



MAJOR PROJECTS REPORT 2015

1 July 2014 – 30 June 2015

Volume 1

ISBN: 978-0-478-27875-0 (Print)
ISBN: 978-0-478-27876-7 (Online)

Published in May 2016

www.defence.govt.nz

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FOREWORD

Foreword from the Secretary of Defence and the Chief of Defence Force

This is the sixth Major Projects Report which tracks progress and project management performance across Defence's major projects (those where the Government has specifically authorised Defence to acquire new equipment).

The reporting period, **1 July 2014 to 30 June 2015**, has not only seen major progress made in delivering on major procurement projects under way but this has taken place against the backdrop of work on the Defence White Paper 2015, enhancing the Defence Capability Management System, Budget investment in the Ministry's Acquisition Division, and putting in place a new system for assessing projects' benefits.

The 12 projects in the 2014 Report are again covered in the 2015 Report. Four of these projects (NH90 helicopters, Medium/Heavy Operational Vehicles; Pilot Training Capability, and Maritime Helicopter Capability) achieved important milestones. This is discussed further in the section on "Performance in the 2014/15 Year".

The one new project in this year's Report is Network Enabled Army Tranche 1 which is the first project of a Network Enabled Army Programme. Consistent with previous feedback provided by the Controller and Auditor-General to improve the procurement of equipment, this project includes investigation of whether technology already in use in the United States can be utilised in this project.

Although only the one major project has been approved for acquisition by the Government during this period, significant work has been going on across a range of other projects currently in the capability development phase. We expect some of these to be approved by the Government for acquisition in the coming year.

Our approach to projects in the development phase is also undergoing important changes. We:

- commenced work on improving our Whole of Life costing for business cases being put to the Government;
- now engage early with industry through publishing Requests for Information respondents' contact details on the Government Electronic Tender System;
- now ask for through life support arrangements in Requests for Information and Requests for Tenders; and
- have incorporated government procurement principles into requests documentation to set clear expectations for prime contractors.

In addition, direct engagement with industry is being established: the Defence Force has appointed a Director of Industry Engagement and the Ministry intends to make a similar appointment in 2016.

This change programme is building the Ministry's capacity, in partnership with the Defence Force, to deliver a substantial acquisition programme over the next decade. This will include replacements for the Defence Force's air transport and air surveillance fleets and the ANZAC frigates. Our objective is to have a capability management system that will be regarded as an international exemplar in this area.

An important element of project delivery is measuring the benefits delivered by the projects. Defence has done a lot of work in this area over the past year, especially to ensure it can meet the Cabinet mandated requirements for reporting on how well projects are meeting the benefits described in business cases. Several projects were identified for piloting the new system including the recently completed P-3K Orion Mission System Upgrade project. We have been working with

Central Agencies on devising a practical system for putting this new system into place in the coming year.

We believe that the initiatives under way across the Capability Management System will give the Government greater confidence in Defence's ability to bring to fruition the very large major equipment procurement programme envisaged for the next 15 years.



HELENE QUILTER
Secretary of Defence

May 2016



T.J. KEATING
Lieutenant General
Chief of Defence Force

May 2016

STRUCTURE OF AND BACKGROUND TO THE 2015 MAJOR PROJECTS REPORT

Structure

The 2015 Report is presented in four parts:

- **Part One** includes a qualitative and quantitative assessment of Defence's management of the 12 current projects (excluding the new project: Network Enabled Army Tranche 1) and performance with respect to three aspects: schedule, cost, and capability in the year 1 July 2014 – 30 June 2015. Part 1 also provides comments on what Defence is doing to in order to improve its performance in managing projects.
- **Part Two** provides project summaries for the 13 projects including Network Enabled Army Tranche 1. The project summaries provide a description of the projects' policy objectives, capability requirements, current status, active high level risks, recent developments and financial performance.
- **Part Three** includes 13 more detailed, project data sheets/information sheets. These provide further information on the acquisition phase and how the capability is being introduced into service.
- **Part Four** contains the 13 projects' history and project definition information.

Background

The 2015 Report is the sixth to be produced. The first Report was released in 2010 to improve the quality, transparency, and usefulness of reporting on defence capability projects.

The project data sheet or information sheet for each project remains the centre-piece of the Report. It contains information about the schedule, cost, and capability requirements for the project.

The 2015 Report project data sheets/information sheets update the 12 projects included in the 2014 Report and their project status, contract payments, risks, and schedule information:

- A109 Training and Light Utility Helicopter
- C-130H Life Extension
- NH90 Medium Utility Helicopter
- P-3K Orion Mission Systems Upgrade
- Pilot Training Capability
- ANZAC Frigate Platform Systems Upgrade
- ANZAC Frigate Systems Upgrade
- Maritime Helicopter Capability
- Medium/Heavy Operational Vehicles
- Strategic Bearer Network
- Project Protector Remediation
- Defence Command and Control System

As in 2014, the details for Project Protector Remediation and the Defence Command and Control Project are presented in Information Sheets rather than Data Sheets to better reflect the differences of these two projects from the other 10 discussed in the Major Projects Report.

Projects not included

No projects included in the 2014 Major Projects Report have been removed from the 2015 Report.

New project included

The criteria for inclusion of new projects in the Major Projects Report is based on the Government having specifically authorised Defence to acquire the capability and that it is being managed by the Ministry of Defence as a “major” project. On that basis one new project is included in the 2015 Major Projects Report: Network Enabled Army Tranche 1 which was authorised in April 2015. This Project is part of a programme i.e. a group of related projects, in this case Network Enabled Army (which will deliver modern communications to Land Force units).

PART 1: ASSESSMENT OF PERFORMANCE

This section provides an assessment of 12 of the 13 projects in the Report across three metrics: schedule, budget, and capability. At the time of this report, the 13th project, Network Enabled Army Tranche 1, had not been in the acquisition phase long enough to enable a full assessment to be made.

ASSESSMENT OF PERFORMANCE

Defence's approach throughout all phases of a project is to ensure that the project deliverables can be realised within the approved budget, within a reasonable time frame, and compliant with the contractual requirements that align with government policy.

Part 1 of the first Major Projects Report in 2010 discussed the difficulty in meeting targets across all three of these performance metrics for the projects reported on in that Report. If two of these are held steady, pressures on a project may often be felt on the third. Defence's preference has been, where possible, to hold steady on cost (through fixed price contracts) and performance, with schedule taking the pressure, if contractors fail to meet time frames specified in the respective contracts. There can, however, be operational consequences to this approach with resulting impacts for platform availability, scheduled maintenance, and training which require careful management.

For projects of recent origin, however, it is Defence's objective that there should be no slippage on the schedule. An important means of achieving this is to buy capability "off the shelf" and minimise the amount of change to configuration including software. This approach is consistent with the comments made in 2010 by the Controller and Auditor-General for improving the management of projects.

PERFORMANCE IN THE 2014/15 YEAR

Defence has assessed that for the 2014/15 year it has achieved a very good standard, especially in the delivery of capability:

- The last NH90 helicopter was handed over to the Air Force.
- 194 Medium/Heavy Operational Vehicles were delivered.
- The Pilot Training Capability T-6C aircraft were delivered.
- Eight of the 10 Seasprite helicopters to be delivered under the Maritime Helicopter Capability Project had arrived.
- The Defence Command and Control Project, Protector Remediation, and ANZAC Frigate Platform Systems Upgrade Project all continued to progress.

One project encountered further delay: the C-130 Life Extension Project with delivery of the last upgraded aircraft pushed back from August 2015 to February 2016. A major reason for this was the longer than expected time required to deal with unforeseen structural issues encountered with the aircraft's fuselage.

SCHEDULE

The updated schedules for each major project are provided in the individual project data/information sheets provided in Part 3 of the 2015 Report.

Of note, recently commenced projects: Pilot Training Capability, Maritime Helicopters Capability and Medium/Heavy Operational Vehicles (except for the five truck/trailer units) substantially adhered to their schedules. Similarly, the second frigate in Phase 2 of the ANZAC Frigate Platform Systems Upgrade Project adhered to its schedule which had been reset in 2014 and Protector Remediation had no slippage.

Schedule slippage was a much less significant factor in the past year as two long running projects: the P-3K2 Orion aircraft Upgrade, and the purchase of the NH90 helicopters were completed.

Only the C-130H Life Extension Project and, because of design changes the five truck/trailer units for the Medium/Heavy Operational Vehicles, experienced further delays.

COST

With respect to the C-130 Hercules Project, the 2011 Report noted that, as advised to Cabinet, the C-130 Hercules project cost may increase as the Ministry of Defence upgrades (under its own management) the remaining three aircraft: the “production phase”.

After the upgrades of the first and second production phase aircraft were completed, an assessment of the costs involved in the upgrades was made and no additional project funding was sought. Similarly, despite the third and fourth (the last) production phase aircraft requiring a substantial amount of additional work on the aircrafts’ airframes, no additional funding has been sought.

A number of projects are showing favourable foreign exchange variations, in some cases substantially.

CAPABILITY

Overall, there has been no change in capability requirements for the 12 projects being fully assessed in this year’s Major Projects Report.

The Defence Command and Control System Project is, however, an example of a capability which may, in some cases, be delivered in phases in order to meet contractual requirements or may be delivered differently from that envisaged when the project was approved for acquisition. In the case of Defence Command and Control System Project, the product originally chosen had been superseded by one that more readily met the requirements. This has provided a better outcome for the same cost.

Projects can be affected by the lack of appropriately skilled personnel to undertake both the acquisition and introduction into service phases. At the current time this risk is being actively managed.

Table 1 on the next page summarises the situation in respect of the projects across the three metrics and operational impact as well as listing cumulative schedule variations since the beginning of the projects.

Table 1: Summary of Three Metrics and Operational Impact

Project	Change in Cost (other than foreign exchange) since the 2014 Major Projects Report	Schedule variation or update since the 2014 Major Projects Report	Cumulative schedule variations since the original contract forecast	Capability changes since the 2014 Major Projects Report	Operational Impact of Delay
A109 Training & Light Utility Helicopter	None	All helicopters were delivered by November 2011.	4 months.	None	No impact as minimal delay in delivery.
C-130H Life Extension	None	Four upgraded aircraft had been delivered to the Air Force by 30 June 2015. The remaining aircraft is now forecast to be upgraded by February 2016, a six month slippage on the revised schedule outlined in the 2014 Report.	Around 68 months total variance for the completion of the five aircraft.	None	The availability of a reduced number of aircraft has required careful management of tasking because of the risks to meeting output requirements and in response option availability. The upgraded aircraft are undertaking operational tasking.
NH90 Medium Utility Helicopter	None	The eighth and last helicopter was delivered in October 2014, as forecast in 2014.	Around 40 months total variance for the delivery of the eight helicopters.	None	The last Iroquois were phased out in July 2015 and the NH90 fleet took over their tasking.

P-3K Orion Mission Systems Upgrade	None	All aircraft were delivered by July 2014.	Around 46 months total variance for the completion of the six aircraft.	None	The upgraded Orion fleet are undertaking operational tasking.
Pilot Training Capability	None	The project is on schedule.	None	None	Not applicable.
ANZAC Frigate Platform Systems Upgrade	None	TE MANA was inducted into the Phase 2 upgrade in December 2014 in accordance with the planned “no later than January 2015” schedule.	None to the rebaselined 2014 schedule.	None	No impact as the programme has been designed around the availability of the frigates.
ANZAC Frigate Systems Upgrade	None	As of 30 June 2015 the project is on schedule for its design phase.	None	None	Not applicable.
Maritime Helicopter Capability	None	The last platform is forecast to deliver on schedule in August 2015.	None	None	Not applicable.
Medium/Heavy Operational Vehicles	None	There was a delay in the delivery of the five truck/trailer units as a result of a change in their design.	Nine months for the truck/trailer units.	Minor change to the trailers’ design.	No impact.
Strategic Bearer Network	None	The contractors supplying the maritime terminals are not able to do so by the planned date. There is also a delay in proceeding with the second Anchor Station. These will impact on the expected completion date for the project. The additional 18 months built into the 2014 timetable to accommodate this.	18 months.	None	No impact. The revised schedule for the maritime terminals is still within the planned installation dates of these on those vessels. The NZDF has yet to settle on a location for the second Anchor Station.

Project Protector Remediation	None	The Protector vessels are in service. Remediation work is undertaken on a time and availability basis.	Running to schedule.	None	No impact as remediation work has been designed around the availability of the Protector vessels.
Defence Command and Control System	None	The acquisition phase i.e. delivery of the Initial Operating Capability, is scheduled for delivery in December 2015. This is a benchmark appearing for the first time in the Major Projects Report. Full Operational Capability is now scheduled to be introduced by December 2017, rather than the originally forecast June 2015.	Not applicable.	None	Delivery of capability is undertaken as personnel and platforms are available.
Network Enabled Army Tranche 1	Not applicable. New project in 2015 Major Projects Report.	There has been no change since the Project was approved by Cabinet in April 2015.	None	None	Not applicable.

CONTINUOUS IMPROVEMENT IN PERFORMANCE

In the 2010 Report, 13 lessons learned were identified from information contained in the project data sheets, observations of project staff, and independent reviews of acquisition projects. These covered improvements, enhancements or scrutiny in or to:

Governance and Leadership:

- governance structures and strategic-level decision points;
- accountability and the need for a senior responsible owner to be allocated to projects;
- planning and prioritisation across the portfolio of capability projects;
- the making of decisions based on reducing costs in the short-term;

Project Management

- the criticality of resourcing projects with the right people;
- project management planning and having one single plan to improve coordination;
- the shortage of staff with corporate knowledge, expertise and understanding of project procedures;

Process and Execution

- enhanced integration and continuity phases of projects;
- greater scrutiny of contractor/sub-contractor competence;
- the speed of the definition and acquisition phases of projects;
- awareness of industry's ambitious and optimistic project planning;
- the technical risks around projects and the need to reduce these prior to contract signing; and
- incremental acquisition strategies where complex and high risk projects are better suited to this approach.

Over the last five years Defence has been addressing these through a process of continuous improvement in the way in which it manages projects. Defence has for example:

- updated the Capability Management Framework to take account of current practice and lessons learnt by Defence since the introduction of the present capability management arrangements which were put in place as a result of the Defence White Paper 2010;
- improved governance arrangements with the establishment of the Capability Management Board and Capability Steering Groups, with the Board including two external members;
- improved support for governance from the Ministry's Policy and Planning Division and the Defence Force's Capability Branch;
- introduced a focussed approach to portfolio and programme management of capability;
- put in place a more integrated and seamless management of projects such as Joint Risk Registers;

- adopted a single shared information technology infrastructure with the Ministry moving on to the Defence Force's system; and
- continued to implement the suggestions made by the Controller and Auditor-General in the 2010 Major Projects Report for changing how Defence goes about procuring equipment, both in the negotiation of contracts and the procurement strategies used. The approach being taken in the Network Enabled Army Tranche 1 Project (and being taken in other capability proposals currently under preparation) is consistent with the approach suggested by the Controller and Auditor-General which includes:
 - buying off the shelf as far as possible thereby maximising value for money of projects;
 - being flexible and innovative in terms of the procurements, the strategies used, and relationships established; and
 - adopting an integrated project management plan.

2014/15 has seen further important developments in the way in which Defence is approaching the management of defence capability.

Defence has begun a four year change programme involving its capability management system. The objective is to develop a fully integrated end-to-end capability management system which is recognised as an international exemplar in the context of a small country with a small military. This will include strengthening project, programme and portfolio management practices.

The Ministry is building capacity in its acquisition and capability development functions as a result of the Government providing the Ministry in the 2015 Budget with additional funding. This will enable 30 new positions to be created in the Acquisitions Division, for example three new Programme Directors for Maritime, Land, and Air, a Chief Advisor with a background in C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance), additional project directors and managers, and new specialist roles in contracting, risk and industry engagement. There will also be five new positions in the capability development area.

Following the release in October 2014 of Defence's report on *Optimising New Zealand Industry Involvement in the New Zealand Defence Sector*, Defence is working with New Zealand industry involved in the defence sector to make doing business with Defence easier.

Defence is looking to get the best possible value for money over the life of capability purchases through, for example, appointing specialist staff to interface with industry; improving Defence's Whole of Life costing so that there is clarity about the true costs of Defence capabilities; engaging with industry earlier when listing Requests for Information; and incorporating Industry Engagement Plans into Defence's tender documentation.

