



MAJOR PROJECTS REPORT 2016

1 July 2015 – 30 June 2016

Volume 1

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FOREWORD

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

This is the seventh 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 2015 to 30 June 2016, has seen very good progress made in delivering on major procurement projects. An important aspect of this is that we have been able to close, or shortly will close, projects which have been in the acquisition phase for a number of years. Three projects, therefore, which were in the 2015 Report do not appear in this Report (A109 Training and Light Utility Helicopter, P-3K Orion Mission Systems Upgrade, and Medium/Heavy Operational Vehicles).

Ten of the 13 projects in the 2015 Report are again covered in the 2016 Report. Four of these projects (Pilot Training Capability, Maritime Helicopter Capability, ANZAC Frigate Platform Systems Upgrade, and Protector Remediation) achieved important milestones. This is discussed further in the section on "Performance in the 2015/16 Year".

The one new project in this year's Report is Individual Weapon Replacement. This Project reflects previous feedback provided by the Controller and Auditor-General that, to improve the procurement of equipment, we should acquire "off the shelf" equipment as is the case here.

Although only the one major project was approved for acquisition by the Government during this reporting period, significant work occurred across a range of other projects in the capability development phase. Two of these (the Maritime Sustainment Capability and Underwater Intelligence, Surveillance and Reconnaissance) have now been approved by the Government for acquisition and will be included in the next Report.

In June the Government released the Defence White Paper 2016. This has set the scene for significant capability renewal over the next decade including replacements for the Defence Force's air transport and air surveillance fleets and the ANZAC frigates. Further details on the Government's equipment procurement programme are included in an updated 2016 Defence Capability Plan.

We have also continued work:

- on the Defence Capability Management System so that it will be regarded as an international exemplar in this area;
- investing in people for the Ministry's Capability Delivery Division (formerly Acquisition Division) through the appointment of experienced project management professionals and ensuring they are well supported by dedicated procurement, finance, risk management and practice management expertise;

- strengthening executive management oversight, governance and assurance of projects through individual project boards, which include external expertise; and
- developing a new system for assessing projects' benefits to ensure Defence can meet the Cabinet mandated requirements for reporting on how well projects are meeting the benefits described in business cases.

In the coming year we expect to make important advancements towards achieving our goal of having fully integrated project teams covering major projects from approval to initiate to in service.

The Ministry has also enhanced its direct engagement with industry through appointing a Chief Advisor Defence Industry Engagement. The appointment complements similar positions in the Defence Force.

We have made major strides in the last year both in delivering capability to the Defence Force and in ensuring that in the future we will be able to successfully deliver the Government's significant investment in major military capability. This is a very pleasing outcome for Defence.



HELENE QUILTER

Secretary of Defence

12 July 2017



for T.J. KEATING

Lieutenant General

Chief of Defence Force

18 July 2017

STRUCTURE OF AND BACKGROUND TO THE 2016 MAJOR PROJECTS REPORT

Structure

The 2016 Report is presented in four parts:

- **Part 1** includes a qualitative and quantitative assessment of Defence's management of the ten current projects (excluding the new project: Individual Weapon Replacement), and performance with respect to three aspects: schedule, cost, and capability, in the year 1 July 2015 – 30 June 2016. Part 1 also provides comments on what Defence is doing in order to improve its performance in managing projects.
- **Part 2** provides project summaries for the 11 projects, including Individual Weapon Replacement. 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 3** includes 11 more detailed project data/information sheets. These provide further information on the acquisition phase and how the capability is being introduced into service.
- **Part 4** contains the 11 projects' history and project definition information.

Background

The 2016 Report is the seventh 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 2016 Report project data sheets/information sheets includes a new entry on Individual Weapon Replacement and updates on ten of the projects included in the 2015 Report and their project status, contract payments, risks, and schedule information:

- C-130H Life Extension
- NH90 Medium Utility Helicopter
- Pilot Training Capability
- ANZAC Frigate Platform Systems Upgrade
- ANZAC Frigate Systems Upgrade
- Maritime Helicopter Capability
- Strategic Bearer Network
- Project Protector Remediation
- Defence Command and Control System
- Network Enabled Army Tranche One

As in 2015 the details for Project Protector Remediation, the Defence Command and Control Project and Network Enabled Army Tranche One are presented in information sheets rather than

data sheets to better reflect the differences of these three projects from the other ten discussed in the Major Projects 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 2016 Major Projects Report: Individual Weapon Replacement which was authorised in December 2015.

Projects not included

The criteria for removing projects from the Major Project Report is when the project finishes its acquisition phase. On that basis three projects included in the 2015 Major Projects Report have been removed from the 2016 report:

- The A109 Training and Light Utility Helicopter Project has now closed, with the A109 helicopters entering into service in December 2015.
- The P-3K Orion Mission Systems Upgrade Project was completed in the 2014/15 financial year and the project closed in December 2016.
- The Medium/Heavy Operational Vehicles Project acquired and accepted all 194 vehicles by June 2015 and project closure is planned for March 2017. While Cabinet’s 2012 approval of the project included funding for recovery vehicles, these were not included in the prime contract and will be addressed by a new, separate project.

In the coming years a group of legacy projects¹ will also come to an end due to the capability having been delivered as well as more recent projects being delivered within agreed schedules.

¹ Legacy projects refers to projects under acquisition prior to the introduction in 2010 of the Capital Asset Management regime and the Better Business Case process.

PART 1: ASSESSMENT OF PERFORMANCE

This section provides an assessment of the 11 projects in the Report across three metrics: schedule, budget, and capability. It should be noted, however, that at the time of this report, the Individual Weapon Replacement project 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 benefits 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. In the past, 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 2015/16 YEAR

Defence has assessed that for the 2015/16 year it has achieved a very good standard:

- The first pilot 'wings' course commenced on the Pilot Training Capability T-6C aircraft, and two simulation training devices were installed.
- The last two of ten Seasprite helicopters to be delivered under the Maritime Helicopter Capability Project arrived.
- The Individual Weapon Replacement Project entered the acquisition phase with a good start and remains on track.
- The Protector Remediation and ANZAC Frigate Platform Systems Upgrade projects were close to completion.

Two projects encountered further delay:

- The C-130 Life Extension Project saw delivery of the last upgraded aircraft pushed back from August 2015 to March 2017. The aircraft was delivered in February 2017. A major reason for the delay was the longer than expected time required to deal with unforeseen structural issues encountered with the aircraft's fuselage.

- The ANZAC Frigate Systems Upgrade Project saw the first ship for induction refit pushed back from November 2016 to July 2017 due to delays in the installation design.

SCHEDULE

The updated schedules for each major project are provided in the individual project data/information sheets provided in Part 3 of the 2016 Report.

