects and capabilities:

- ANZAC Class Self-Defence Upgrade
- Multi-Role Vessel
- P-3 Air-to-Surface Weapons
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- HMNZS *Endeavour*

Current Status

10.14 Preliminary work is underway within Defence to scope this project. Options to mitigate the decaying inventory are being investigated. A scoping study is under development to align this project with the introduction into service of the first upgraded ANZAC Class Frigate. It is expected that the type of torpedo to replace

the Mark 46 series will be determined by costs, primarily platform integration costs.



Timing

10.15 The current Mark 46 Mod 2 torpedo will not be supportable beyond 2009. A replacement will need to be in service before the expiry of the maintenance life of current torpedoes in 2012-14.

Costs

10.16 The indicative cost of this project is around $70 - 80 million. The estimated life is about 15 years. Whole-of-life costs are not yet able to be calculated.

NZDF Satellite Communications Capability

Description

10.17 This project involves the acquisition of a guaranteed secure satellite communications capability for the NZDF.

Policy Value

10.18 Strategic communications in the form of high band-width capability is required to support NZDF deployments. The NZDF needs to be able to provide guaranteed secure communications to its operational deployments in a manner which is interoperable with potential coalition partners, particularly Australia. The NZDF also needs to be able to provide immediate strategic communications into the Pacific in support of whole-of-government operations, such as humanitarian assistance.

Capability Gap

10.19 Currently, the NZDF does not have a guaranteed secure strategic communications capability. To support existing missions, satellite capability is organised on an ad-hoc basis using commercial or coalition partner satellites. Neither system is able to guarantee secure, uninterrupted capability. The future growth of the NZDF's command and control capability will require significantly more secure band-width than currently utilised.

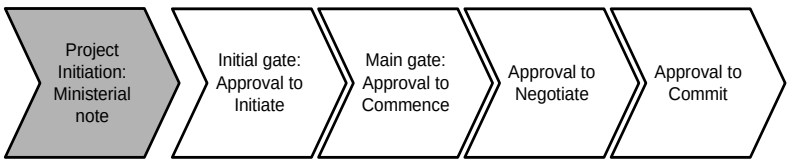
Links to other Capabilities

10.20 Linked projects are:

- Joint Command and Control Systems
- P-3 Mission Management, Communication, and Navigation System Upgrades
- Joint Communications Modernisation
- Land Command & Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance

Current Status

10.21 Preliminary work was undertaken on this project in 2006/07. Further work to determine options to meet this capability requirement is underway.



Timing

10.22 This project is expected to start delivering increased communications capability from 2010.

Costs

10.23 Capital and operating costs will be dependant on whether lease or purchase options are selected. More detailed costs will be available once the specifications have been confirmed. This project is expected to cost between $45 - 65 million. Whole-of-life costs are not yet able to be calculated.

11. Projects that have Benefit but are Less Critical to Achieving Policy Objectives

Remote Mine Detection

11.1 The Maritime Forces Review identified a requirement to protect New Zealand's major ports by developing a capacity to detect and dispose of mines and other explosives underwater. The Review concluded that the mine countermeasures role should be retained. The capability of the Navy to detect mine-like objects is becoming increasingly limited as current equipment approaches the end of its economic life. Upgrading this capability would significantly improve the safety of personnel and ships over the current inadequate, emergency only, systems.

Indirect Fire Support Weapon

11.2 The Army currently has 81mm mortars and the 105mm artillery howitzer. Both weapons are expected to require replacement around 2012. A study will be conducted in due course to determine the appropriate indirect fire support weapon capability.

Infrastructure Projects

11.3 There is a range of infrastructure requirements that will need to be addressed over the next ten years. These projects will upgrade or replace existing facilities and may reduce overall infrastructure and operating costs.

12. Projects Previously on the LTDP and Moved to the Defence Capital Programme - Minors

High Preparedness Infantry Company

Description

12.1 This project, formerly known as the High Readiness Infantry Company project, will produce a high preparedness force element equipped and trained to meet short notice security and stability contingencies in the near region. It will allow an integrated capability to be stood up, addressing the equipment, infrastructure and personnel policy requirements for maintaining a high preparedness company.

Policy Value

12.2 A high preparedness company will provide the NZDF with a land force element that is equipped and resourced to conduct evacuation, stability and security operations at short notice.

Capability Gap

12.3 The Army does not currently maintain a high preparedness infantry company that can undertake many short-notice tasks. This represents a policy gap and impacts on deployment times. The NZDF has met current operational commitments without a permanent high preparedness force element through the improvisation of capabilities on a case by case basis, with many of the costs absorbed through baselines. This practice is generating operational risk in the short term and wider organisational atrophy in the longer term. The establishment of a high preparedness infantry company would avoid disrupting personnel numbers in wider Army units in order to meet short warning contingencies.

Links to other Capabilities

12.4 This project has links to the following projects and capabilities:

- C-130 Life Extension
- Boeing 757 Modification
- P-3 Mission Management, Communication, and Navigation Systems Upgrades
- Multi-Role Vessel
- Night Vision Equipment
- NZDF Weapon Replacement

Current Status

12.5 Preliminary work is underway within Defence to scope this project.

Timing

12.6 As an initial step a High Preparedness Platoon Group will be developed. A full High Preparedness Company Group will be generated once the High Preparedness Platoon has been established.

Costs

12.7 This project has not been costed. Whole-of-life costs are not yet able to be calculated.

Army Manoeuvre Range

12.8 A moving target range is a key training enabler for soldiers and commanders to practice skills necessary to conduct motorised operations. The range allows for the practice of low-level manoeuvre (up to platoon level) while engaging static and moving targets. The moving target range has been completed and is being introduced into service.

Army Engineering Equipment

12.9 This project is improving the Army's engineering equipment and therefore its ability to support mobility of the motorised land force. Equipment includes:

- Combat engineering tractors (under acquisition)
- Rapid gap crossing system (under acquisition)
- Water purification/storage (introduced into service)

Combat Service Support Vehicles

12.10 This project is providing additional combat service support vehicles and associated equipment to support the Light Armoured Vehicles. It has moved into the acquisition and introduction into service phase.

Direct Fire Support Weapon

12.11 The Direct Fire Support Weapon (Area) will provide Army with an automatic grenade launcher weapon and fire control systems. This project will address a capability gap in the ability of Army's light infantry to engage and defeat crew served weapon systems and area targets with direct fire beyond the range of section and platoon level automatic weapons. The Direct Fire Support Weapon (Area) will also contribute to the force protection of convoys and support areas.

NZDF Weapon Replacement

12.12 This project will replace or upgrade selected current small arms based weapon systems and add new weapon systems to the NZDF. The Government has approved this project and an acquisition strategy is being prepared.