INTRODUCTION INTO SERVICE

Section 3 of the Project Data sheets outlines the intended Introduction into Service plans for each of the platforms or systems. Key points to note for the 2014/15 year are:

- ANZAC Frigate Platform System Upgrade and Maritime Helicopter Capability: The Phase 2 Introduction into Service plan reflects the changes in the New Zealand Defence Force organisation to adopt the Capability Management Framework expectations. Scheduling and sequencing of activity is contained in the Test Concept Document and the Operational Release Plan.
- P-3K Orion Mission Systems Upgrade: Initial operational capability was achieved in March 2013 with P-3K2 aircraft available, P-3K2 crews trained and task supporting systems in place. Throughout 2014, ongoing capability release has seen the search and rescue, surveillance and reconnaissance, anti surface warfare, anti submarine warfare and training roles released to in-service under the NZDF airworthiness framework. Final capability release will occur once the currently deployed P-3K2 overseas returns. The transition from introduction into service to in-service is expected in February 2016.
- C-130H Life Extension: Acceptance and release of capability into service has been completed for Air Logistics Support, Search and Rescue, Self Protection System and High Latitude (Antarctic) Operations. Full capability release was achieved in September 2014 and the Capability transitioned from introduction to service to in-service. The Acquisition Phase will be complete once all the production aircraft are delivered.
- A109 Training & Light Utility Helicopter: The first Helicopter Basic Course (HBC) took place in January 2014. This HBC was the first training course to be run with students, both pilots and helicopter crewmen that have not previously flown helicopters. The HBC students on this course graduated in August 2014. While there are delays in final light utility operational capability due to staff shortages, the capability will transition from introduction into service to in-service in December 2015.
- NH90 Medium Utility Helicopter: Capability release was achieved in March 2014, which has allowed the conduct of a variety of tactical transport tasks. The National Contingency (NATCON) capability was released in December 2014 allowing the NH90 to take over responsibility for all NATCON tasking from the UH-1H Iroquois aircraft. Following the issuance of the NZDF Interim Type Certificate in June 2015 an Interim Operational Capability Statement was issued detailing the capability to support counter terrorism to overland targets. Future Capability releases are currently scheduled within the Introduction into Service Transition Plan with the Final Operating Capability scheduled for late 2017.
- Pilot Training Capability: All 11 aircraft have been successfully delivered and formally accepted by the NZDF. In March 2015 a T-6C pilot conversion course successfully graduated 6 RNZAF pilots. Infrastructure work at RNZAF Base Ohakea has been progressed as planned with the new training centre now complete and installation of the equipment for the computer based training underway. In June 2015 both simulators were delivered to RNZAF Base Ohakea. Transition from introduction into service into in-service is expected in February 2016.
- Maritime Helicopter Capability Project: The first tranche of three aircraft were delivered to New Zealand in January 2015. A Special Flight Permit was issued by the RNZAF Airworthiness Authority in February 2015 with the first flight under RNZAF authority occurring in March 2015. The training facilities were completed

in February 2015 with various SH-2G(I) training courses subsequently utilising the facility. The non-flying aircraft storage, spares and flight pack-up facility was completed in March 2015. CAE commenced the installation of the Full Motion Flight Simulator (FMFS) in March 2015.

- Medium/Heavy Operational Vehicles: Introduction into service commenced and as at 30 June 2015 was proceeding well.
- Across the New Zealand Defence Force's Integrated Air Transition Programme, Introduction into Service is progressing well. Personnel resignations, however, have necessitated reviews of transition plans.

AUDITOR-GENERAL'S COMMENTARY

Background

In 2008, my staff identified a need for the Ministry of Defence and the New Zealand Defence Force (together referred to as "Defence") to report better and more complete information to show how well they manage projects to acquire new defence capability (capability projects). My Office worked with Defence to improve the quality, transparency, and usefulness of Defence's reporting of how it manages major capability projects.

Since 2010, the Ministry of Defence has produced annual comprehensive Major Projects Reports that covered capability projects that had been approved by Cabinet and are being managed by the Ministry of Defence. My staff reviewed these Reports while they were prepared.

Review of the 2015 Major Projects Report

My commentary covers the 2015 Major Projects Report. The Report includes 13 projects, of which one is new. Cabinet approved the Network Enabled Army Tranche One in April 2015. My staff reviewed the changes to the project data sheets and project information sheets in Volumes 2 and 3 of the Major Projects Report. The data and information sheets present detailed information about how each of the projects is meeting capability needs, cost, and schedule. The results of this review are reported on pages 16-17.

My staff also reviewed Part 1 of the 2015 Major Projects Report, which provides Defence's summary assessment of its performance in managing and delivering the 13 projects.

Overall view of the 2015 Major Projects Report

Overall, I consider that Defence has realistically assessed its performance in managing the 13 projects. Its Report demonstrates a commitment to transparency and continuous improvement. Defence has maintained the timeliness of the delivery of its new projects approved by Cabinet in 2014. The Pilot Training Capability project is being introduced into service, and all the contracts for the Frigate Systems Upgrade project have been awarded. However, the limited availability of personnel remains a risk and issue for many projects.

General commentary on the 2015 Major Projects Report

Defence has continued to act on my recommendations from 2010. Defence has maintained improvements in how it manages new projects. The latest project, Network Enabled Army Tranche One, is part of a wider Network Enabled Army programme that is intended to modernise the Army's communications. The acquisition for this programme is incremental. By building on acquisition and testing work in each "tranche", Defence can reduce the risk of buying technology that is not well supported and/or not fit for purpose. This approach will also allow personnel to become familiar with the new technology as it is introduced. As the programme progresses, it is important that Defence continue to review the Army's needs and priorities to ensure that the capability it is investing in remains fit for purpose.

After improvements in recent years, Defence has maintained the timeliness of the delivery of its newer projects. Both of the new major projects approved in 2014 are on schedule as of 30

June 2015. The Pilot Training Capability project has led to the graduation of six pilot instructors, and the new training centre has been constructed. In the Frigate Systems Upgrade project, all contracts for the remaining services and equipment have been awarded. However, Defence will review the time frame for this project after a more detailed design of the work has been agreed. This shows flexibility in the way Defence manages procurement and ensures that time frames are realistic. There have been few new delays in the other projects.

Defence has begun to look at measuring the benefits delivered by its projects, and a few projects are nearing completion. This presents an opportunity for Defence to review whether the agreed capabilities will be achieved.

Defence has changed the way it reports risks and issues in this year's Major Projects Report. This is based on the use of joint risk registers for the projects. However, room remains to improve the consistency of how it reports risks and issues.

Personnel risks

The limited availability of personnel continues to pose a significant risk to projects. Seven of the 13 projects name lack of personnel as a risk or issue. It can be difficult for Defence to maintain enough people with the training and experience needed to test then smoothly introduce new capability into service while continuing with business as usual and providing operational outputs. Staff turnover continues to affect some projects. Defence is actively managing these personnel risks and issues.

Detailed comments on projects

The final NH90 helicopter has been received and accepted. This is a major milestone for Defence in what has been a problematic acquisition. However, the limited availability of personnel continues to affect the NH90 helicopter upgrades. Operational testing and training have been slow because of this limited availability. The personnel risk is worsening, and it is crucial that Defence takes steps to mitigate this.

I would like to thank the Ministry of Defence and the New Zealand Defence Force for their assistance and co-operation during our review.



Lyn Provost
Controller and Auditor-General

May 2016

**INDEPENDENT REVIEW REPORT
TO THE READERS OF
THE MINISTRY OF DEFENCE AND THE NEW ZEALAND DEFENCE FORCE'S
MAJOR PROJECTS REPORT FOR THE YEAR ENDED 30 JUNE 2015**

I have carried out a review of the project summaries, project data sheets, project information sheets, and project definition information (collectively referred to in this report as the “project information”) included in the *Major Projects Report for the year ended 30 June 2015* prepared by the Ministry of Defence and the New Zealand Defence Force (together referred to as “Defence”). The purpose of this report is to express a conclusion on whether any matters have come to my attention to indicate that the project information provided by Defence is not fairly disclosed.

I have used my staff and resources to carry out the review.

The project summaries on pages 21 to 80, the project data sheets on pages 82 to 218, the project information sheets on pages 325 to 333, and the project definition information on pages 223 to 333 cover the following acquisition projects:

- A109 Training and Light Utility Helicopter;
- C-130H Life Extension;
- NH90 Medium Utility Helicopter;
- P-3K Orion Mission Systems Upgrade;
- Pilot Training Capability;
- ANZAC Platform Systems Upgrade;
- ANZAC Frigate Systems Upgrade;
- Maritime Helicopter Capability;
- Medium/Heavy Operational Vehicles;
- Strategic Bearer Network;
- Defence Command and Control System;
- Project Protector Remediation; and
- Network Enabled Army Tranche One.

These projects are collectively referred to as “the specified acquisition projects”.

Review work carried out

The review was carried out in keeping with the Auditor-General’s Auditing Standard 5: *Performance Audits, Other Auditing Services and Other Work Carried Out on behalf of the Auditor-General* and the External Reporting Board International Standard on Assurance Engagements (New Zealand) 3000: *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*. The review was also carried out in keeping with the Auditor-General’s Statement on Quality Control, which requires compliance with the External Reporting Board’s Professional and Ethical Standard 3 (Amended): *Quality Control*. The review was subject to a comprehensive system of quality control, including documented

policies and procedures regarding compliance with ethical requirements and professional standards.

The procedures performed in a review vary in nature and timing from, and are less in extent than for, an audit. The level of assurance obtained in a review is substantially lower than the assurance that would have been obtained had an audit been performed.

The review involved carrying out procedures and making enquiries in order to reach my conclusion. These procedures and enquiries included:

- reconciling the non-financial information in the project information with supporting documentation provided by Defence;
- reconciling selected financial information in the project information with the supporting job cost reports provided by Defence;
- reconciling selected financial information in the project information with the Ministry of Defence's audited financial statements for the year ended 30 June 2015; and
- seeking explanations from Defence staff for any questions arising from the reconciliations.

Inherent uncertainty in the project information

The project information contains certain future-focused disclosures about expected achievements, planned time frames, forecast expenditure, and intended capability requirements. There are also disclosures about project risks. This information is, by its nature, inherently uncertain.

The review was limited to reconciling such disclosures to reliable supporting documentation and, where necessary, obtaining satisfactory explanations from Defence staff. Some forecast information relies on the expert judgement of the Defence staff involved in the project. Whether those forecasts will prove accurate depends on future events or circumstances. Because of that uncertainty, what takes place might be materially different from what is forecast in the project information.

Responsibilities of Defence

The Secretary of Defence and the Chief of Defence Force are responsible for preparing the *Major Projects Report for the Year Ended 30 June 2015* to fairly disclose information about the specified acquisition projects. In particular, the project information is expected to include:

- a description of the project;
- the status of the project;
- financial performance against the budgets approved by Cabinet;
- expected achievements;
- planned time frames;
- forecast expenditure;
- intended capability requirements; and
- project risks.

Fair disclosure of the project information requires that the project information is:

- complete;
- materially correct; and
- understandable.

Responsibilities of the Auditor-General

My responsibility is to review the project information and to reach an independent conclusion about whether the project information is fairly disclosed.

Independence

The review was carried out in keeping with the Auditor-General's Statement on *Code of Ethics for Assurance Providers* control, requires compliance with the External Reporting Board's Professional and Ethical Standard 1 (Revised): *Code of Ethics for Assurance Providers*.

As the Auditor-General, I am constitutionally and operationally independent of the Ministry of Defence and the New Zealand Defence Force. Other than performing functions and exercising powers under the Public Audit Act 2001 as the auditor of the Ministry of Defence and the New Zealand Defence Force, I have no relationship with, or interests in, the Ministry of Defence and the New Zealand Defence Force.

Conclusion

Based on the review, nothing has come to my attention that causes me to consider that the project information included in the *Major Projects Report for the Year Ended 30 June 2015* has not been fairly disclosed.



Lyn Provost
Controller and Auditor-General
Wellington, New Zealand
May 2016

PART 2A SUMMARIES OF PROJECT STATUS REPORTS

The project summaries contained in this part of the Major Projects Report provide a concise, simple and high level overview of each major project. The summaries include a basic description of each project's policy objectives and capability requirements; the current status with respect to capability, schedule and cost; active high level risks and issues; recent developments; and financial performance. References are provided to the underlying project data sheets if greater detail or information on a specific project is required.

READERS GUIDE

The following keys should be used when reading the current project status and active risks tables contained within each summary.

Key for Risk and Current Status	
	On track. The risks or issues that exist will have little or no impact on the ability to deliver project outputs, objectives or goals. Little or no resource allocation or management effort is required.
	Medium. The risks or issues that exist may temporarily degrade the ability to deliver project outputs, objectives and goals. A moderate level of resource allocation or management effort is required.
	High. The risks or issues that exist could degrade the ability to deliver project outputs, objectives and goals. A high level of resource allocation or management effort is required.
	Critical. The risks or issues that exist could significantly degrade or prevent the ability to deliver project outputs, objectives and goals. Significant resource allocation or management effort is required.

EXPLANATION OF RISKS AND ISSUES STATEMENTS	
Current Risk	An assessment of the status of the risk as it currently exists without taking treatment action in terms of four gradations of seriousness: Low (green), medium (yellow), High (orange), Extreme (red).
Treated Risk	An assessment of the risk if the stated treatment action is applied.
Risk Trend	The expected progression of the risk and whether it is improving, stable or worsening compared to the previous report.
Critical Timing	The point at which the risk needs to be resolved.
Risk or Issue Authority	The part of the organisation that is responsible for managing the risk or issue.

A109 TRAINING AND LIGHT UTILITY HELICOPTER

Project Description: This project is providing the Defence Force with a training and light utility helicopter capability. Five A109LUH (New Zealand) helicopters and a flight training simulator have been acquired to replace the current training helicopters for the Air Force. An additional (sixth) helicopter has been acquired and broken down to form the majority of the spares and logistics package.

Policy Value

The A109’s training capability will provide the Government with the helicopter pilot and crewmen training necessary to support the Defence Force’s NH90 and Seasprite helicopter fleets and operations.

The A109’s light utility capability will enhance the Government’s options for:

- defending New Zealand’s sovereignty, its Exclusive Economic Zone and territorial waters;
- contributing to whole of government efforts at home in resource protection, disaster relief, and humanitarian assistance; and
- operating with the Australian Defence Force to discharge our obligations as an ally of Australia.

Capability Requirements

The capability requirements necessary to support policy objectives include:

Helicopter pilot and crewmen training:

- Basic helicopter pilot training
- Conversion to aircraft-type and consolidation flying for pilots destined for NH90 and Seasprite helicopters
- Training for qualified helicopter instructors
- Continuation training for helicopter pilots
- Training for helicopter crewmen and crewmen instructors

Light utility tasks:

- Air movement
- Search and rescue
- Command, control and communications
- Aero-medical evacuation
- Special operations, including limited counter terrorism tasks
- Aerial sustainment
- Maintenance test flying

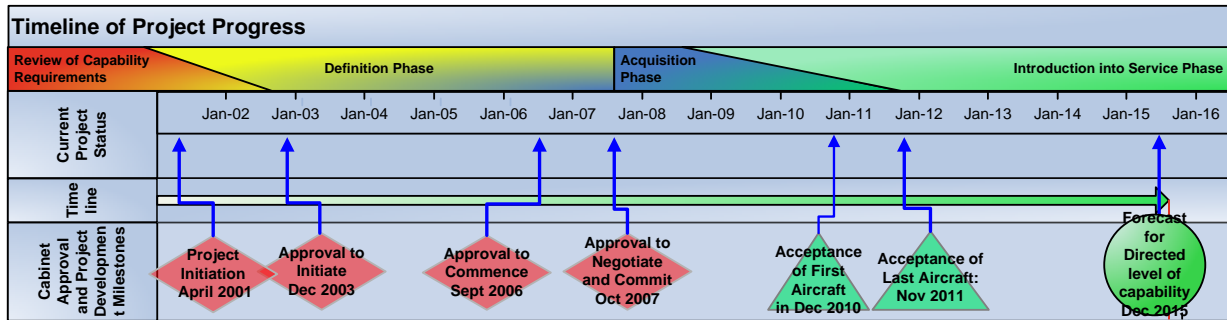
The operational requirements necessary to support the capability can be found at Part 4, page 232

Current Project Status

	Capability: The contract’s primary function and performance specifications are on track to be delivered.
	Schedule: All five helicopters and flight training devices have been delivered. The Project has not been closed as there remain some outstanding matters to be resolved by the manufacturer.
	Cost: The Project budget is on track. The remaining expenditure is forecast to stay within the approved budget.