Of note, recently commenced projects Pilot Training Capability and Maritime Helicopters Capability substantially adhered to their schedules. Similarly, the second frigate in Phase 2 of the ANZAC Frigate Platform Systems Upgrade Project adhered to its schedule and Protector Remediation had no slippage.

Schedule slippage was a much less significant factor in the past year as a long-running project, the purchase of the NH90 helicopters, was close to being completed.

COST

No cost increases were incurred during the period under view although the Strategic Bearer Network Project was awaiting a Cabinet decision on additional funding (now agreed). 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 was sought.

A number of projects have continued to benefit from favourable foreign exchange variations.

CAPABILITY

Overall, there has been no change in capability requirements for the ten projects carried over from the 2015 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 the 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 2015 Major Projects Report	Schedule variation or update since the 2015 Major Projects Report	Cumulative schedule variations since the original contract forecast	Capability changes since the 2015 Major Projects Report	Operational Impact of Delay
C-130H Life Extension	None.	Four upgraded aircraft had been delivered to the Royal New Zealand Air Force by 30 June 2015. The remaining aircraft is now forecast to be delivered in March 2017, a seven month slippage on the revised schedule outlined in the 2015 Report.	Around 75 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.
Pilot Training Capability	None.	The project is on schedule.	None.	None.	Not applicable.
ANZAC Frigate Platform Systems Upgrade	None.	<i>Te Mana</i> 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	The cost of installation is under pressure. The extent of that pressure will only be known once the design phase is completed in the coming year.	Longer than anticipated time has been required for the preliminary design phase which has delayed the start of the refit to 1 July 2017.	Cumulative 12 month delay from the project implementation business case baseline.	None.	Any impact in view of the delayed induction was still being assessed at 30 June 2016.
Maritime Helicopter Capability	None.	The last platform was delivered in September 2015.	None.	None.	Not applicable.
Strategic Bearer Network	None.	Proceeding with the procurement of the maritime terminals and the second Anchor Station has awaited Cabinet approval (since obtained) of additional funding. A further 12 months delay to delivery of the project has occurred.	30 months.	None.	First possible installation on RNZN vessel was missed, remaining installation dates can still be met. 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 has been 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 2016, rather than the originally forecast December 2015. Full Operational Capability is now scheduled to be introduced by June 2018, rather than the originally forecast June 2015.	12 months. 36 months.	None.	Delivery of capability is undertaken as personnel and platforms are available.
Network Enabled Army Tranche 1	None.	There has been no change since the Project was approved by Cabinet in April 2015.	None.	None.	Not applicable.
Individual Weapon Replacement	New project in 2016 Major Projects Report.	The project is in the acquisition phase. Delivery of some ancillary equipment has occurred within the reporting period.	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 the 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. Since 2015, momentum in these areas has increased with the additional investment in Ministry of Defence and the Defence Capability Change Action programme. 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;
- attracted professional project managers from the market, as well as specialist procurement, finance, risk management, and practice management expertise;
- improved governance and executive management oversight with the establishment of the Capability Management Board, Capability Steering Groups, and individual Project Boards. The Capability Management Board and individual Project Boards include 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 approach to project management through the introduction of Integrated Project Teams for major projects and joint artefacts, 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 Network Enabled Army Tranche 1 (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 reducing risk and 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.

In 2015-16 Defence continued its focus on the way in which it is approaching the management of defence capability.

The Defence Capability Change Action Programme continues the objective of developing 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 includes 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 is enabling 30 new positions to be created in the Capability Delivery Division (formerly the Acquisition Division). For example, appointments have included three new Domain 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 staff in contracting, project management practice, finance and industry engagement. There are also new positions in the capability development area.

Defence is looking to get the best possible value for money over the life of capability purchases through, for example, having appointed 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 2015/16 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 planned and monitored by Navy's Maritime Test and Evaluation Authority.
- 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 the last production aircraft is delivered, scheduled for March 2017.
- 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 January 2018.
- Pilot Training Capability: All 11 aircraft have been successfully delivered and formally accepted by the NZDF. The first RNZAF Pilots "Wings" course commenced on 1 February 2016 and is progressing well. The course is expected to be complete in mid 2017. The two simulators are installed, powered up and functional in the new facility in Ohakea. Beechcraft completed rectification work (projector upgrade) to improve the brightness level and enable them to fully meet industry standards. Infrastructure work at Ohakea is complete. The final two of four fuel tankers were delivered to Ohakea in September 2016.
- Maritime Helicopter Capability Project: All ten helicopters, spares and support equipment, publications and training have been delivered. The Full Mission Flight Simulator was provisionally accepted on 30 October 2015. The Software Support Centre (SSC) was accepted on 5 May 2016. The SSC contract with Beca Applied Technologies was signed on 1 April 2016 and provides Through Life Support to the mission system software to the aircraft until 2030. The SH-2G(I) was awarded its Interim Type Certificate on 7 April 2016. This follows a significant period of shore based Operational Test & Evaluation. The SH-2G(I) Seasprite embarked in HMNZS *Te Kaha* on 11 April 2016 to conduct a work up and to participate in exercise Rim of the Pacific (RIMPAC) 2016. The Seasprite Transition Unit was disbanded on 14 April 2016 and all personnel were subsumed into the Air Force's 6 Squadron. Simultaneously the SH-2G(NZ) was withdrawn from service.
- Individual Weapon Replacement Project: The Introduction into Service plan will introduce the MARS-L rifle system into service across the NZDF. In order to ensure the readiness of the MARS-L capabilities to support NZDF operations it will be monitored by the Directorate of Land Capability Delivery.

DEPUTY 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). Our 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 Major Projects Reports that report on the status of 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 *Major Projects Report 2016*

My commentary covers the *Major Projects Report 2016*. This year's report covers eleven projects. Three projects from the previous year's report have been successfully introduced into service and have therefore not been reported on. These projects are outside the scope of our work. There is one new project in 2016. Cabinet approved the Individual Weapon Replacement project in December 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 2016. 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 17-19.

My staff also reviewed Part 1 of the *Major Projects Report 2016*, which provides Defence's summary assessment of its performance in managing and delivering the 11 projects.

Overall view of the *Major Projects Report 2016*

Overall, I consider that Defence has realistically assessed its performance in managing the 11 projects. The 2016 report demonstrates a commitment to transparency and continuous improvement. The acquisition phases of several older projects have come to an end, and most of the newer projects are on schedule, with the exception of the final C-130H Hercules aircraft Life Extension project and the ANZAC Frigate Systems Upgrade first ship refit. The Strategic Bearer Network is the only project to experience cost increases since the 2015 report. The limited availability of personnel remains a risk for some projects but has improved from previous years.