Recent Developments

A109 capability release has continued as has training of maintainers and aircrew.



Active Risks at 30 June 2015

Risk ID:	Description	Treatment
1	If the Centre of Gravity (CofG) envelope does not support RNZAF Statement of Operating Intent requirements there is a risk that the training available for HCM may be decreased or the fatigue on the airframe and overall operating costs may be increased.	Mitigation: The aircraft usage is being monitored by the RNZAF to ensure the aircraft is operated within current limitations. AgustaWestland have been asked to quote for provision of an assessment regarding an extension to the CofG envelope.
Current Risk:	Treated Risk:	Risk Trend: Stable
		Critical Timing: Ongoing
		Risk Authority: RNZAF
		Introduction into Service

Issues

Issue ID:	Description	Status as at 30 June 2015
1	The RNZAF is not able to provide sufficient rotary personnel to cater for concurrent activities during IIS with the effect that output or transition activities slow.	Establishment and organisational reviews will not address the risk within the Transition Plan horizon. The RNZAF is investigating potential solutions.
Critical Timing:	Ongoing	Issue Authority: RNZAF
2	The current A109 Mission Planning System (MPS) requires a consolidated NZDF C2 policy around standalone internet computer systems accessing the NZDF intranet and agency co-ordination to ensure it meets the needs of the No 3 SQN.	Ongoing issue with the assurance of data being managed by No 230 SQN with risk also carried over to the airworthiness register, Performance of MPS will always remain marginal and replacement will be required in due course.
Critical Timing:	Ongoing	Issue Authority: RNZAF

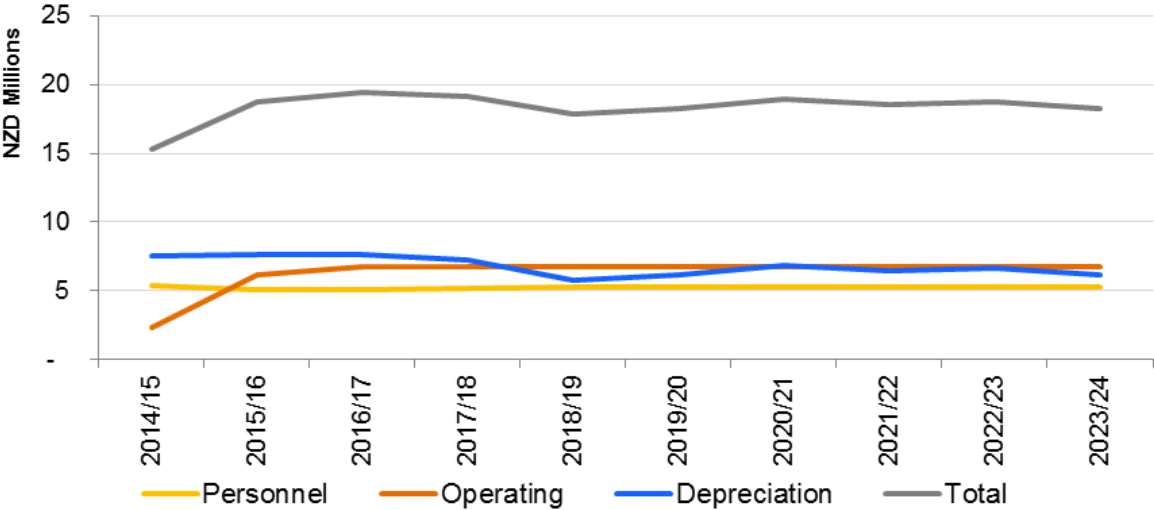
Financial Performance

Further detail on financial performance can be found at Part 3, pages 86-89.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	140.5
Life to date expenditure	128.9
Total forecast expenditure	132.0
Gross project variation (forecast)	8.5 under spend
Foreign exchange impact	5.1
Actual project variation (forecast)	3.4

Summary of Training and Light Utility Helicopter Through Life Operating Cost Estimates



C-130H LIFE EXTENSION

Project Description: This project is extending the life and availability of the five Air force C-130H Hercules aircraft for airlift and transport tasks through to at least 2020. This is being achieved by upgrading the avionics, flight deck communications, navigation, mechanical and self-protection systems as well as extensively refurbishing the airframe structure. The project is also procuring a part task trainer to assist pilot conversion training.

Policy Value

The C-130H provides essential air transport and airlift that enhances the Government's options for:

- defending New Zealand's sovereignty, its Exclusive Economic Zone and territorial waters;
- conducting operations to combat terrorism or acts of sabotage;
- operating with the Australian Defence Force to discharge our obligations as an ally of Australia;
- contributing to peace and stability operations in the South Pacific;
- contributing to whole of government efforts at home and abroad in resource protection, disaster relief, and humanitarian assistance; and
- participating in Five Power Defence Arrangements and other multilateral exercises or operations.

Capability Requirements

The capability requirements necessary to support policy objectives include:

- Provide tactical airlift operations (inter-theatre air transport) in moderate threat environments in support of Defence Force deployments.
- Conduct airlift operations as part of a coalition task force in support of our Defence partners.
- Conduct strategic airlift operations between New Zealand, the South Pacific, and the Asia Pacific.
- Assist in delivery of vital civil military tasks.

The operational requirements necessary to support the capability can be found at Part 4, page 242.

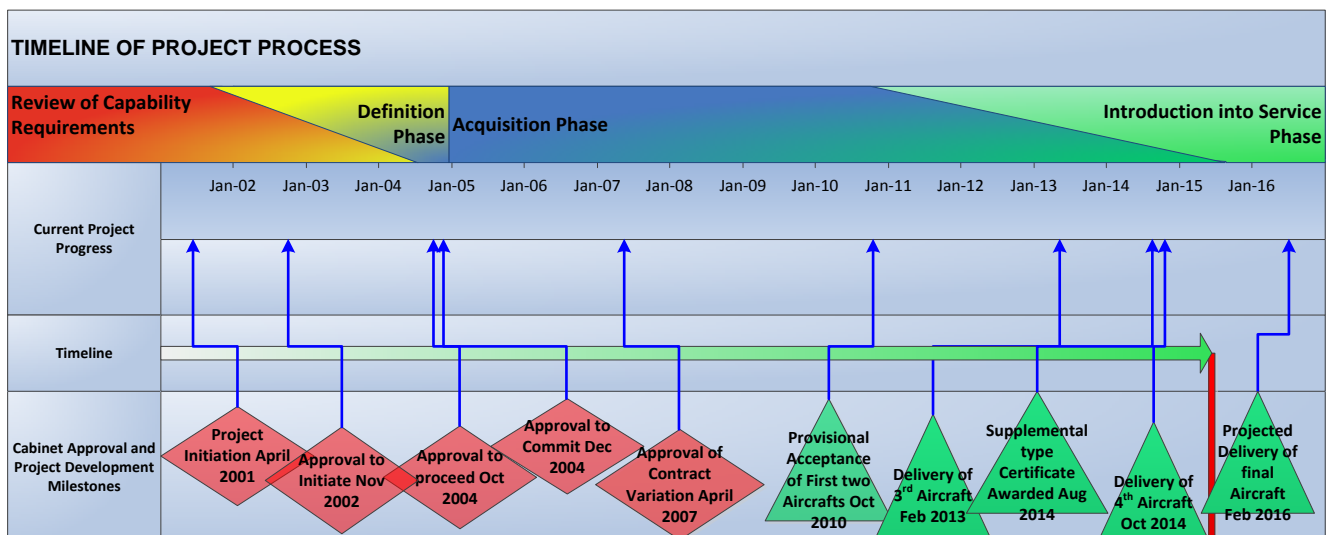
Current Project Status

	<p>Capability: While a Directed Level of Capability was established in September 2014 with some aircraft upgraded and crews trained, the project is continuing through to mid 2016 to upgrade all five aircraft.</p>
	<p>Schedule: Four upgraded aircraft have been delivered to the Air Force The last aircraft is scheduled for delivery in mid 2016, 68 months later than originally forecast at contract signing.</p>
	<p>Cost: Defence is managing the production phase upgrade of the remaining three C-130H's for which an additional amount of NZ\$9.85 million was allocated to the Ministry of Defence, to be reviewed during the production phase. This is a provisional estimate of the potential shortfall in production phase labour costs and Part Task Trainer development costs. Now that the last aircraft upgrade has commenced the requirement for additional funding to complete the programme, as signalled to Cabinet in July 2010, should not be required. All contingency has however now been drawn down and the funding remains very tight. The budget is monitored very closely against the current scheduled mid 2016 completion date.</p>

Recent Developments

The final aircraft is progressing well in the upgrade slot at Woodbourne, Blenheim. A significant amount of unscheduled structural work, not seen on the other four aircraft, has resulted in a delay to the completion date.

The mediation meeting between Honeywell and L-3 Communications took place in July 2015 and agreement was reached on the scope of the final software load to be completed by Honeywell and installed.



Active Risks at 30 June 2015

Risk ID:	Description					Treatment				
1	If the funding from L-3 for the V120 software load falls short of the required scope then not all software issues may be able to be resolved.					The RNZAF has provided L3 with a prioritised list for the final load with a minimum scope also identified. A mediation meeting (L-3/Honeywell/MoD) in July 2015 has been proposed by L-3 to finally resolve this.				
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	July 2015	Risk Authority:	MoD	
							Acquisition Division			
2	If key personnel in the Aviation Labour Group (ALG) workforce leave prematurely during their work on the final aircraft completion of NZ 7002 could be delayed.					Meetings with ALG senior management have confirmed they will take several steps with their workforce to mitigate this concern including incentive payments, increased engagement and communication, and pro-active engagement with the workforce on follow-on job opportunities.				
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	July – December 2015	Risk Authority:	MoD	
							Acquisition Division			
3	If aircraft parts are not available for the testing phase of the final aircraft then NZ 7002 could be delayed from completion. Note: this risk is exacerbated for this last aircraft as there are no further aircraft undergoing the LEP modification to use parts from as a temporary fallback measure.					In the latter half of 2015 it is intended to have increased engagement with RNZAF logistics (weekly status meetings on avionics spares) to pro-actively manage and prioritise spares between the operational unit and the Production aircraft. Monthly meetings between MoD and RNZAF in Woodbourne has commenced to manage the spares.				
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	July – December 2015	Risk Authority:	MoD	
							Acquisition Division			
4	If the final Production aircraft is delayed past March 2016 the funding to complete this final aircraft may be at risk.					With only one aircraft remaining many of the variables have been removed and monitoring of the budget will be considerably easier. A fixed budget amount remains and this will be actively tracked against the monthly projections by the Production team reporting back to the MoD Finance Division. In the final months ALG personnel will be progressively released commensurate with the decreasing specialist skills requirement which will result in a decreased monthly overhead.				
Current Risk:		Treated Risk:		Risk Trend:	Increase due to Centre Wing Book issue	Critical Timing:	July – December 2015	Risk Authority:	MoD	
							Acquisition Division			

5	If the relationship between L-3 and Honeywell affects the completion of the final contracted software load then the resolution of the remaining software issues may be delayed or may not be completed.				Manage the final load under the RNZAF BOA thereby separating the load from L-3. Continur with the V119 load until the issue(s) is resolved. The aircraft software configuration contains no airworthiness issues that would prelude it from continued operation if required.				
Current Risk:		Treated Risk:		Risk Trend	Stable	Critical Timing	July/August 2015	Risk Authority	MoD
							Acquisition Division		

Issues

Issue ID:	Description	Status as at 30 June 2015		
1	The quote received from Honeywell to resolve the remaining software issues (V120 load) was unacceptable to L-3 so they have proposed a mediation meeting with Honeywell (prior to arbitration action) to finally resolve the load. They have requested that the MoD attend this meeting.	The MoD have provided a formal document to L-3 summarising the factual information on the impact of the software since provisional acceptance in 2010. The MoD are now waiting on L-3 to advise the confirmed date of the tripartite meeting, the proposal being for it to take place at the end of July 2015.		
Critical Timing:	July 2015	Issue Authority:	MoD Acquisition Division	
2	The Centre Wing Box LH upper and lower aft corner fittings are misaligned by 0.030" to 0.040" (as delivered by L-3). Resolution of this will delay the completion date of aircraft NZ 7002 by 3-5 weeks.	The NZDF has been notified of the delay. New corner fittings have been ordered and will be replaced to resolve the misalignment. L-3 have agreed to cover the costs for the fitting, analysis and installation.		
Critical Timing:	July/August 2015	Issue Authority:	MoD Acquisition Division	

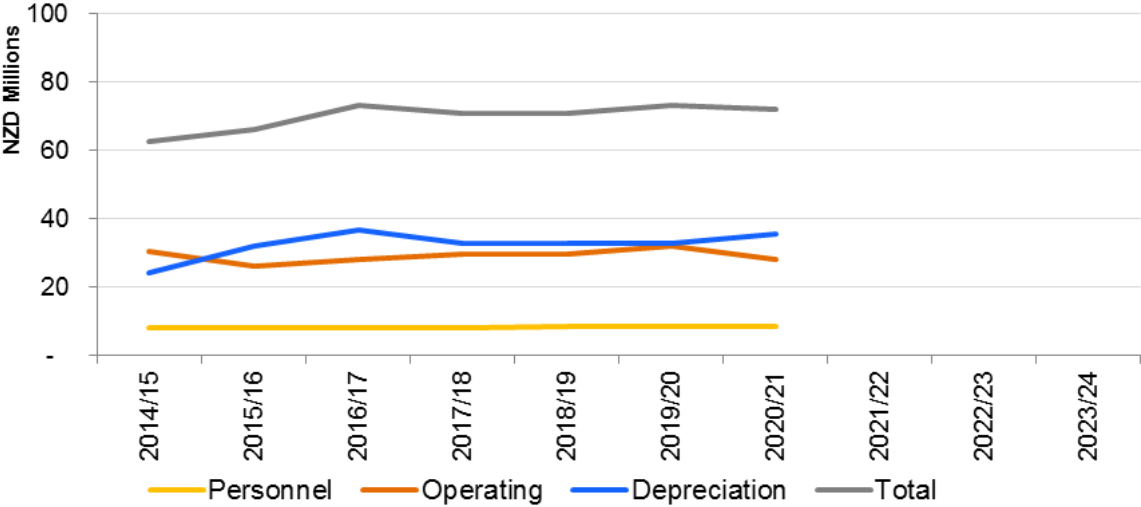
Financial Performance

Further detail on financial performance can be found at Part 3, pages 99-102.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	264.8
Life to date expenditure	258.3
Total forecast expenditure	261.1
Gross project variation (forecast)	3.7
Foreign exchange impact	(3.6)
Actual project variation (forecast)	0.1

Summary of C130H Life Extension Through Life Operating Cost Estimates



NH90 MEDIUM UTILITY HELICOPTER

Project Description: This project is providing the Defence Force with a medium utility helicopter capability for the next 30 years. Eight NH90 helicopters with associated deliverables are being acquired from Nato Helicopters Industries to replace the Royal New Zealand Air Force Iroquois fleet. An additional (ninth) helicopter is being acquired and broken down to form the majority of the spares and logistics package.

Policy Value

The Medium Utility Helicopter provides rotary wing airlift that enhances the Government’s options for:

- defending New Zealand’s sovereignty;
- conducting operations to combat terrorism or acts of sabotage;
- operating with the Australian Defence Force to discharge our obligations as an ally of Australia;
- contributing to peace and stability operations in the South Pacific;
- contributing to whole of government efforts at home and abroad in resource protection, disaster relief, and humanitarian assistance; and
- participating in Five Power Defence Arrangements and other multilateral exercises or operations.

Capability Requirements

The capability requirements necessary to support policy objectives include:

- **Combat Missions:** air assault; special operations; and intelligence, surveillance, target acquisition and reconnaissance.
- **Combat Support Missions:** air movement; command, control and communications; and search and rescue.
- **Combat Service Support Missions:** aerial sustainment; aero-medical evacuation; search and rescue; and transport of personnel.
- **Ancillary Tasks:** helicopter aircrew training and maintenance test flying.

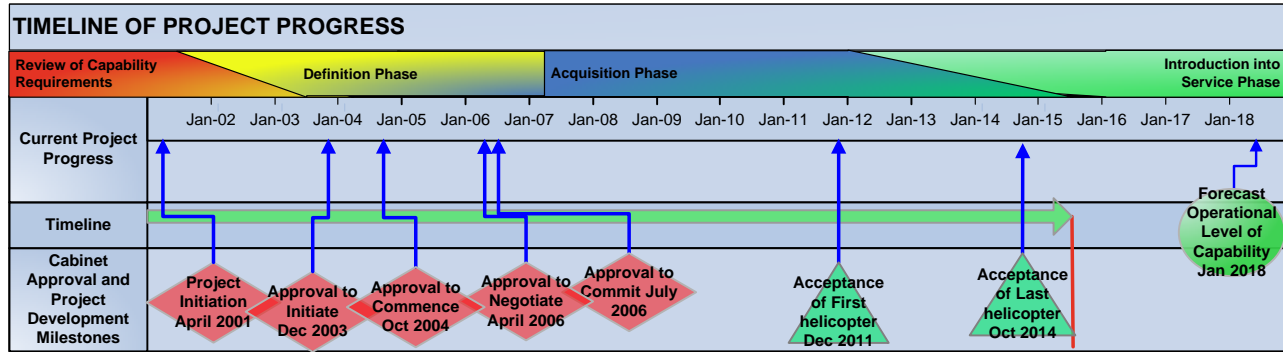
The operational requirements necessary to support the capability can be found at Part 4, page 250.

Current Project Status

	Capability: The first Phase of “Final Configuration Plus” has been completed. The second phase scheduled for the first half of 2016 will see the fleet meeting its contracted capability.
	Schedule: All aircraft were delivered by 30 October 2014. The second phase of “Final Configuration Plus” is planned for the first half of 2016.
	Cost: The project is within budget and estimating an underspend.

Recent Developments

The last helicopter was delivered by air in October 2014.



Active Risks at 30 June 2015

Risk ID:	Description					Treatment			
1	If the resources to train air and maintenance crews for embarked operations do not allow the achievement of DLOC standards there is a risk that DLOC readiness for deck and amphibious operations may not be generated or maintained.					Mitigation: The RNZAF has recognised the risk and is investigating potential solutions.			
Current Risk:	[Yellow]	Treated Risk:	[Yellow]	Risk Trend:	Worsening	Critical Timing:	Ongoing	Risk Authority:	RNZAF
							Introduction into Service		
2	If there is an external perception that the NH90 is taking too long to enter service there is a risk that the NZDF/RNZAF's reputation may be undermined.					The Search and Rescue Capability was released at the end of 2014 and the Counter Terrorism Capability was released in Jul 2015 allowing the UH-1H to be retired from NZDF service. Other releases are being worked on.			
Current Risk:	[Yellow]	Treated Risk:	[Yellow]	Risk Trend:	Stable	Critical Timing:	Ongoing	Risk Authority:	NZDF Capability
							Introduction into Service		
3	If the Engine Venting retrofit activities take longer than planned there may be delayed delivery of the helicopter.					Close co-ordination of Engine Venting retrofit activities between NHI retrofit team and the RNZAF will minimise disruptions.			
Current Risk:	[Yellow]	Treated Risk:	[Green]	Risk Trend:	Stable	Critical Timing:	2 nd Qtr 2016	Risk Authority:	RNZAF
							Introduction into Service		

Issues

Issue ID:	Description	Status as at 30 June 2015	
1	The RNZAF is not able to provide sufficient rotary personnel to cater for concurrent activities during Introduction into Service with the effect that output or transition activities slow.	Establishment and organisational reviews will not address the risk within the Transition Plan horizon. The RNZAF has, therefore, further revised the Transition Plan. The RNZAF is investigating potential solutions.	
Critical Timing:	Ongoing	Issue Authority:	RNZAF
2	The cabin floor is susceptible to damage with the effect that loading of certain equipment may be prevented and/or downtime may result from damage.	RNZAF designed 'load spreader' floors are under manufacture at present with all aircraft to have them fitted as soon as possible. Expected completion date is December 2015. NHI will provide replacement aircraft floors in due course.	
Critical Timing:	December 2015	Issue Authority:	RNZAF
3	The Mission Planning Ground Station will not have sufficient Original Equipment Manufacturer qualification to satisfy RNZAF Airworthiness requirements with the effect that the RNZAF will need to undertake testing and certification.	Good progress has been made to date with remediation of issues identified. Performance of the Mission Planning Ground Station will always remain marginal and replacement will be required in due course. A dedicated RNZAF mission planning support person has made significant enhancements to the Mission Planning Ground Station over recent months.	
Critical Timing:	Ongoing	Issue Authority:	RNZAF
4	There are insufficient NZDF resources available to complete Operational Testing and Evaluation (OT&E) due to concurrent and/or overlapping OT&E programs with the effect that OT&E will be delayed with consequent impact on IService and capability release.	The RNZAF continues to actively manage the issue with Contractor support as well as for assessment of recent OT&E activities.	
Critical Timing:	Ongoing	Issue Authority:	RNZAF

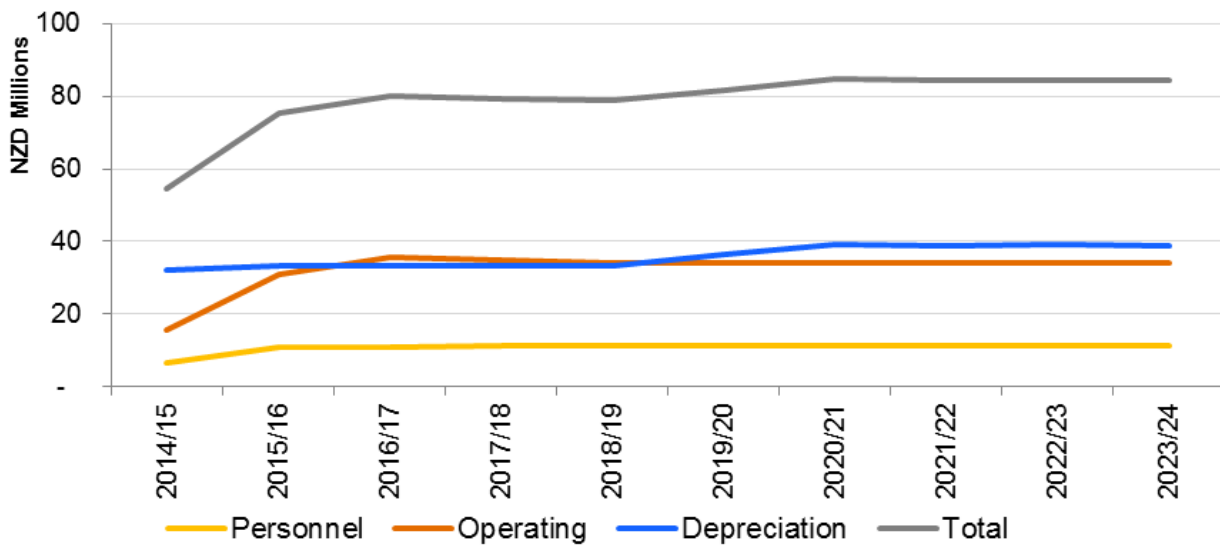
Financial Performance

Further detail on financial performance can be found at Part 3, pages 111-112.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	771.7
Life to date expenditure	663.6
Total forecast expenditure	678.4
Gross project variation (forecast)	93.3 under spend
Foreign exchange impact	93.2
Actual project variation (forecast)	0.1
Explanation	NOTE: The impact of a foreign exchange rate at any point of time in a project is constantly subject to change as the project progresses. These fluctuations are expected and mitigated by forward cover. Actual expenditure can only be measured once the project is complete and any variations resulting from foreign exchange differences are managed through forward cover.

Summary of NH90 Medium Utility Helicopter Through Life Operating Cost Estimates



P-3K ORION MISSION SYSTEMS UPGRADE

Project Description: This project is upgrading the mission management, sensors, communications, and navigation systems for the six Air force P-3K Orion surveillance and reconnaissance aircraft. Also being acquired is a flight deck trainer. The prime contractor undertaking the upgrade is L-3 Communications Integrated Systems.

Policy Value

The surveillance and reconnaissance capability of the P-3K Orion enhances the Government's options for:

- defending New Zealand's sovereignty, its Exclusive Economic Zone and territorial waters;
- protecting New Zealand's interests in the Southern Ocean and Ross Dependency;
- operating with the Australian Defence Force to discharge our obligations as an ally of Australia;
- contributing to peace and stability operations in the South Pacific;
- contributing to whole of government efforts at home and abroad in resource protection, disaster relief, and humanitarian assistance; and
- participating in Five Power Defence Arrangements and other multilateral exercises or operations.

Capability Requirements

The capability requirements necessary to support policy objectives include:

Support to civilian agencies via the conduct of air operations throughout the New Zealand Exclusive Economic Zone, and surrounding waters to assist:

- | | |
|--|------------------------|
| • Fisheries protection | • Conservation support |
| • Border protection | • Search and rescue |
| • Oil spill and navigation hazard response | • Police activities |

Support to Defence and Foreign Policy within New Zealand's area of interest to assist:

- | | |
|------------------|-------------------|
| • Air operations | • Special Forces |
| • Land Forces | • Maritime Forces |

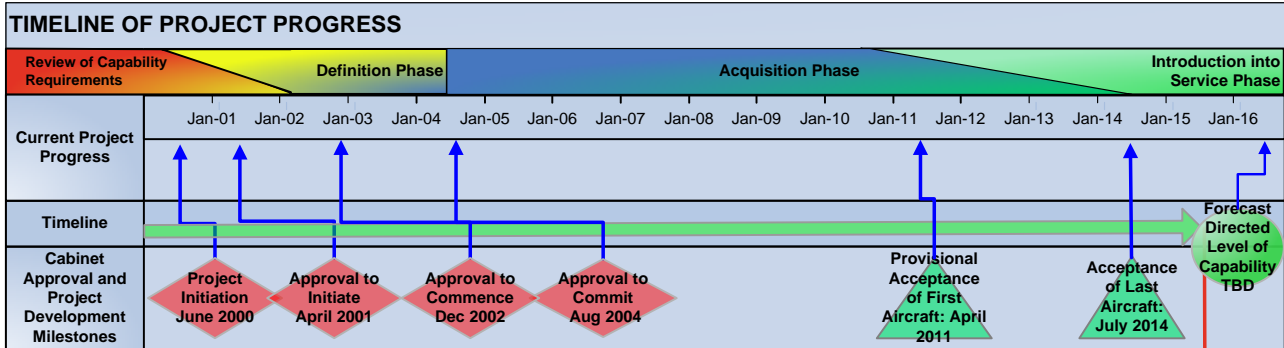
The operational requirements necessary to support the capability can be found at Part 4, page 258.

Current Project Status

	Capability: The contracted capability has been delivered.
	Schedule: The remaining deliverable (Data Recording Switch) is expected in late 2015.
	Cost: The project will deliver within the revised budget agreed in 2012.

Recent Developments

With the delivery of the final software the focus is on closing the Acquisition phase.



The final phase of Operational Test and Evaluation has been delayed with the deployment of a P-3K2 overseas. Upon the return to New Zealand of the aircraft an Operational Test and Evaluation schedule will be developed. Once completed the P-3K2 Directed Level of Capability will be declared.

Active Risks at 30 June 2015

Risk ID:	Description	Treatment			
1	During the ongoing Operational Test and Evaluation and operational use there is a risk that operational use of the Upgrade Systems may identify hitherto unknown issues relating to compliance with the Contract specification which, if significant, may require significant MoD and NZDF resources to investigate and resolve and may also prove difficult to engage the Contractor.	Project Contingency Reserve funds for additional Crown Costs (acknowledging limited funds are available).			
Current Risk:		Treated Risk:		Risk Trend: Stable	Critical Timing: October 2015
					Risk Authority: MoD Acquisition Division

Issues

Issue ID:	Description	Status as at 30 June 2015	
1	Flight Crew Display (FCD). The FCD has experienced a high failure rate that has been attributed to overheating. This is being investigated by L-3.	L-3 are reviewing the internal design of the FCD after concern was raised about the power supply as a significant source of heat. A proposed rectification is expected in the second half of 2015.	
Critical Timing:	June 2015	Issue Authority:	MoD Acquisition Division

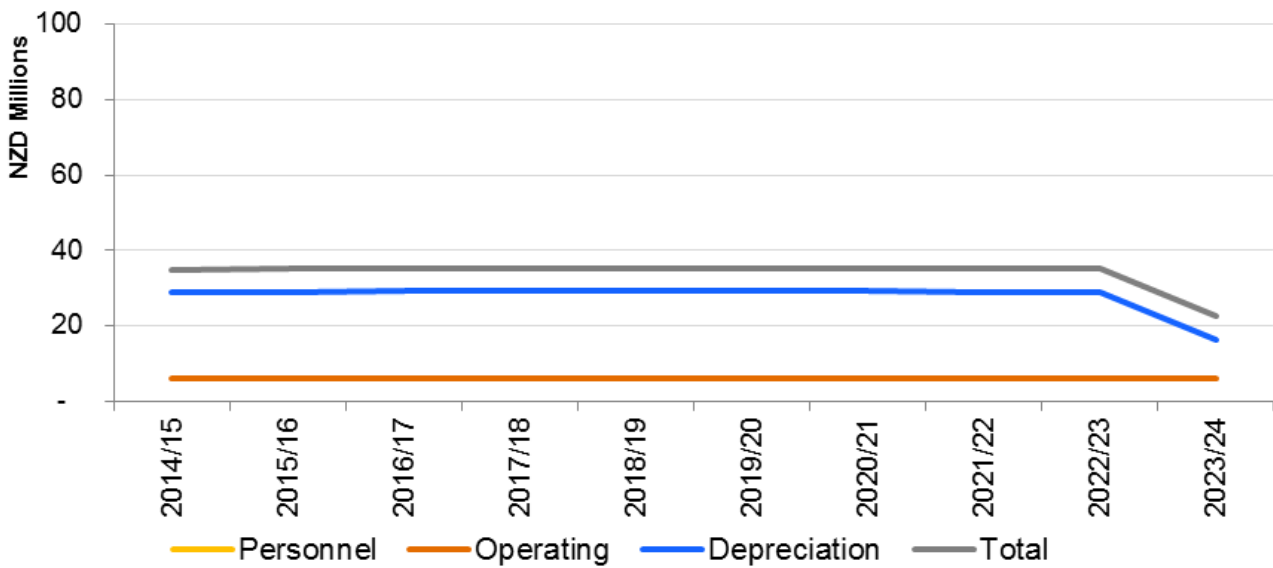
Financial Performance

Further detail on financial performance can be found at Part 3, pages 122-125.

Approved Budget and Expenditure

	Total (NZ\$ million)
Approved budget	377.3
Life to date expenditure	330.9
Total forecast expenditure	332.7
Gross project variation (forecast)	44.6
Foreign exchange impact	43.5
Actual project variation (forecast)	1.1

Summary of P-3K Mission Systems Upgrade Through Life Operating Cost Estimates



PILOT TRAINING CAPABILITY

Project Description: The Pilot Training Capability Project will replace the current military pilot training system with:

- modern trainee selection tools which select those most likely to succeed as military pilots;
 - flight simulation computers and flight simulators;
 - the introduction of a fleet of modern training aircraft and
 - a new teaching curriculum that is matched to the pilot training requirements
-

Policy Value

The New Zealand Defence Force requires about 15 new military pilots and up to 12 new Qualified Flying Instructors each year to replace those who are promoted or leave.

These pilots need to be trained to an appropriate military standard and be capable of undertaking safe military air operations across the spectrum of Defence Force operations and thereby to sustain and enhance the New Zealand Defence Force's contribution toward government options for:

- defending New Zealand's sovereignty, its Exclusive Economic Zone and territorial waters;
- operating with the Australian Defence Force to discharge our obligations as an ally of Australia;
- contributing to peace and stability operations in the South Pacific;
- contributing to whole of government efforts at home in resource protection;
- participating in Five Power Defence Arrangements and other multilateral exercises or operations;
- protecting New Zealand's interests in the Southern Ocean and Ross Dependency; and
- providing a physical demonstration of New Zealand's commitment to regional and global security, including protecting sea lines of communication.

Capability Requirements

The capability requirements necessary to support policy objectives include:

- Able to train 15-20 new pilots per year.
- Provide and maintain Military Qualified Flying Instructors.
- Develop Flying Supervision to the highest standards.
- Produce Military Pilots.
- Allow Defence Force to control Training Outcomes.

The operational requirements necessary to support the capability can be found at Part 4, page 265.