Several projects are expected to be completed this year, and two new projects will be reported on in the 2017 report. This provides an opportunity for Defence to use the lessons it has learned from the past few years of major project monitoring. I expect Defence to continue improving the quality and standard of procuring and reporting on major project acquisition.

General commentary on the *Major Projects Report 2016*

Defence has continued to act on our office's recommendations from 2010. Defence has maintained improvements in how it manages and reports on new projects. The latest project, Individual Weapon Replacement (IWR), is a project that will replace the existing New Zealand Defence Force (NZDF) rifle and grenade launcher with a more modern weapon. The new weapon will provide increased reliability and flexibility as well as improve the overall effectiveness of NZDF operations in future operating environments. The acquisition of this weapon was done through a better business case framework that looked at several criteria to determine the best option for NZDF. Defence has managed the initial phases of acquisition

of the IWR project well, with a clear procurement strategy that addresses the issues our office raised in our review of the *Major Projects Report 2010*.

After improvements in recent years, Defence has maintained the timeliness of delivery of most of its newer projects. The new major projects approved in 2014 and 2015 are generally on schedule as of 30 June 2016, with the exception of the Frigate Systems Upgrade, which has experienced delays caused by the installation design. The new pilot training centre in Ohakea has been launched, and two new simulators have been installed. 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.

In line with Cabinet's requirements, Defence has produced a benefits measurement framework that will enable benefits to be measured and tracked each year. With this in place, Defence should be able to assess whether its major project acquisitions are achieving the intended outcomes.

Personnel risks

Personnel risks to projects have improved from last year's report, with a lack of personnel being identified as a risk or issue for only four of the eleven projects. This improvement is due partly to risk reduction and planning and partly to the completion of some projects. With several new projects expected to be included in the report over the next 1-2 years, I expect that Defence will continue to identify and treat personnel risks as early as possible.

Defence has taken steps to mitigate the personnel risks for the older projects, and newer projects are benefiting from increased awareness and preparation. It is too early to tell whether this improvement will be sustained, and so I encourage Defence to continue monitoring these risks for current and future projects.

Detailed comments on projects

The C-130H Life Extension project was completed in March 2017. Unforeseen structural work not encountered on the previous aircraft is the main reason for the delay to the revised 2015 schedule. The ANZAC Platform Systems Upgrade is nearing completion, with operational release and project closure scheduled for December 2016. The Protector Remediation vessels are awaiting their imminent operational release by the Chief of Navy following the completion of remaining installations. The NH90 helicopters are on track to achieve their full operating capabilities in January 2018. The retirement of the last Iroquois helicopter has helped relieve the strain on personnel resources, because the older helicopter no longer needs to be sustained.

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



Greg Schollum
Deputy Auditor-General

6 July 2017

**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 2016**

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 2016* 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 20-62, the project data sheets on pages 63-136, the project information reports on pages 137-155, and the project definition information on pages 159-233 cover the following acquisition projects:

- C-130H Life Extension;
- Individual Weapon Replacement
- NH90 Medium Utility Helicopter;
- Pilot Training Capability;
- ANZAC Platform Systems Upgrade;
- ANZAC Frigate Systems Upgrade;
- Maritime Helicopter Capability;
- 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 2016;
- seeking explanations from Defence staff for any questions arising from the reconciliations; and
- seeking assurances from Defence about events subsequent to 30 June 2016.

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 2016* 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.

My responsibility

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*, which requires compliance with the External Reporting Board's Professional and Ethical Standard 1 (Revised): *Code of Ethics for Assurance Practitioners*.

As the Deputy 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 2016* has not been fairly disclosed.

A handwritten signature in black ink, consisting of a stylized 'G' followed by a horizontal line with a small flourish at the end.

Greg Schollum
Deputy Auditor-General

Wellington, New Zealand

6 July 2017

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.

C-130H LIFE EXTENSION

Project Description: This project is extending the life and availability of the five Royal New Zealand 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.

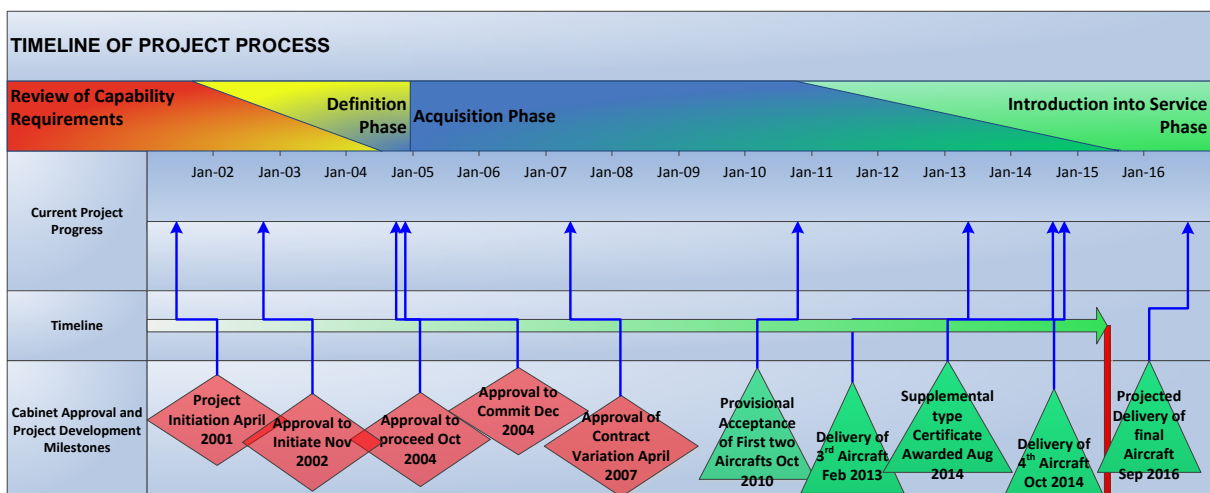
The operational requirements necessary to support the capability can be found at Part 4, page 164.

Project Status as at 30 June 2016

	<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 the third calendar quarter of 2016 to upgrade all five aircraft.</p>
	<p>Schedule: Four upgraded aircraft have been delivered to the Royal New Zealand Air Force. The last aircraft is scheduled for delivery in the third quarter of 2016, 75 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 is nearing completion the requirement for additional funding to complete the programme, as signalled to Cabinet in July 2010, should not be required. All contingency however, has now been drawn down and the funding remains very tight. The budget is monitored very closely against the current scheduled completion date.</p>

Developments post 30 June 2016

- The final aircraft is now scheduled to be completed at Woodbourne, Blenheim in March 2017. A significant amount of structural work, not seen on the four other aircraft, is the main reason for the delay to the completion date. A successful tripartite meeting between Honeywell, L-3 and the Crown early in 2016 resulted in commencement of the final software load by Honeywell. This will be completed in 2017 and will resolve the remaining issues in the current load. The Crown is actively involved and progressively testing all fixes until completion of the load.