Current Project Status

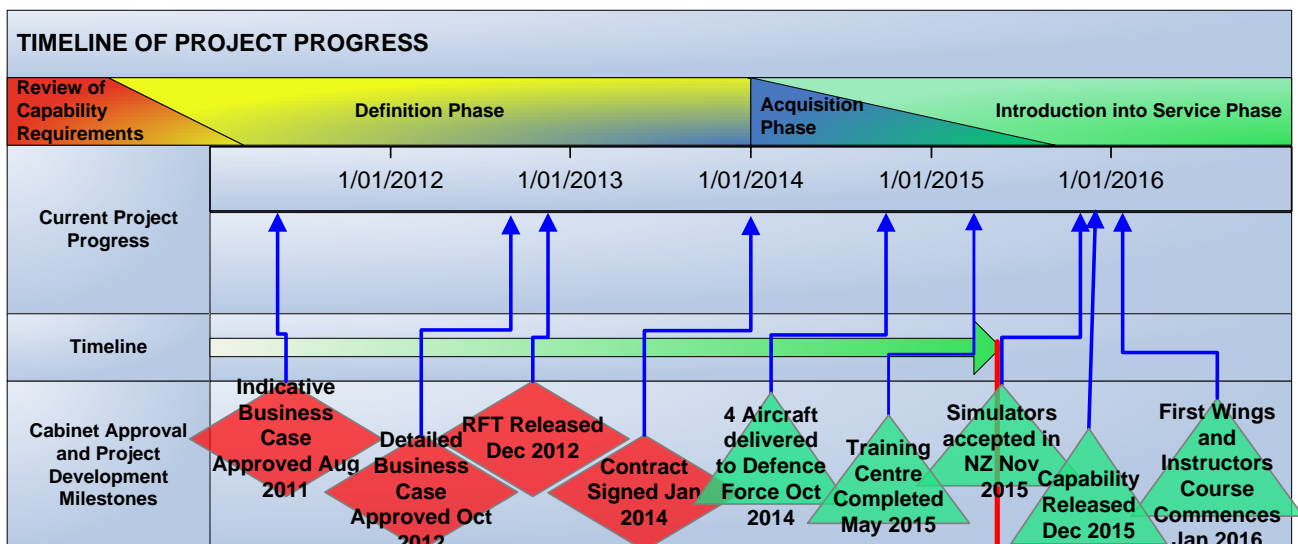
	Capability: The capability is targeted to be in place to commence Pilot Training in January 2016. This will encompass both the initial Pilots course and the Flight Instructors course.
	Schedule: All 11 aircraft were delivered to Ohakea on schedule and have been accepted by the NZDF. At this stage Aircraft, Simulators and training packages are all on schedule with 2015 being an intensive year of deliveries.
	Cost: The project budget remains on track.

Recent Developments

All 11 aircraft have been delivered and accepted by the NZDF and the flying hours planned for the first (transition) year are on track to be met.

The two Simulators are installed and functionally working in Ohakea however the extensive testing and certification phase will go through to October 2015. Significant work is ongoing between the Defence Force training specialists and CAE to produce the final training packages.

The hangar upgrade in Ohakea and the new training center were completed on schedule and are operational. Work on the aircraft shelters (carports) has commenced.



Active Risks as at 30 June 2015

Risk ID:	Description					Treatment			
1	Training development; If the training packages are not developed to the required standard prior to the Airworthiness Board meeting in December 2015 the RNZAF may not type certify the capability.					CAE have employed an ex-RNZAF Qualified Flying Instructor as the Field Service Representative in Ohakea to assist with the training package co-ordination. The Crown has approved CAE to develop training package amendments which will resolve issues raised by RNZAF Qualified Flying Instructors following review of the lessons. This was funded from contingency.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Nov 15	Risk Authority:	MoD PD
							Acquisition Division		
2	NZDF Capability gap: If the planned January 2016 Pilot Training Capability start date is delayed Pilot Training using RNZAF resources may not be able to be achieved as the current CT-4 contract has been terminated.					The project schedule is on-track and is closely monitored with manageable risks to date. A possibility of utilising another Royal Australian Air Force pilot training course (in Australia) to cover any delay could be considered.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Jan 2016	Risk Authority:	RNZAF

Issues

Issue	Description	Status as at 30 June 2015	
1	A portion of the training packages requires some bespoke N.Z specific amendments.	A contract amendment was approved for CAE to amend a portion of the training packages to meet the unique New Zealand flying conditions. A drawdown on contingency funds was approved to cover the cost of this work.	
Critical Timing:	Not Available	Issue Authority:	MOD Acquisition Division

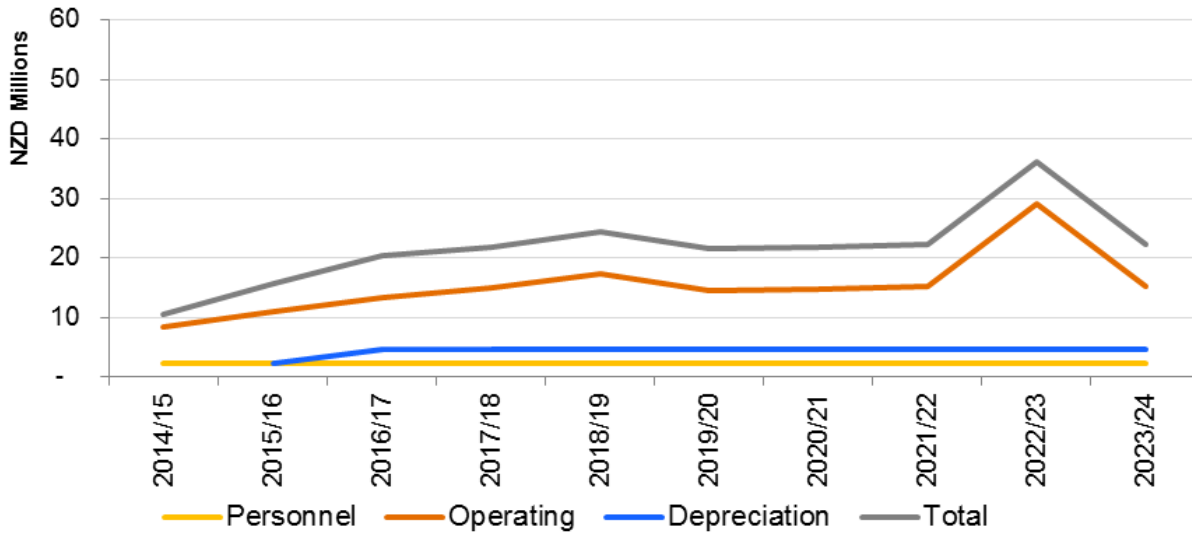
Financial Performance

Further detail on financial performance can be found at Part 3, pages 134-136.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	154.6
Life to date expenditure	128.6
Total forecast expenditure	148.8
Gross project variation (forecast)	5.8
Foreign exchange impact	-2.8
Actual project variation (forecast)	8.6
Explanation	This is the difference between the budget foreign exchange rates (weighted average of currency purchases: spot and forward rates) compared to the actual foreign exchange rates and current forecast rate.

Summary of Pilot Training Capability Through Life Operating Cost Estimates



ANZAC FRIGATE PLATFORM SYSTEMS UPGRADE

Project Description: The Platform Systems Upgrade is addressing equipment obsolescence, performance degradation, operational limitations and compliance issues with the platform systems of the ANZAC class frigates. These platform systems are distinct from combat capabilities and enable the frigates to move, float, generate power and recover from damage.

Policy Value

The Platform Systems Upgrade will maintain the operational effectiveness and efficiency of the ANZAC frigates, *Te Kaha* and *Te Mana*, over their remaining lives. It will thereby sustain and enhance the Naval Combat Force's contribution toward government options for:

- defending New Zealand's sovereignty, its Exclusive Economic Zone and territorial waters;
- operating with the Australian Defence Force to discharge our obligations as an ally of Australia;
- contributing to peace and stability operations in the South Pacific;
- contributing to whole of government efforts at home in resource protection;
- participating in Five Power Defence Arrangements and other multilateral exercises or operations;
- protecting New Zealand's interests in the Southern Ocean and Ross Dependency; and
- providing a physical demonstration of New Zealand's commitment to regional and global security.

Capability Requirements

The capability requirements necessary to support policy objectives include:

- Increase the stability of the ANZAC Frigates after incurring damage
- Increase the ANZAC Frigates reserve buoyancy
- Improve the propulsion systems of the ANZAC Frigates
- Increase the ability of the ANZAC Frigates to operate at high temperatures
- Provide a control and monitoring system that delivers automated functions across all platform systems

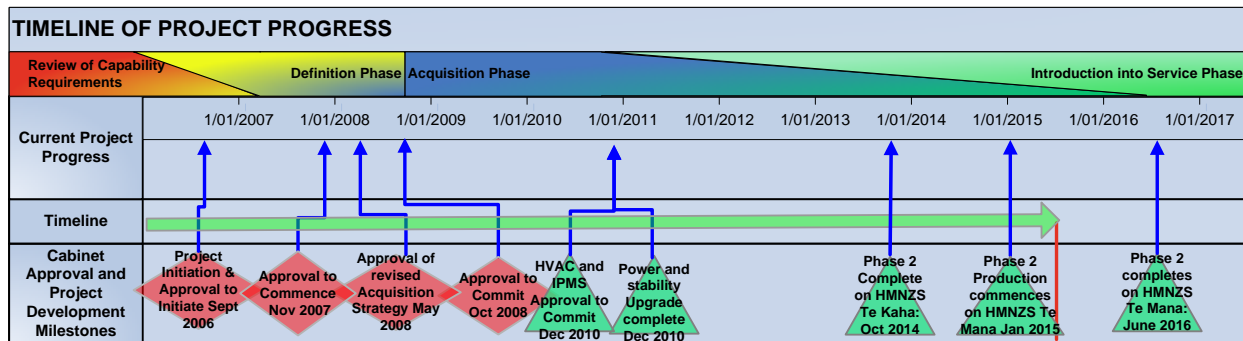
The operational requirements necessary to support the capability can be found at Part 4, page 274.

Current Project Status

	<p>Capability: The first ship in Phase 2, <i>Te Kaha</i> completed contractor sea acceptance trials on 21 September 2014 and following a period of shakedown, workup and operational readiness evaluation deployed for the Gallipoli commemoration and operational deployment in the Indian Ocean.</p>
	<p>Schedule: <i>Te Mana</i> commenced production work in the Naval Base in December 2014 with a planned completion date in May 2016. The work is currently ahead of schedule with the ship in dock.</p>
	<p>Cost: Cabinet approved a revised budget for Phase 2 for upgrading both frigates. <i>Te Kaha</i> was completed within the revised budget. <i>Te Mana</i> is projecting a small underspend.</p>

Recent Developments

Te Kaha successfully completed the deployment returning to Devonport Naval Base in early August 2015.



Active Risks at 30 June 2015

Risk ID:	Description	Treatment											
1	If the integration and consolidation of all streams of work into the production period extend beyond the current production window <i>Te Mana</i> may not be able to be inducted into the FSU Project on time.	The NZDF has assumed full responsibility for the Extended Selected Restricted Availability (ESRA) involving the PSU Project work and the scheduling of all post PSU activities.											
Current Risk:		Treated Risk:	Risk Trend:	Stable	<table border="1"> <tr> <td>Critical Timing:</td> <td>Nil</td> <td>Risk Authority:</td> <td>NZDF</td> </tr> <tr> <td colspan="4">Capability Branch</td> </tr> </table>	Critical Timing:	Nil	Risk Authority:	NZDF	Capability Branch			
Critical Timing:	Nil	Risk Authority:	NZDF										
Capability Branch													
2	If the transitional arrangements for the Dockyard Management Contract are delayed the PSU Project may be affected during the transition resulting in cost and time pressures.	The NZDF has assumed full responsibility for the Extended Selected Restricted Availability involving the PSU Project work and scheduling of all post PSU activities.											
Current Risk:		Treated Risk:	Risk Trend:	Stable	<table border="1"> <tr> <td>Critical Timing:</td> <td>1 May 15</td> <td>Risk Authority:</td> <td>NZDF</td> </tr> <tr> <td colspan="4">Capability Branch</td> </tr> </table>	Critical Timing:	1 May 15	Risk Authority:	NZDF	Capability Branch			
Critical Timing:	1 May 15	Risk Authority:	NZDF										
Capability Branch													

3	If there is late delivery of Government Furnished Equipment (consoles) this may impact on the schedule.					The MoD will seek a detailed subcontract schedule from Noske-Kaeser (week by week) as well as also seeking a weekly progress report.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	1 Aug 16	Risk Authority:	MoD
							Acquisition Division		
4	If there is insufficient ANZAC frigate experienced resources in the MoD team to deliver the MoD scope of work, additional support may be required leading to cost and/or schedule impacts.					Regularly review resource requirements and supplement as necessary.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Ongoing	Risk Authority:	MoD
							Acquisition Division		
5	If there is a subcontractor schedule mis-match with the ESRA programme, this may result in modifications to the ESRA schedule to match contractor availability.					Clarify subcontractor schedule, regularly review it, and ensure proper integration with the ESRA programme.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	1 May 2015	Risk Authority:	NZDF
							Capability Branch		
6	If there is inaccurate schedule mark-ups these may result in inaccurate reporting of progress and schedule impacts.					Undertake education, provide management oversight, seek process improvements (analysis of root cause of issues), implement performance measures around mark-up performance, and analyse resourcing bottlenecks at production.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Not yet Assigned	Risk Authority:	NZDF
							Capability Branch		

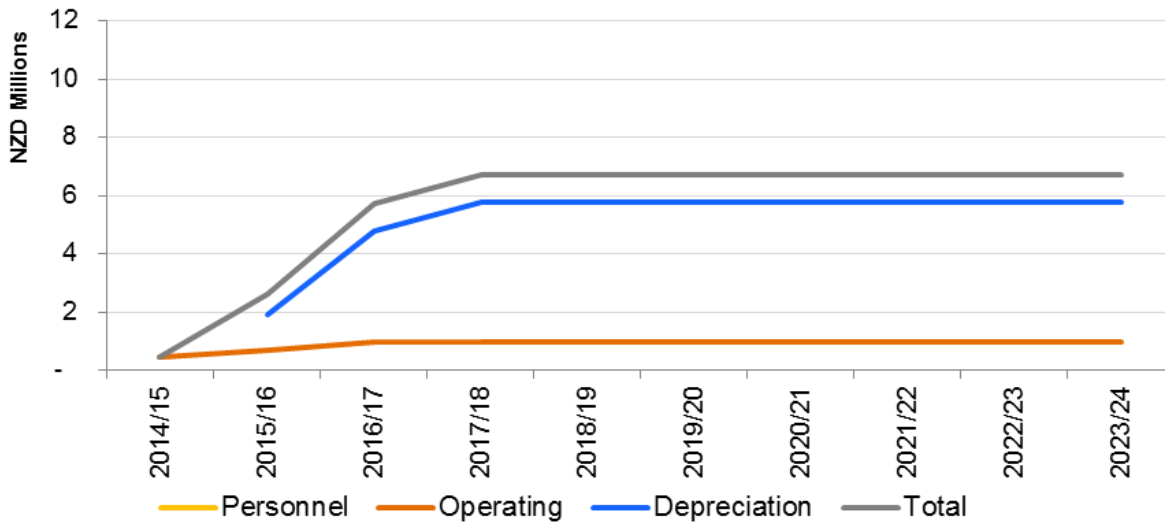
Financial Performance

Further detail on financial performance can be found at Part 3, pages 144-147.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	87.6
Life to date expenditure	66.3
Total forecast expenditure	85.9
Gross project variation (forecast)	1.7
Foreign exchange impact	1.3
Actual project variation (forecast)	0.4
Explanation	30 June 2015 forecast results in a project underspend.

Summary of ANZAC Platform Systems Upgrade Through Life Operating Cost Estimates



ANZAC FRIGATE SYSTEMS UPGRADE

Project Description: The primary objective of the ANZAC Frigate Systems Upgrade Project is to restore the frigates' ability to fulfil credible combat roles and provide high quality surveillance products in the contemporary and emerging security environment. This will ensure that the Government retains the ability to deploy the frigates to the Pacific and beyond, enabling them to operate with confidence in low to medium threat environments.