Active Risks at 30 June 2016

Risk ID:	Description					Treatment			
1	If the software V120 load is unsuccessful then the remaining software issues may have to be carried for the remaining in-service life of the aircraft.					The contracted scope of work with Honeywell requires all scope items to be fully resolved at no cost to the Crown. The Crown is progressively testing each group of issues as they are fixed by Honeywell before moving on to the next group.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Nov 2017	Risk Authority:	MoD
							Acquisition Division		

Issues

Nil issues.

Financial Performance

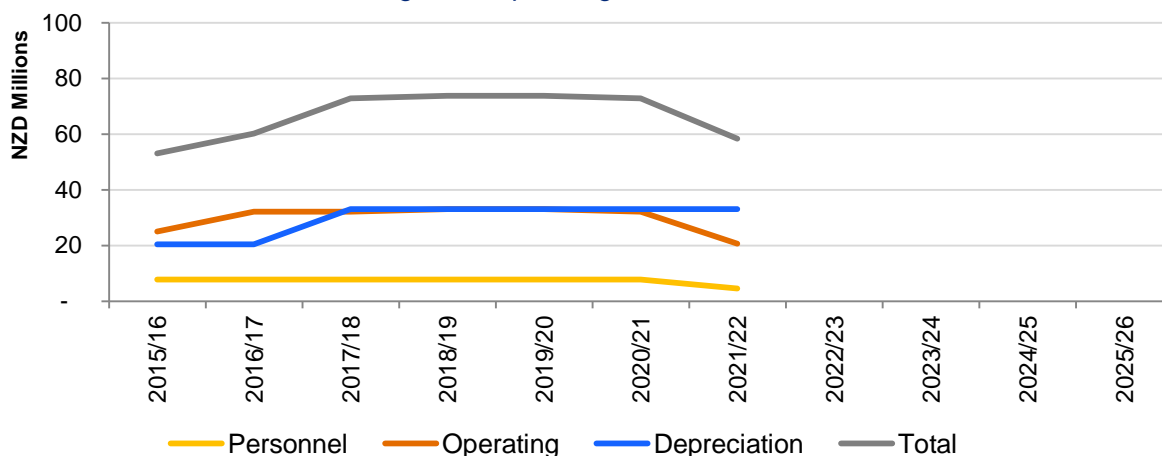
Further detail on financial performance can be found at Part 3, pages 64-66.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	264.8
Life to date expenditure	260.1
Total forecast expenditure	261.1
Gross project variation (forecast)	3.7
Foreign exchange impact	(3.7)
Actual project variation (forecast)	0.0

Summary of C130H Life Extension Through Life Operating Cost Estimates

C-130H Life Extension: Through Life Operating Costs



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 have been acquired from NATO Helicopters Industries to replace the Royal New Zealand Air Force Iroquois fleet. An additional (ninth) helicopter has been 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.

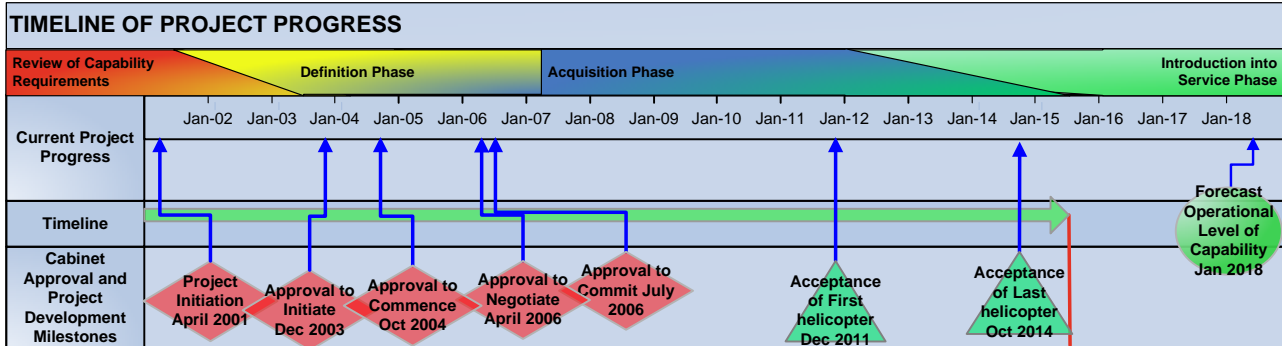
The operational requirements necessary to support the capability can be found at Part 4, page 172.

Project Status as at 30 June 2016

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 August – October 2016.
Cost:	The project is within budget and declared an underspend.

Developments post 30 June 2016

The loading of an RNZAF NH90 into an RAAF C-17 using RAAF and Australian Army equipment was completed successfully.



Active Risks at 30 June 2016

Risk ID:	Description	Treatment							
1	If the resources to train air and maintenance crews for embarked operations do not allow the achievement of Directed Level of Capability (DLOC) standards there is a risk that DLOC readiness for deck and amphibious operations may not be generated or maintained.	Mitigation: The Chief of Air Force has recognised the risk and has directed Assistant Chief Air Force Strategy & Management to investigate and report on potential solutions.							
Current Risk:		Treated Risk:		Risk Trend:	Stable	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 THEN there is a risk that the NZDF/RNZAF's reputation will be undermined.	Mitigation: Continue to manage the introduction of new capabilities in order to deliver full operational capability as soon as possible.							
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 2016	
1	The RNZAF is not able to provide sufficient 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 now used routinely for all flights with six final sets available. The two prototype loadspreader floors will be upgraded to final production status giving coverage across all flying aircraft with spares to hand. NATO Helicopter Industry (NHI) will provide replacement aircraft floors in due course. The load spreader floors will continue to be used, however, even with these new floors as a husbandry measure.	
Critical Timing:	December 2016	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.	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 in service 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