Policy Value

The Frigate System Upgrade will maintain the combat effectiveness and efficiency of the ANZAC frigates, *Te Kaha* and *Te Mana*, over their remaining lives. It will thereby sustain and enhance the Naval Combat Force's contribution toward government options for:

- defending New Zealand's sovereignty, its Exclusive Economic Zone and territorial waters;
- operating with the Australian Defence Force to discharge our obligations as an ally of Australia;
- contributing to peace and stability operations in the South Pacific;
- contributing to whole of government efforts at home in resource protection;
- participating in Five Power Defence Arrangements and other multilateral exercises or operations;
- protecting New Zealand's interests in the Southern Ocean and Ross Dependency; and
- providing a physical demonstration of New Zealand's commitment to regional and global security, including protecting sea lines of communication.

Capability Requirements

The capability requirements necessary to support policy objectives include:

- **Participation**
Able to deliver the ability to participate in national, allied and coalition activities to the Combined Force Commander in order to maximise the effective contribution made.
- **Strategic Situational Awareness**
Able to achieve situation awareness of electromagnetic emissions to the Combined Force Commander and specified agencies in support of tactical and strategic objectives.
- **Air Threat to Others**
Able to deliver an ability for a defended surface unit to operate in an area under an air threat to the Combined Force Commander in order to undertake its designated mission.
- **Surface Threat to Others**
Able to deliver the neutralisation of a surface delivery platform prior to its weapon launch to the Combined Force Commander in order for a defended unit within 4 km to be able to continue with its mission.
- **Effects Ashore**
Able to deliver effects ashore from organic **weapons** to the Combined Force Commander in order to support land operations.

- Through Life

The Logistics Commander (Maritime) is able to deliver availability characteristics to the Commander Joint Forces New Zealand in order to enable completion of a mission throughout the life of the platform.

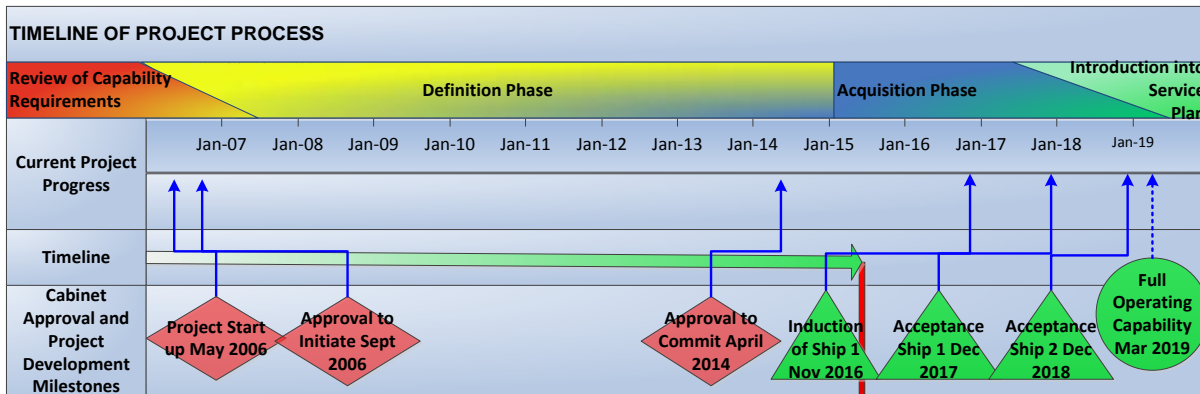
The operational requirements necessary to support the capability can be found at Part 4, pages 283-284.

Current Project Status

	Capability: The contracted System Requirements are currently on track to be delivered.
	Schedule: Since Cabinet Approval to Commit to Contract, six contracts and two Foreign Military Sales cases were awarded between April 2014 and July 2014, as planned. A further two contracts were awarded in January and March 2015 along with one Foreign Military Sales case. The project is on track with the contractors achieving their scheduled milestones.
	Cost: The project budget is on track with milestone payments being made to contractors as scheduled.

Recent Developments

The Combat Systems Preliminary Design was successfully completed, as planned, in April 2015. The first platform Preliminary Design Review was completed as scheduled in May 2015 with two additional reviews now planned for August to consider changes to the missile data link antennae location. The overall (preliminary and detail) design schedule is not expected to be impacted. The current target date for the first ship to commence its refit in Canada is November 2016.



Active Risks at 30 June 2015

Risk ID:	Description					Treatment			
1	EW Libraries If the NZDF does not establish how the Electronic Warfare library production will be structured in the future in sufficient time, the libraries may not be available in time to meet Interim Operating Capability timing.					Facilitate establishment of database support agreement with UK MoD or establishment of a NZ-based support facility. Establish supportability options.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	15 August 2015	Risk Authority:	MoD
							Acquisition Division		
2	Tactics and Procedures If the NZDF does not develop its tactics and procedures to exploit the full capabilities of the FSU systems, some benefits associated with the Project may not be realised.					Navy doctrine update process. Assignment of appropriately experience warfare personnel to develop doctrine and tactics in parallel with project's progress. Leverage off a larger parent navy. Locate personnel in Halifax, Canada and utilise the Defence Technology Agency.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	1 January 2016	Risk Authority:	MoD
							Acquisition Division		

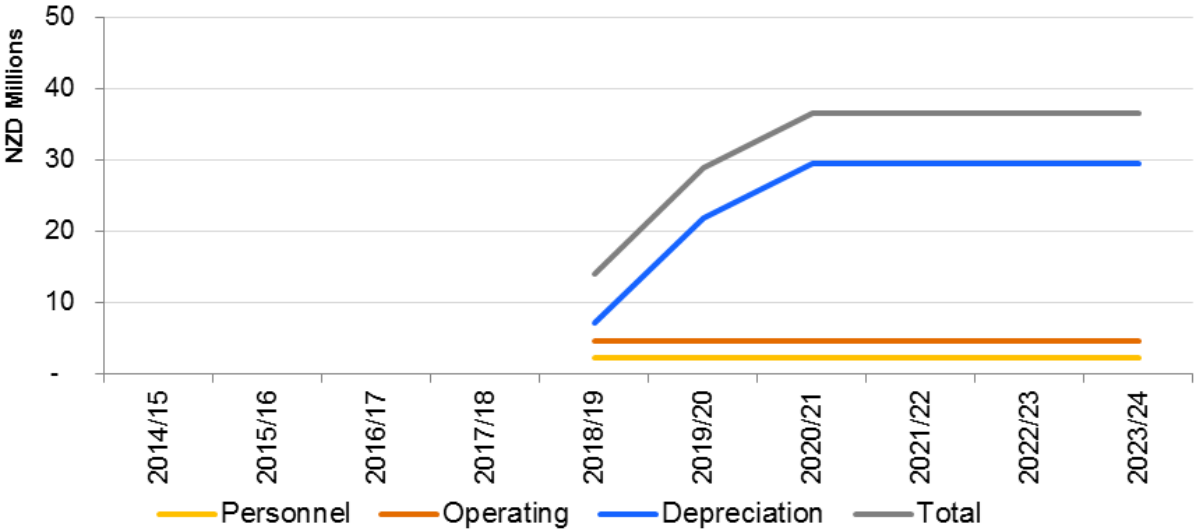
Financial Performance

Further detail on financial performance can be found at Part 3, pages 155-157.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	446.2
Life to date expenditure	144.2
Total forecast expenditure	472.9
Gross project variation (forecast)	-26.7
Foreign exchange impact	-29.3
Actual project variation (forecast)	2.6
Explanation	Foreign exchange impact

Summary of ANZAC Frigate Systems Upgrade Through Life Operating Cost Estimates



MARITIME HELICOPTER CAPABILITY

Project Description: This project is providing an upgraded fleet of naval helicopters for the Royal New Zealand Navy. Eight SH2G International Super Seasprite helicopters are being acquired from Kaman Aerospace with associated spares, training aids and a full-mission flight training simulator. Two additional helicopters are part of the package. These will be stored for use as attrition airframes and for spare parts. The Project will also include the acquisition of Penguin missiles to replace the current stock of Mavericks.

The existing SH2G (New Zealand) Super Seasprite fleet was scheduled for a major upgrade of avionics and mission systems by 2015 to address system obsolescence. The offer of a fleet of SH2G International Super Seasprites with these systems already upgraded was assessed to provide greater value for money and at lower project risk.

Once delivered to New Zealand the helicopters undergo a period of Operational testing and Evaluation before being brought into service.

Policy Value

The Naval helicopters are a component of the Naval Combat Force and provide rotary wing surveillance, warfare and airlift that enhance the Government's options for utilising the Defence Force for the principal tasks set out in the Defence White Paper 2010, in particular:

- to defend New Zealand's sovereignty;
- to discharge our obligations as an ally of Australia;
- to contribute to and, where necessary, lead peace and security operations in the South Pacific;
- to contribute to whole-of-government efforts at home and abroad in resource protection, disaster relief, and humanitarian assistance; and
- to make a credible contribution in support of peace and security in the Asia-Pacific region.

Capability Requirements

The capability requirements necessary to support policy objectives include:

Surveillance and reconnaissance: <ul style="list-style-type: none"> • Conduct military and civil surveillance • Embark and operate from all Navy aviation capable units • Detect threats in a hostile environment • Conduct maritime Search and Rescue 	Utility Lift <ul style="list-style-type: none"> • Search and rescue • Aero-medical evacuation • Aerial sustainment
Offensive action: <ul style="list-style-type: none"> • Prosecute surface and sub-surface targets 	

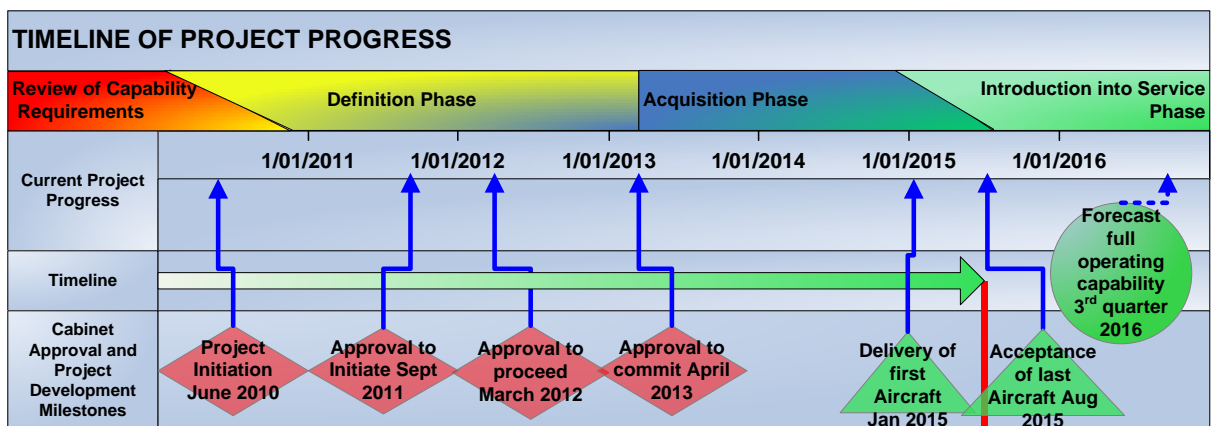
The operational requirements necessary to support the capability can be found at Part4, pages 294.

Current Project Status









	Capability: The contract's primary function and performance specifications are on track to be delivered. No major impacts on the specified operational requirements are envisaged at this stage.
	Schedule: The schedule is on track.
	Cost: The project budget is on track.

Recent Developments

Kaman delivered the first three helicopters in January 2015, the second three in May 2015 and a further two in June 2015. Facilities being provided under this project were completed in March 2015. Training was completed in Connecticut in October 2014. Work has commenced in the installation and testing of the Full Mission Flight Simulator.



Active Risks at 30 June 2015

Risk ID:	Description	Treatment							
1	If the Armaments Processing Bay (APB) at Kauri Point (the Weapons storage facility West of the Devonport Naval Base) and storage igloos are not completed by the end of September 2015 this may complicate logistics, affect training and may delay the telemetry firing and eventual release of capability.	<ul style="list-style-type: none"> Use Waiouru or Ohakea as an alternative APB until the APB at Kauri Point is completed. Delay training until later in 2015. This may also require a delay in the Telemetry Firing (scheduled for July 2016). 							
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	25 Sept 2015	Risk Authority:	NZDF
						Capability Branch			
2	If equipment and compliance obsolescence is not identified and treated this may result in increased costs, significant staff issues, pressure on spares holdings and loss of capability.	<ul style="list-style-type: none"> Supportability / Obsolescence Analysis Review option with Kaman. Development of an Obsolescence Management Plan. Ensure sufficient rotables can be sourced from the Australian Defence Force. Identify source of funding for obsolescence re-engineering. Ensure Cost Centre Managers are aware of the need to increase budgets to cater for this additional expense (\$20 million over four years). 							
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	15 Aug 2016	Risk Authority:	NZDF
						Capability Branch			
3	If the design and implementation of the encrypted data link system is not robust and the system doesn't perform adequately or to specification the data link capability may be affected and equipment may need to be modified and/or further testing may be required	<ul style="list-style-type: none"> Conduct standards and conformance testing – planned for May 2015. Conduct complete data link helicopter testing as soon as possible which is to be completed in NZ. If the data link system fails to perform to specification, then conduct required modifications. 							
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Dec 2015	Risk Authority:	MOD
						Acquisition Division			
4	If NZDF activities such as new projects, ceremonial commemorations, and military exercises take higher priority for resources, then project Introduction into Service activities may be delayed.	<ul style="list-style-type: none"> No mitigation possible at project level. Defence Governance level direction on Introduction into Service priority over ceremonial activities given. 							
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Sep 2015	Risk Authority:	NZDF
						Capability Branch			

Issues

Issue	Description	Status as at 30 June 2015
1	If the availability of Qualified Instructors is limited this may lead to delays in delivery or attainment of Directed level of Capability (DLOC).	<ul style="list-style-type: none"> Instructor employment on DLOC tasks is being minimised. A minimum number (one) of Qualified Instructors is being maintained on the legacy capability. A Qualified Instructor in a non-flying role has been reallocated to flying duties.
Critical Timing:	Current	Issue Authority: NZDF Capability Branch
2	There are insufficient people to maintain and operate the new helicopters in both Introduction into Service and Stable state due to competing calls from other NZDF activities.	<ul style="list-style-type: none"> Once the new fleet has been introduced and the impacts are better able to be assessed, conduct a further establishment and maintenance review to determine required personnel numbers. Hire NZDF civilians or contract in sufficient personnel to perform the required maintenance and support tasks in the interim.
Critical Timing:	Current	Issue Authority: RNZAF
3	Australia is unable to release spares that are common with their S-70B Seahawk helicopter until they cease S-70B Seahawk operations so that there may be insufficient spares to support operations in the interim.	<ul style="list-style-type: none"> Use spares from the two non-flying airframes. Australia has agreed to loan spares on a case-by-case basis in the event that they are required. <p>Australia is soon to set dates for SH-70B retirement and confirmed dates for the transfer is expected in August 2015.</p>
Critical Timing:	1 February 2016	Issue Authority: MOD Acquisition Division and NZDF Capability Branch
4	Due to a number of cumulative factors, the encrypted data link system has not been able to be tested in the helicopter and helicopters have had to be accepted with the system untested and unverified.	Arrangements have been made for the necessary material to permit testing in August 2015 in Auckland.
Critical Timing:	1 February 2016	Issue Authority: MoD Acquisition Division
5	When displaying radar video overlay on a tactical situation display each of the screens intermittently displays interference and distortion.	The fault will be rectified by Kaman installing a video to video convertor between the Radar's Signal Processor and the CMFD Video Distribution Unit with rectification to be completed by 1 August 2015.
Critical Timing:	1 August 2015	Issue Authority: MoD Acquisition Division and NZDF Capability Branch

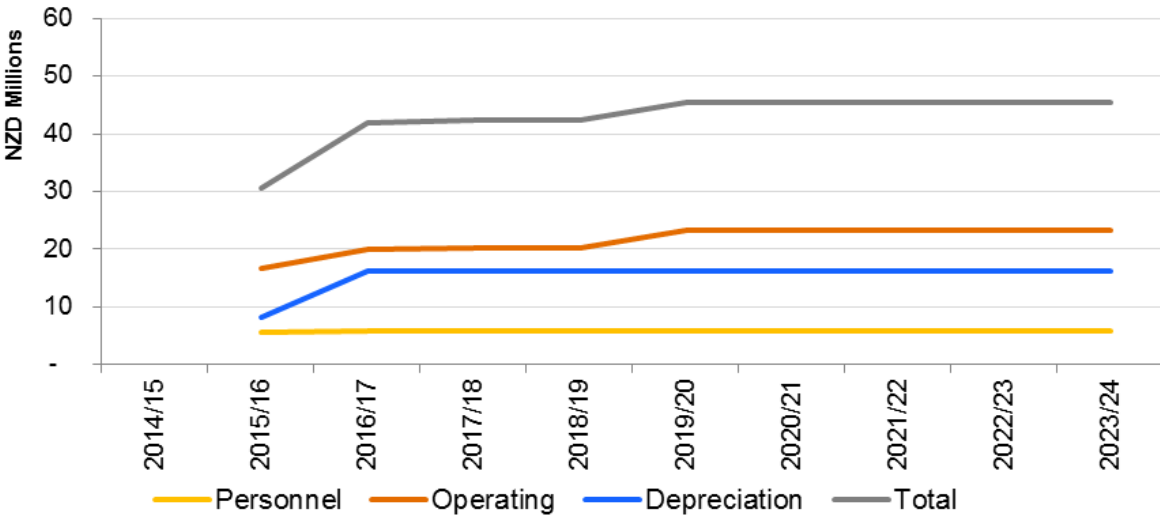
Financial Performance

Further detail on financial performance can be found at Part 3, pages 166-169.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	252.3
Life to date expenditure	184.9
Total forecast expenditure	253.6
Gross project variation (forecast)	-1.3
Foreign exchange impact	-2.7
Actual project variation (forecast)	1.4
Explanation	NOTE: The impact of a foreign exchange rate at any point of time in a project is constantly subject to change as the project progresses. These fluctuations are expected and mitigated by forward cover. Actual expenditure can only be measured once the project is complete and any variations resulting from foreign exchange differences are managed through forward cover.