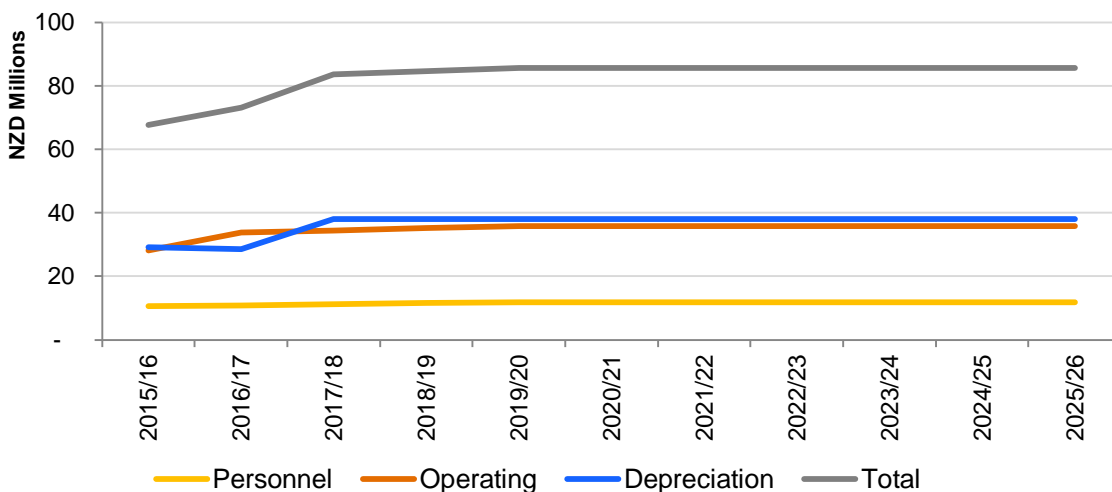
Further detail on financial performance can be found at Part 3, pages 75-76.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	771.7
Life to date expenditure	675.8
Total forecast expenditure	675.8
Gross project variation (forecast)	95.9 under spend
Foreign exchange impact	(93.0)
Actual project variation (forecast)	2.9
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

NH90 Medium Utility Helicopter: Through Life Operating Costs



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.

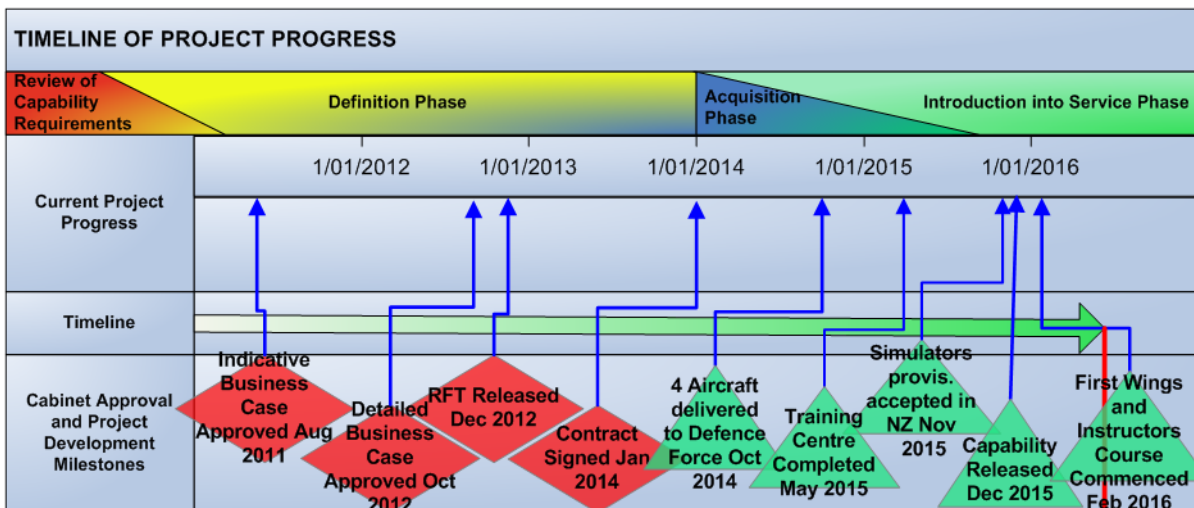
The operational requirements necessary to support the capability can be found at Part 4, page 179.

Project Status as at 30 June 2016

	Capability: The capability was 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 were accepted by the NZDF.
	Cost: The project budget remains on track.

Developments post 30 June 2016

The final two of four fuel tankers were delivered to Ohakea in September 2016.



Active Risks as at 30 June 2016

Nil Risks.

Issues

Nil Issues.

Financial Performance

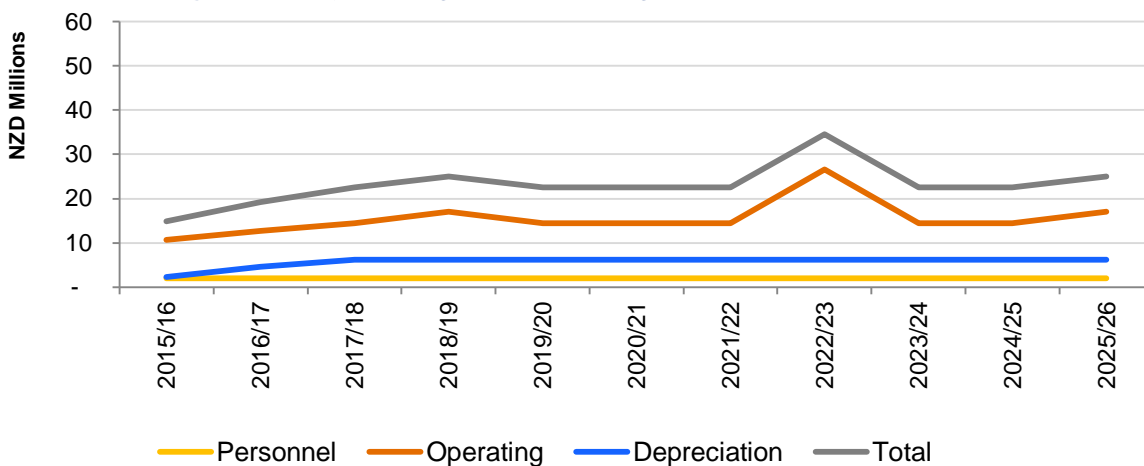
Further detail on financial performance can be found at Part 3, pages 85-87.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	159.2
Life to date expenditure	145.0
Total forecast expenditure	145.3
Gross project variation (forecast)	13.9
Foreign exchange impact	-0.4
Actual project variation (forecast)	14.3
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

Pilot Training Capability: Through Life Operating Costs



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

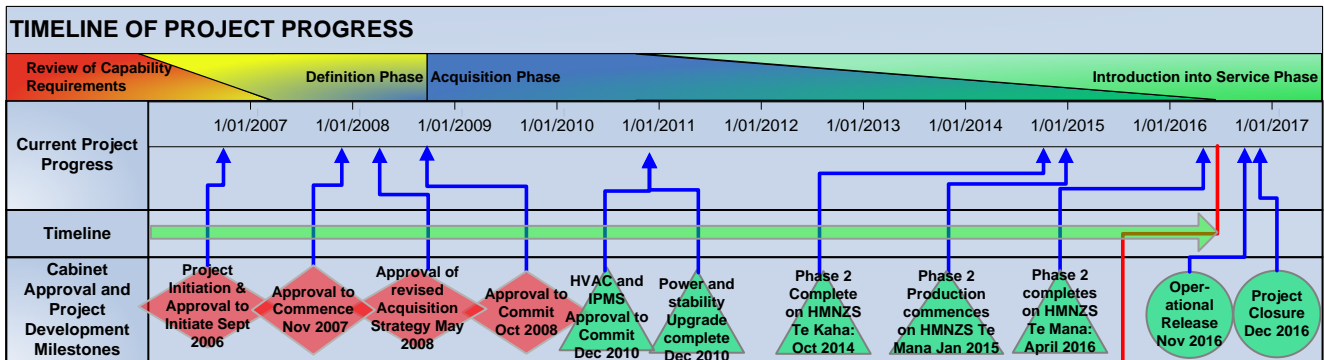
The capability requirements necessary to support policy objectives include:

- 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 186.

Project Status as at 30 June 2016

	<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. In 2016 <i>Te Kaha</i> has deployed to the major multinational maritime exercise RIMPAC.</p> <p><i>Te Mana</i> completed phase 2 with the completion of Contractor Sea Acceptance Trials in April 2016.</p>
	<p>Schedule: <i>Te Mana</i> completed phase 2 early with Interim Operational release and Contractor Sea Acceptance Trials in April 2016.</p> <p>The On Board Operational Trainer Software programmed for delivery in mid 2017 remains outstanding.</p> <p>The “Operational Capability Statement” has been drafted for Naval Capability Board endorsement prior to “Operational Release” by the Chief of Navy. Operational release is planned for the last quarter of 2016.</p>
	<p>Cost: Expenditure against the Crown Appropriation of \$87.600M is \$77.905M (30 June 2016), with an estimate at completion (EAC) of \$80.574M producing a variance at completion (VAC), when adjusted for FX Impact (-\$1.785M) of \$5.240M (underspend).</p>



Active Risks at 30 June 2016

Nil Risks.

Financial Performance

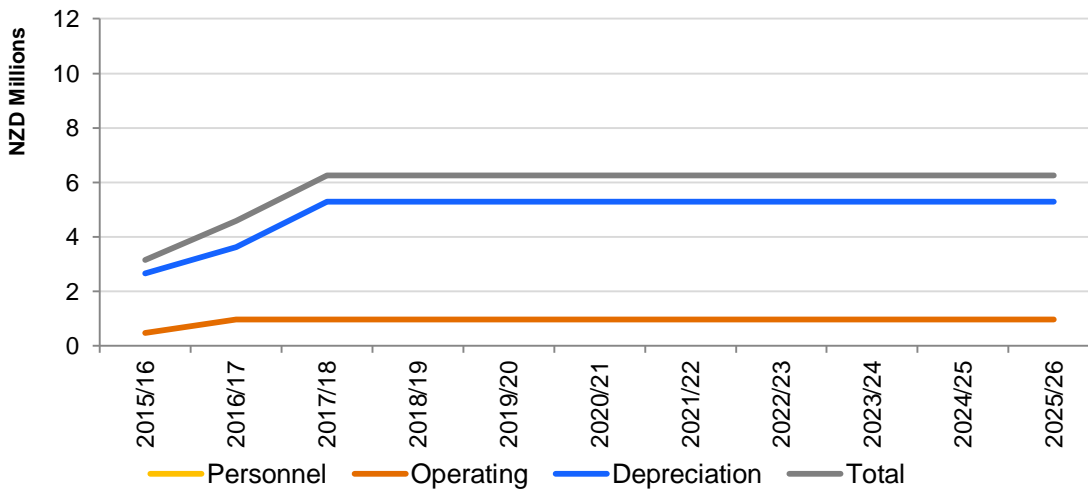
Further detail on financial performance can be found at Part 3, pages 94-95.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	87.6
Life to date expenditure	77.9
Total forecast expenditure	80.5
Gross project variation (forecast)	7.1
Foreign exchange impact	1.8
Actual project variation (forecast)	5.2
Explanation	30 June 2016 forecast results in a project underspend.

Summary of ANZAC Platform Systems Upgrade Through Life Operating Cost Estimates

ANZAC Platform Systems Upgrade: Through Life Operating Costs



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 four kilometres 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, page 194-195.

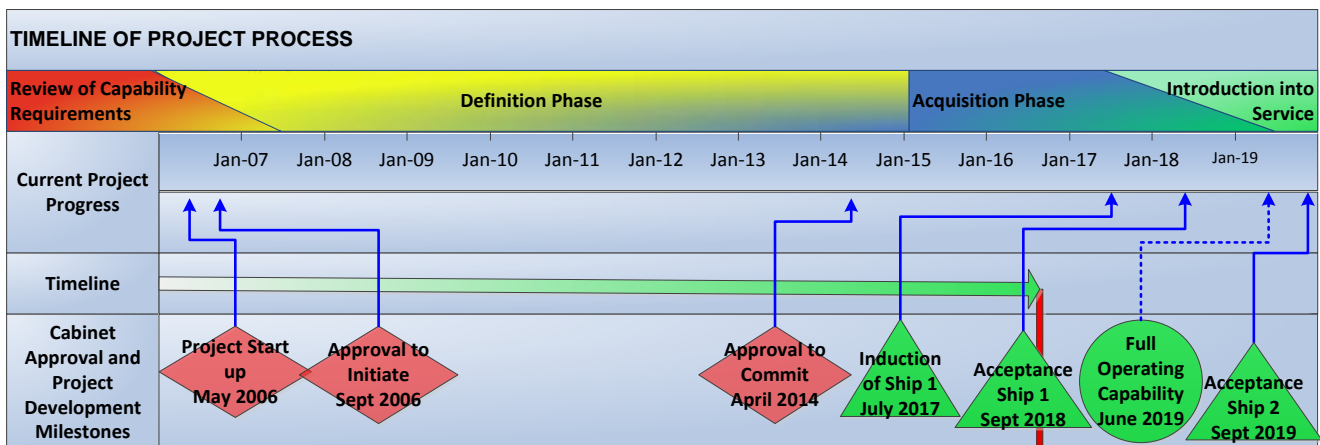
Project Status as at 30 June 2016

	Capability: The contracted System Requirements are currently on track to be delivered with integration testing successfully progressing.
	Schedule: From a contract delivery perspective, since the last report which showed induction of the first ship into refit in November 2016, the refit start date has moved to July 2017 due primarily to delays in installation design.
	Cost: Milestone payments are being made to contractors as scheduled. There is a risk around installation costs. Updated estimates of the three work packages from the Detailed Design phase will be progressively provided to allow for an early indication of installation costs.