Summary of Maritime Helicopter Capability Through Life Cost Estimates



MEDIUM/HEAVY OPERATIONAL VEHICLES

Project Description: This project is replacing the New Zealand Defence Force's aging medium and heavy operational vehicle fleet with new vehicles. Trucks are essential to transport troops and supplies.

Current military operations require trucks that can operate in difficult terrain, and handle bulk loads including pallets, containers and liquids. Forces on deployment may need to be supplied with everything they need (such as fuel, food, water and ammunition) across widely dispersed operations. Trucks need to protect the occupants through the provision of armour and electronic countermeasures as required. They need to support contemporary communications equipment. They need to be reliable, efficient and easy to use and provide support even when deployed in remote places.

Up to 200 new trucks are being procured from Rheinmetall MAN Military Vehicles (Australia) replacing 290 vehicles in the current fleet. On entry into operational service, they will allow the retirement of many current Mercedes Unimog and MB 2228 series trucks.

The new trucks are assembled in Vienna, Austria and then shipped to Auckland, where the manufacturer's agents (MAN) will complete New Zealand compliance. The Ministry of Defence will do final acceptance and take delivery in Auckland, and the trucks will be transferred to Defence Force Authorityship for distribution.

Some specific sub components (dump bodies and semi trailers) will be manufactured in New Zealand under subcontract to MAN. These components will be matched to the relevant trucks in New Zealand for final inspection prior to delivery.

Policy Value

The Medium/Heavy Operational Vehicle project provides essential land transport for the Defence Force. This enhances the Government's options for utilising the Defence Force for the principal tasks set out in the Defence White Paper 2010, in particular:

- to defend New Zealand's sovereignty;
- to discharge our obligations as an ally of Australia;
- to contribute to and, where necessary, lead peace and security operations in the South Pacific;
- to make a credible contribution in support of peace and security in the Asia-Pacific region;
- to protect New Zealand's wider interests by contributing to international peace and security, and the international rule of law; and
- to contribute to whole-of-government efforts at home and abroad in resource protection, disaster relief, and humanitarian assistance.

Capability Requirements

The capability requirements necessary to support policy objectives include:

- Can be fitted with Defence Force specified voice and data communication equipment
- Can be equipped with active and passive protection
- Comply with current safety regulations
- Transportable by air and sealift
- Transport range of military loads including bulk liquids, palletised and containerised loads, Defence Force modules, personnel, weapons and ammunition, loose loads
- Off road mobility including some self recovery
- Integrated load handling for some vehicles
- New Zealand Transport Agency Compatible
- Operate in wide range of climate and lighting conditions
- Run on standardised military fuel
- Commonality across fleet
- Proven in service
- Supportable in New Zealand
- Proven global supply chain
- Supportable within current Defence Force trades and resources
- Value for money over 20 year life

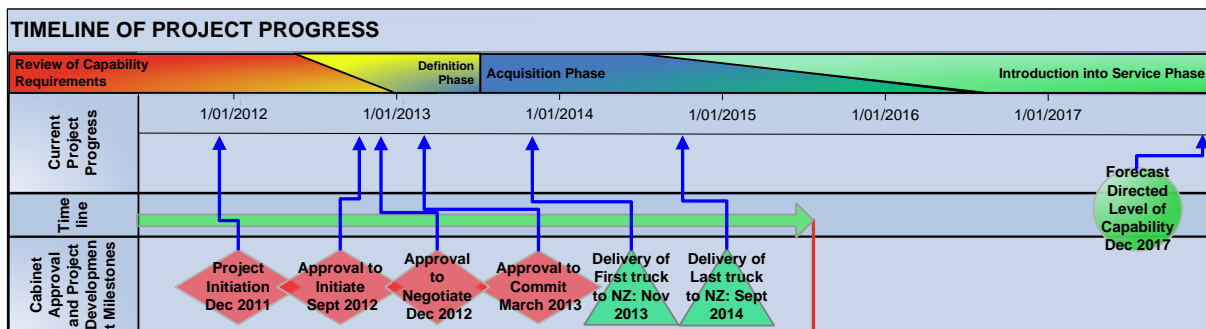
The operational requirements necessary to support the capability can be found at Part 4, page 305-306.

Current Project Status

	Capability: Contracted capability has been delivered.
	Schedule: All vehicles have been delivered. Outstanding deliveries relate to training aids and Flats racks.
	Cost: The project budget is on track.

Recent Developments

All vehicles delivered.



Active Risks at 30 June 2015

Risk ID	Description					Treatment			
1	Operational Compliance (High) – If the successful management of the vehicles within the defined axle load and weight parameters is not followed then a breach of the agreed exemptions could occur.					<p>NZDF has set up dialogue with the New Zealand Transport Agency and the Transitional Inter Service Team and introduction into service are covering the matter during training courses and instructions need to be provided which details exactly how compliance will need to be managed. Army to review infrastructure (weigh bridges) so that all necessary preventions are taken to ensure vehicles remain within the agreed parameters. Looking into on-board weigh systems as an option.</p> <p>Current actions include:</p> <ul style="list-style-type: none"> • Initial 2-year State Highway Over-weight Permits applied for each truck (excludes local roads). • Transport Compliance Manager being recruited. • Training focus on compliance management including Bridge Engineering Self Supervision qualification for all drivers. • Clear guidance for units receiving Medium Heavy Operational Vehicle provided in the Introduction into Service Instruction around compliance, and operating the vehicles safely. 			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Ongoing	Risk Authority:	NZDF
							Capability Branch		
2	Recovery Vehicle: The User Requirement for recovery vehicles is not yet finalised. Depending on the eventual agreed requirement, there may not be a MAN solution for all or part of the requirement.					A number of actions are being taken to either extend the life of the present vehicles, upgrade the present vehicles, or purchase alternative vehicles.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Ongoing	Risk Authority:	NZDF
							Capability Branch		

Issues

Issue ID:	Description	Status as at 30 June 2015	
1	Seating Pods – issue with current fitting instructions preventing introduction into service of the seating pods.	This issue has changed to one on the Load Anchorage points not being certified. This matter is being addressed by RMMVA and a Heavy Vehicle Certifier.	
Critical Timing:	August 2015	Issue Authority:	MoD Acquisition Division
2	Legacy Trailer Integration – Engineering solution for integrating legacy trailers has yet to be resolved	Awaiting Army to confirm Legacy trailer requirements for MHOV.	
Critical Timing:	August 2015	Issue Authority:	NZDF Capability Branch
3	Staffing – The Project has had its two Material Support Technical Advisors leave the project in the last 2 months.	The Project needs to maintain the project tempo and deliver all technical support to the Project.	
Critical Timing:	Ongoing	Issue Authority:	NZDF Capability Branch

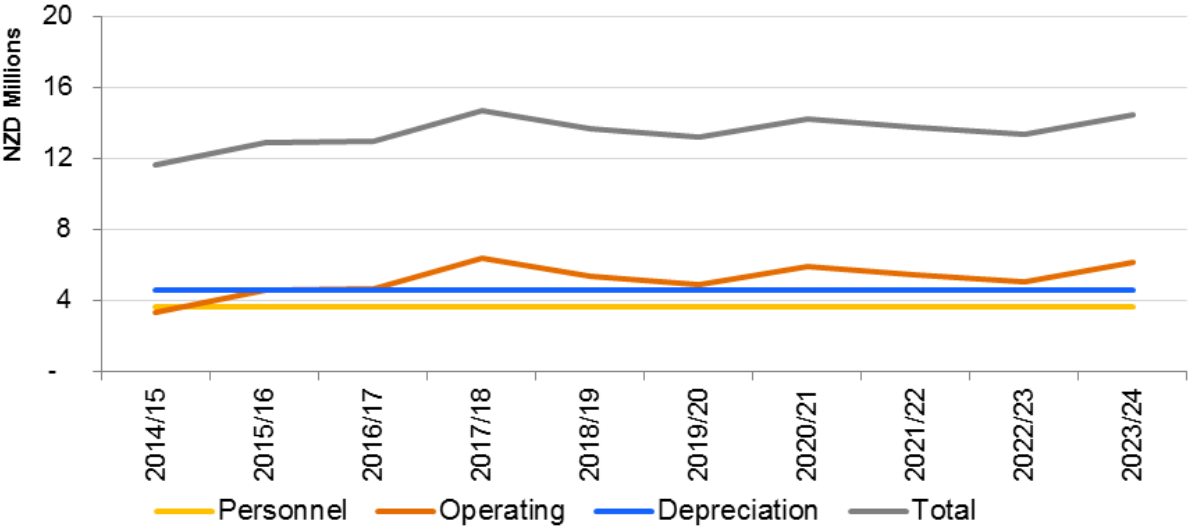
Financial Performance

Further detail on financial performance can be found at Part 3, pages 177-179.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	138.7
Life to date expenditure	98.6
Total forecast expenditure	132.9
Gross project variation (forecast)	5.8
Foreign exchange impact	4.7
Actual project variation (forecast)	1.0

Summary of Medium/Heavy Operational Vehicles Through Life Cost Estimates



STRATEGIC BEARER NETWORK

Project Description: This project will provide Satellite Communications equipment to the New Zealand Defence Force. A number of mobile (land based) terminals, maritime terminals for the Navy and fixed anchor station terminals will be purchased. This Satellite Communications equipment will access the United States Department of Defence Wideband Global Satellite Communications constellation enabling deployed forces to meet current and future strategic information exchange requirements (and meet the growing demand for bandwidth).

The Wideband Global Satellite Communications is a constellation of nine communications satellites with a full operational date of 2018/19. Seven of the satellites are operational in orbit now with the remaining two being launched over the next three years. The Defence Force have gained access to the Wideband Global Satellite Communications constellation through a Memorandum of Understanding with the United States Department of Defence. This will provide a large increase in Satellite Communications capacity for the Defence Force in return for funding a share of the build of Wideband Global Satellite Communications Satellite Nine and a share of the through life management costs.

Cabinet has approved the Satellite Communications (wideband) bearer phase of the project which is the subject of this report. A further narrowband (including High Frequency radio) phase has begun development of a Business Case in 2015.

Policy Value

Strategic Bearer Network is an enabling project supporting a number of key Defence Force functions across several capabilities including the Network Enabled Army programme, Defence Command and Control System, the P-3 Orions and the ANZAC frigates. This project will enable the Government's options for utilising the Defence Force for the principal tasks set out in the Defence White Paper 2010, in particular:

- to defend New Zealand sovereignty;
- to contribute to and where necessary lead peace and security operations in the South Pacific;
- to make a credible contribution in support of peace and security in the Asia – Pacific region;
- to protect New Zealand's wider interests by contributing to international peace and security, and the international rule of law;
- to contribute to whole of government efforts at home and abroad in resource protection, disaster relief, and humanitarian assistance; and
- to participate in whole of government efforts to monitor the international strategic environment.

Capability Requirements

The capability requirements necessary to support policy objectives include:

- Provide a computer network infrastructure with global reach, high capacity and robust design.
- Enable the Command and Control of deployed forces
- Meet the growing demands for information exchange with our deployed forces
- Provide greater levels of interoperability with security partners
- Provide Value for Money from investment in Satellite Communications

The operational requirements necessary to support the capability can be found at Part 4, page 317.

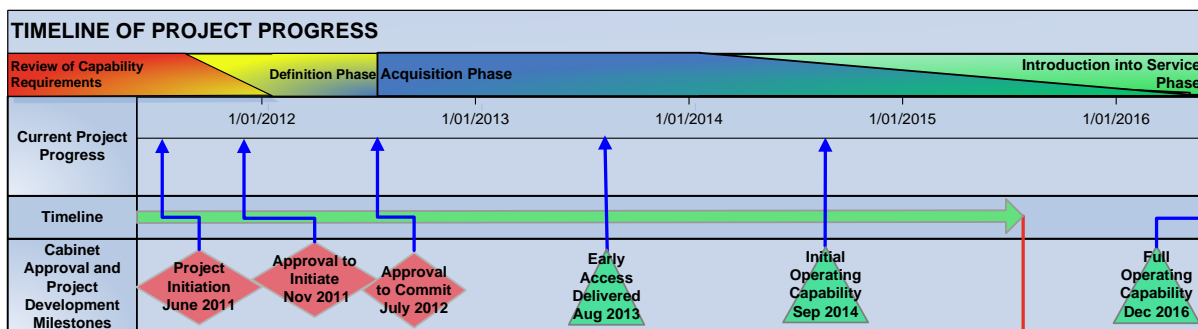
Current Project Status

	<p>Capability: The first tranche of equipment for the Defence Force has been used in a number of operational scenarios including local and overseas deployment. This has allowed the Defence Force to work through the Introduction into Service activities and this equipment has been declared operational capability in September 2014. The contract for maritime terminals is currently under negotiation.</p>
	<p>Schedule: Approximately half of the mobile terminals have been delivered with the remainder on order for delivery in late 2015. The first anchor station was delivered in March 2014 and has been used continuously since then. A tender for maritime terminals was unsuccessful and a Foreign Military Sale for the terminals is being developed with the US Government.</p>
	<p>Cost: The Defence Force is managing New Zealand’s share of the Wideband Global Satellite Communications satellite build and launch costs (agreed under the Memorandum of Understanding). The Defence Force is also responsible for the through life support costs which are identified as a share of the Wideband Global Satellite Communications satellite project management office, and the support costs of the terminals used to access the satellite. The Ministry of Defence is responsible for the acquisition of the infrastructure (mobile and maritime terminals and fixed anchor stations). The total approved budget is NZ\$83.3 million with a contingency of NZ\$5.6 million. The Defence Force share of the budget for the Memorandum of Understanding is NZ\$51 million. The Ministry of Defence acquisition budget is NZ\$32.3 million with NZ\$26.3 million in 2012 – 2016 and NZ\$6 million in 2022.</p>

Recent Developments

Contract for the supply of Wideband Global Satellite Communications Mobile Terminals: An additional five small land mobile terminals were ordered under the existing contract for delivery in November 2015 to the Defence Force.

Contract for the Supply of Maritime Terminals: It is anticipated a Foreign Military Sale order for the maritime terminals will be awarded in the third quarter of 2015.