Developments post 30 June 2016

The Combat Systems Preliminary Design was successfully completed, as planned, in April 2015. Platform Preliminary Design was completed in December 2015 which was later than expected due to the requirement to change the location of the missile data link antennae and the consequent need to re-view the mutual interference studies and move other antennae. This delayed the start to the Detail Design phase and the refit start date moving from November 2016 to July 2017.

The upgrade of the sonar and installation of the new underwater telephone in HMNZS *Te Mana* was successfully completed in June 2016 with trials showing a significant improvement in performance. This was repeated in *Te Kaha* in November 2016.



Active Risks at 30 June 2016

Risk ID:	Description					Treatment			
1	Operational Support Data used to support operational systems require development by NZDF authorities. If this data is not available the effectiveness of some weapons and sensors may be reduced.					The establishment of NZDF capability to provide operational data support for ANZAC FSU systems will also provide similar support for other NZDF operational capabilities.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	September 2016	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. Naval Warfare Development Group has been established. Locate personnel in Halifax, Canada and utilise the Defence Technology Agency.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	September 2016	Risk Authority:	MoD
						Acquisition Division			
3	Cost of Installation If the cost of installation exceeds budget including special contingency then additional funding may have to be sought or capability reduced.					Production cost estimates at Preliminary Design Review/Detailed Design Review and pre-Project Implementation Business Case. Clear messaging regarding potential scope creep/inclusion of non-Frigate Systems Upgrade work. Prime System Integrator model transferring much of the risk and wide involvement in Integrated Project Team.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	February 2017	Risk Authority:	MoD
						Acquisition Division			
4	Frigate Systems Upgrade Contingency If there should be any further significant unexpected costs (not related to design or installation) then project contingency may be inadequate.					Any further costs to be monitored closely.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	July 2016	Risk Authority:	MoD
						Acquisition Division			

Financial Performance

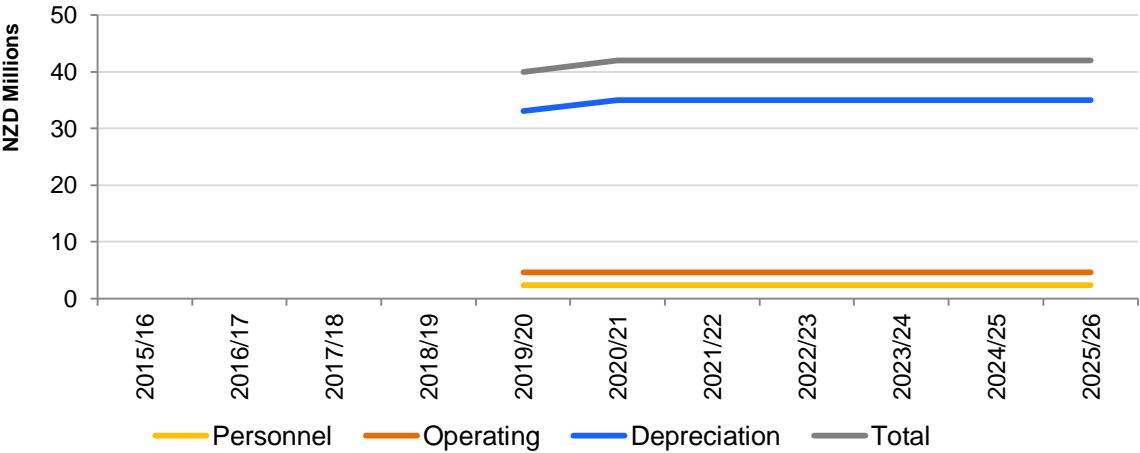
Further detail on financial performance can be found at Part 3, pages 102-103.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	490.9
Life to date expenditure	247.7
Total forecast expenditure	455.8
Gross project variation (forecast)	35.1
Foreign exchange impact	34.7
Actual project variation (forecast)	0.4
Explanation	Foreign exchange impact

Summary of ANZAC Frigate Systems Upgrade Through Life Operating Cost Estimates

ANZAC Frigate Systems Upgrade: Through Life Operating Costs



MARITIME HELICOPTER CAPABILITY

Project Description: This project is providing an upgraded fleet of naval helicopters for the Royal New Zealand Navy. Eight SH2G(I) Super Seasprite helicopters have been 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(NZ) 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(I) 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 Test 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

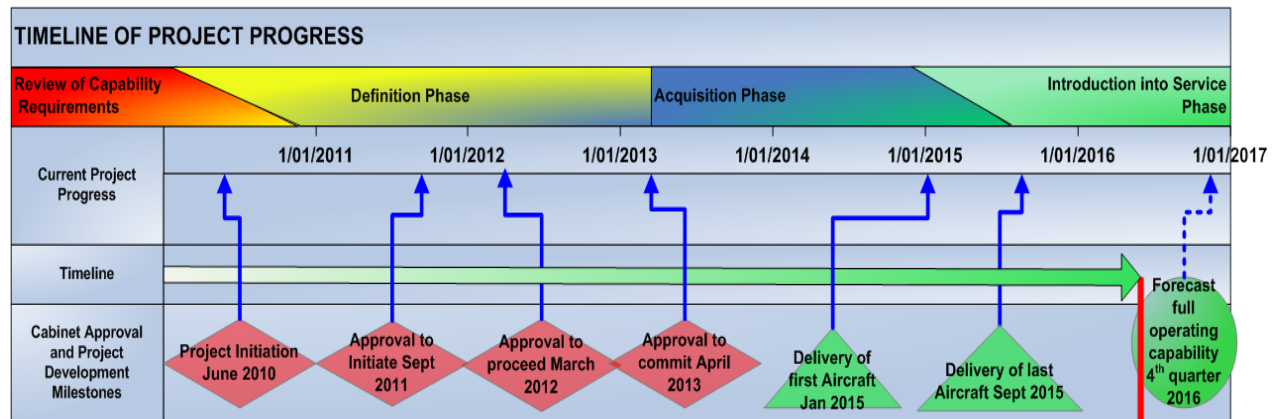
The capability requirements necessary to support policy objectives include:

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 Part 4, page 204.

Project Status as at 30 June 2016

	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.