Active Risks at 30 June 2015

Risk ID:	Description					Treatment			
1	If there are delays or long lead times with the acquisition of the Wideband Global Satellite terminals then subsequent Introduction into Service may be delayed					Continued engagement with industry and customers.			
Current Risk:	Yellow	Treated Risk:	---	Risk Trend:	---	Critical Timing:	---	Risk Authority:	MoD
						Acquisition Division			
2	If the costs of the acquisition project rise above the estimates this may impact on meeting all the project requirements.					NZDF priorities will dictate the order in which the terminals are delivered.			
Current Risk:	Orange	Treated Risk:	---	Risk Trend:	---	Critical Timing:	---	Risk Authority:	MoD
						Acquisition Division			
3	If the maritime terminals deliveries do not match up with ship availability there may be installation delays.					The MoD and Navy are working together to schedule this and will work with the FMS case to manage this.			
Current Risk:	Yellow	Treated Risk:	---	Risk Trend:	---	Critical Timing:	---	Risk Authority:	MoD
						Acquisition Division			
4	If the location for the second anchor station is not on Defence land the Project may incur additional cost.					The NZDF is to confirm the location.			
Current Risk:	Orange	Treated Risk:	---	Risk Trend:	---	Critical Timing:	---	Risk Authority:	MoD
						Acquisition Division			

Issues

Issue ID:	Description	Status as at 30 June 2015
1	Untrained personnel using the equipment may damage it or report it as unserviceable when it is not.	Ongoing additional training has been provided and the NZ Army can now run the course in house.
Issue Authority:	NZDF Army	
2	The Ka band on the HSS130 terminal has not worked since it was handed over to the NZDF.	Testing under supervision of the manufacturer's engineer and Defence Technology Agency confirmed the terminals to be working. Attention now turns to improving Integrated Logistic Support for the operators.
Issue Authority:	NZDF Logistics Command	
3	User demand for the terminals has exceeded supply through the acquisition project. The MoD can order the terminals early but their certification is still under action by the US.	HSS 130 terminals have been ordered as they are now certified. There is outstanding certification required for the Maritime Terminals.
Issue Authority:	NZDF Capability Branch	
4	Strategic terminals are being used in a tactical environment creating additional wear and tear and negative feedback from the user.	The MoD has no control over how the NZDF uses their terminals but maintenance and support costs are already higher than estimated in the business case due to the increased wear and tear. The smaller strategic terminal is more suited to this need and the recently ordered terminals should relieve some of the pressure on the larger terminals.
Issue Authority:	NZDF Capability Branch	

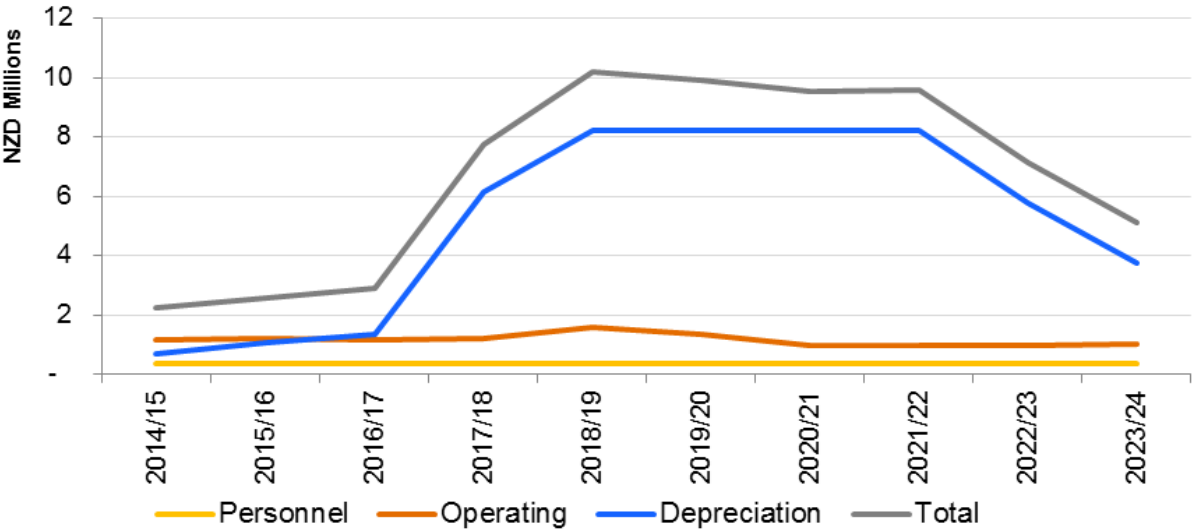
Financial Performance

Further detail on financial performance can be found at Part 3, pages 188-190.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	88.9
Life to date expenditure	47.5
Total forecast expenditure	81.6
Gross project variation (forecast)	7.2
Foreign exchange impact	0
Actual project variation (forecast)	7.2

Summary of Strategic Bearer Network Phase 1 Through Life Operating Cost Estimates



PART 2B SUMMARIES OF PROJECT INFORMATION REPORTS

DEFENCE COMMAND AND CONTROL SYSTEM

Introduction: The 2010 Major Projects Report included the Joint Command and Control System Programme. It reported that of the four projects identified in that programme, only the Defence Command & Control System Project had commenced, and that the other three were still in the concept stage.

On 18 July 2011, however, Cabinet cancelled the Joint Command and Control System Programme. It did so because the capability gaps identified in the 2008 Business Case, and which were to be addressed by the three projects other than Defence Command & Control System, had significantly reduced. The previously agreed scope and structure of the Programme, therefore, were no longer appropriate.

Accordingly, this Project Information Sheet reports on the Defence Command & Control System Project only.

At the same time as the Cabinet decision, the lead for the acquisition of the Defence Command & Control System Project transferred from the Defence Force to the Ministry of Defence. Governance remains with a Ministry of Defence/Defence Force Capability Steering Group accountable to the Capability Management Board.

The project team engages closely with NZDF's CIS Branch and the NZDF Intelligence Community to progress and develop the project

The Acquisition Work

The project was originally managed in spirals, as follows:

- Spiral 1: the implementation of Global Commanding Control System - Maritime Version 4 including Intelligence features onto the Multi-Agency Network – Restricted at the National Maritime Co-ordinating Centre located at Headquarters Joint Forces New Zealand in Trentham.
- Spiral 2: the implementation of Global Commanding Control System - Maritime Version 4, including Intelligence features, onto the Defence Force Secure Wide Area Network

Cabinet approved the adoption of the Global Command and Control System – Joint on 29 October 2013 as the Maritime variant was no longer considered by Defence to be the optimum variant of the US Global Command and Control System (GCCS), for the whole of the New Zealand Defence Force. The project is now managed in phases as follows:

- Phase 1 : the pilot of GCCS-J at a small number of sites, and as ship trials

- Phase 2: the rollout of GCCS-J across the New Zealand Defence Force

GCCS-J provides systems for improving the effective command and control of Joint Forces of the New Zealand Military, and includes Integrated Imagery and Intelligence (I3).

Schedule

With the adoption of the Joint version, the project will now complete by the end of 2017.

Active Risks as of 30 June 2015

Risk ID:	Description					Treatment			
1	If there is lack of availability of appropriately skilled resources this may cause further schedule slippage.					Continue communication with CIS resources managers to provide timely requests for high demand resource. Where possible, secure dedicated resource for the DC2S project.			
Current Risk:	---	Treated Risk:	---	Risk Trend:	---	Critical Timing:	---	Risk Authority:	MoD
								Acquisition Division	
2	If the quality of information delivered by the Common Operating Picture (COP) is poor, this could result in failure to adopt it as an integral element of Command and Control.					Joint Forces New Zealand and Joint Intelligence Fusion Centre to negotiate a service level agreement that defines COP quality and fitness for use in a given context.			
Current Risk:	---	Treated Risk:	---	Risk Trend:	---	Critical Timing:	---	Risk Authority:	NZDF
								Capability Branch	
3	If there is evolving requirements from related projects, this could cause further slippage.					Continue collaboration with related projects.			
Current Risk:	---	Treated Risk:	---	Risk Trend:	---	Critical Timing:	---	Risk Authority:	MoD
								Acquisition Division	

Issues

Issue ID:	Description	Status as at 30 June 2015	
1	JC2CUI (Joint Command and Control Common User Interface) GCCS-J client solution	JC2CUI client remains withheld pending US Government release to NZ and the need to then evaluate it. JC2CUI is expected to be the preferred GCCS-J client type for a significant number of NZDF users including the other government agencies. Expected benefits include lower licensing costs, and improved operator effectiveness.	
Critical Timing:	Current	Issue Authority:	MoD Acquisition Division
2	AIS (Automated Identification System for vessels)	AIS data has important shipping information which needs to be displayed on the Common Operating Picture. A decision is needed on what solution is to be used for bringing AIS data into GCCS-J. There are two options: NZDF developed or US Coastguard software which DISA provided recently. The issue is that until the solution is decided, it cannot be implemented which impacts on the schedule. Through testing and evaluation, the solution can be decided.	
Critical Timing:	Current	Issue Authority:	NZDF Enterprise Architect
3	JIFC manning (Joint Intelligence Fusion Centre)	The JIFC, who are responsible for managing DC2S COP data and providing quality control, are unable to support sustained 24x7 operations, due to their manning levels.	
Critical Timing:	Current	Issue Authority:	NZDF Commander Joint Intelligence Fusion Centre
4	Technical resource availability	The scarcity of specialised technical resources in some areas in the Defence Force's Computer Information Systems Branch is delaying progress. Prioritisation is resulting in DC2S project tasks being queued to wait until other projects or business as usual work is completed first.	
Critical Timing:	Current	Issue Authority:	MoD Acquisition Division

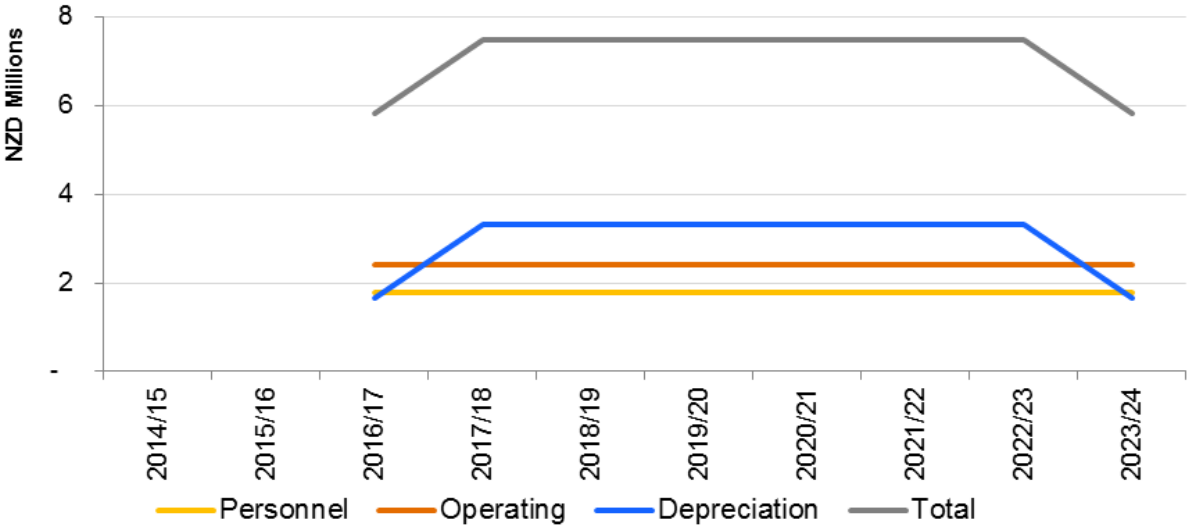
Financial Performance

Further detail on financial performance can be found at Part 3, pages 197-199.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	23.6
Life to date expenditure	11.3
Total forecast expenditure	23.0
Gross project variation (forecast)	0.6 under spend
Foreign exchange impact	0.1 (favourable)
Actual project variation (forecast)	0.5
Explanation	N/A

Summary of Defence Command and Control Through Life Cost Estimates



PROJECT PROTECTOR REMEDIATION MULTI-ROLE VESSEL, OFFSHORE AND INSHORE PATROL VESSELS

Project Background: Project Protector delivered a Multi-role Vessel, two Offshore and four Inshore Patrol Vessels. These vessels were acquired to perform a range of sealift and naval patrol tasks for the Defence Force and civilian agencies.

The ships were delivered with capability shortfalls and deficiencies that were subject to a mediation claim and settlement. This project will remediate the shortfalls and deficiencies.

The Acquisition Work

A two phase programme is being undertaken:

- Phase one involves detailed planning and design work. This includes scrutiny of the costs of potential changes in relation to the level of benefit they provide and the amount of settlement funding that remains.
- Phase two involves the remediation solutions and optimisations for *Canterbury* and the rest of the Protector fleet which are priorities for implementation.

This second phase involves the implementation of the prioritised list of physical changes that have been identified during Phase One. These changes have been undertaken in six work streams:

- Priority One: Sea-keeping
- Priority Two: *Canterbury's* Ship to Shore Transfer System
- Priority Three: *Canterbury's* Mission Systems
- Priority Four: Aviation Integration on *Canterbury*
- Priority Five: *Canterbury's* Medical Systems
- Priority Six: Minor Safety and Compliance Items

A range of changes to address immediate safety and capability issues have been completed. All design work is completed with the majority of implementation completed on all vessels.

Schedule

Installation work on all vessels has progressed throughout the period. As at 30 June 2015 the project was 93% complete and the plan anticipates work completion of 99 % in June 2016.

Four (of 23) items remain outstanding for *Canterbury* being the completion of the Void 14 ballast, the upgrade of the ship's crane to 65 tonnes, software installation for the sensor management system and finalisation of the aviation management capability. The last three items are on schedule for completion by project closure in June 2016, The completion of the ballast work is docking dependent and is scheduled for the planned docking in September 2016.

Five (of six) items are completed on *Wellington*. *Otago* requires the upload of accepted software for the Sensor Management System in August 2015. Both vessels are planned to receive the aviation management capability following Canterbury installation.

All work is completed on *Hawea* and practically complete on *Rotoiti*. The same work is planned for *Taupo* and then *Pukaki* through the remainder of 2017.

Active Risks as at 30 June 2015

Risk ID:	Description:					Treatment			
1	Operational demands on in service ships may impact on production schedules and Operational Release of ships.					<ul style="list-style-type: none"> • Prioritisation of work. • Use of interim Operational Release. 			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	--	Risk Authority:	NZDF
								Navy	
Risk ID:	Description:					Treatment			
2	The NZDF may not be ready for introduction into service (specifically Operational Release).					<ul style="list-style-type: none"> • Prioritisation of work. • Use of interim Operational Release. 			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	--	Risk Authority:	NZDF
								Capability Branch	

Issues

Issue ID:	Description:	Status as at 30 June 2015	
1	Operational Release Programme.	Operational release paper is being prepared by the Navy which needs to take into account operational demands.	
Critical Timing:	--	Issue Authority:	NZDF: Navy

Financial Performance

Further detail on financial performance can be found at Part 3, pages 205-206.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	60.8
Life to date expenditure	51.2
Total forecast expenditure	60.4
Gross project variation (forecast)	0.3 (under spend)
Foreign exchange impact	0.0
Actual project variation (forecast)	0.3 (under spend)

NETWORK ENABLED ARMY TRANCHE ONE

Project Background: The Network Enabled Army (NEA) Tranche 1 Project is to deliver modern communications to the land force units most often deployed by the Government – Special Operations Forces (SOF); and a land force commitment, including infantry, a Task Group Headquarters and communications personnel, of around 200 personnel. This project is part of the wider NEA Programme.

ACQUISITION PHASE

Summary of acquisition phase

In April 2015, Cabinet approved NEA Tranche One Project funding for new digital radios and associated equipment as part of the NEA Programme (CAB Min (15) 11/7 refers).

A Charter for NEA Tranche 1 Project acquisition process is under consideration.

How Defence decided to acquire the Capability Solution

The NEA Tranche 1 Project has a range of interlinked capabilities that will be delivered through a series of acquisitions. These capabilities are outlined in Volume 3 of the MPR. They were developed through the NEA Programme Business Case. This was approved by the Minister of Defence and provided the basis for the Tranche 1 Project approved by Cabinet.

Financial Performance

Further detail on financial performance can be found at Part 3, pages 211-213.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	106
Life to date expenditure	0.0
Total forecast expenditure	106
Gross project variation (forecast)	0.0
Foreign exchange impact	0.0
Actual project variation (forecast)	0.0

Schedule/Timeframe/Progress

The Tranche 1 Acquisition Phase Project Charter is due to be considered through the Defence NEA Governance process in November 2015. This will establish the agreed schedule.

Tranche 1 is due for completion by June 2018.

MAJOR PROJECT RISKS AND ISSUES

Risks were identified at project establishment and are managed on an ongoing basis.

As at 30 June 2015, the NEA Tranche 1 Project did not yet have a Risk Register although the NEA Programme did. A joint Risk Register involving both the acquisition and Introduction into Service phases will be developed for Tranche 1 by the end of 2015.