Active Risks at 30 June 2016

Risk ID:	Description					Treatment			
1	If SH-2G(NZ) equipment that crosses over to the SH-2G(I) model is not available there may be a backlog of repairable items which will reduce aircraft and pack up availability.					<ul style="list-style-type: none"> Prioritise allocation of critical spares against SH-2G(NZ) disposal and SH-2G(I) Introduction into Service. Prioritise spares acquisition and repair. 			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	16 Aug 2016	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. An Obsolescence Management Plan is being developed. 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 does not 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"> Testing progressing with some positive results. A number of issues (incorrect plugs, wiring and data bus referencing) have been rectified and simple testing with HMNZS <i>Te Mana</i> has been achieved. 			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	May 2016	Risk Authority:	MOD
						Acquisition Division			
4	If the weapon or store can not be certified (stores clearance) for flight due to carriage and release considerations, the capability may not be able to be operationally fielded.					<ul style="list-style-type: none"> Stores release progressing. 			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	May 2016	Risk Authority:	NZDF
						Capability Branch			

5	If the Baseline Configuration Audit (BCA) for the Full Motion Flight Simulator (FMFS) upgrade is required to be large in scope, then further delays and costs may result, or there may be inadequate acceptance procedures resulting in diminished FMFS performance.				<ul style="list-style-type: none"> • CAE to complete audit scoping activity. • On receipt, review audit scoping results and progress with audit. • Contract advice required on whether this is a NZDF obligation for the cost or whether the contract is sufficiently silent that the matter is open to negotiation with CAE. • Possible requirement for contingency funds dependent on final scope of BCA. 					
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	Current	Risk Authority:	COMLOG	
							Capability Branch			

Issues

Issue	Description	Status as at 30 June 2016	
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. • Relief expected 2nd quarter 2017. 	
Critical Timing:	Current	Issue Authority:	NZDF Capability Branch
2	Personnel turnover in project support roles due to military posting cycles and resignations creates knowledge voids and inefficiencies, and transfers a re-education burden onto remaining project staff.	<ul style="list-style-type: none"> • The Full Mission Flight Simulator and facilities manager commenced resettlement training in March 2016 prior to departure in June 2016. As an interim solution a replacement has been hired under a fixed term contract (six month renewable). The long term solution is to establish a permanent civilian position for the FMFS manager. Documentation for this has been submitted to work force planning and DCAF. • Joint Project Office (JPO) Auckland Lead posted. JPO Lead position will be disestablished, however, the MHCP Introduction into Service Project Manager role will continue. 	
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. • Australia is yet to confirm dates for SH-70B retirement and the latest advice (January 2016) is that these spares will not be released until late 2017. 	
Critical Timing:	Current	Issue Authority:	MOD Acquisition Division and NZDF Capability Branch

4	If spares are insufficient because the spares strategy (to only procure all G(I)-specific spares and rely on the current common G(NZ) holdings) results in shortfalls, then, this will result in increased costs and may adversely impact operational output. May also impact SH-2G(NZ) disposal.	<ul style="list-style-type: none"> • Audit of pool calculation method. • Analysis of SH-2G(NZ) spares availability. • Access to spares from aircraft 9 and 10. • Acquire additional spares from original equipment manufacturers or Kaman (Project Contingency).
Critical Timing:	Current	Issue Authority: COMLOG
5	Through-life support contracts are more expensive than estimated because costs were assessed on current contracts and the context may vary for the Project.	<ul style="list-style-type: none"> • Updated budgetary figures for through life support. • Determine costs and benefits of retaining or (in the case of obsolescence) upgrading equipment to retain capability. • Acquire support equipment (dummy landing gear) to reduce reliance on actual spares.
Critical Timing:	Current	Issue Authority: MoD Acquisition Division and NZDF Capability Branch

Financial Performance

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

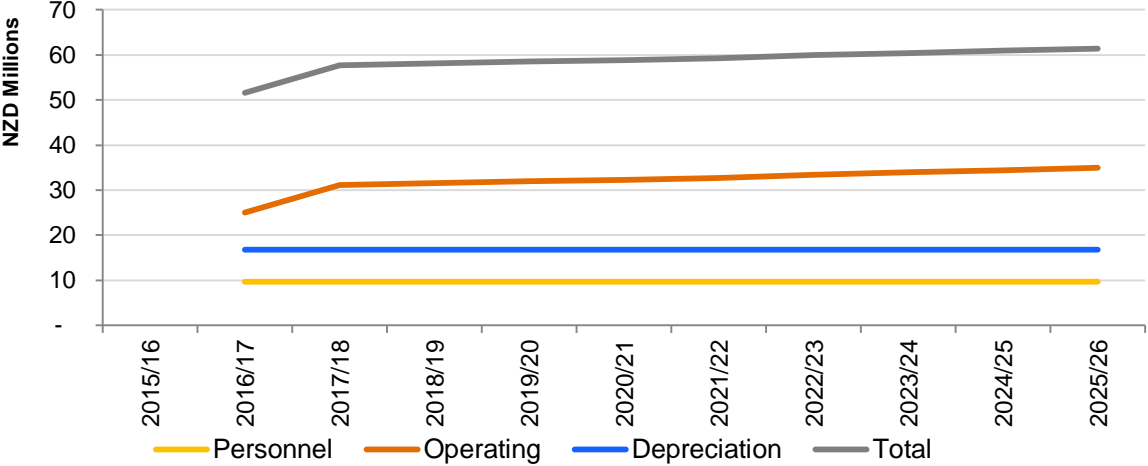
Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	252.3
Life to date expenditure	215.2
Total forecast expenditure	258.5
Gross project variation (forecast)	(6.1)
Foreign exchange impact	5.0
Actual project variation (forecast)	(1.1) ²
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.

² In 2016/17, the Ministry will seek a non-cash technical adjustment to the approved budget, reflecting the effect of foreign currency exchange movements on the reported value of the project expenditure.

Summary of Maritime Helicopter Capability Through Life Cost Estimates

Maritime Helicopter Capability: Through Life Operating Costs



INDIVIDUAL WEAPON REPLACEMENT

Project Description: The purpose of the Individual Weapon Replacement project is to replace the existing New Zealand Defence Force (NZDF) 5.56mm Steyr rifle and the 40mm grenade launcher with a new individual weapon and grenade launcher. To meet the needs of future operating environments, the Individual Weapons Replacement Project requires a move from a closed to open architecture design which gives the user the ability to change systems and ancillaries, as well as adjust the size.

Policy Value

The Project to replace the Steyr is founded on the ability to deploy rapidly in task groups tailored to requirements. This concept was set out in the Defence White Paper 2010 (DWP 2010). The Defence White Paper 2016 was released after the weapons Project had been approved. The Future Joint Operating Concept (which describes how the NZDF will meet this policy) and the Annual Plans and Statements of Intent describe the outputs required by Government.

The organisational benefits of addressing these issues are, in summary:

- a. an increased ability to effectively detect, recognise, identify and engage targets; and
- b. increased individual weapon fleet reliability and operator confidence.

In practical terms, these benefits lead to increased soldier performance, which in turn leads to better operational performance. Soldiers are confident in knowing that their rifle is modern and reliable. They are able to over-match their opponents, and reduce the risk of engaging the wrong targets. This generates a higher likelihood of mission success.

Capability Requirements

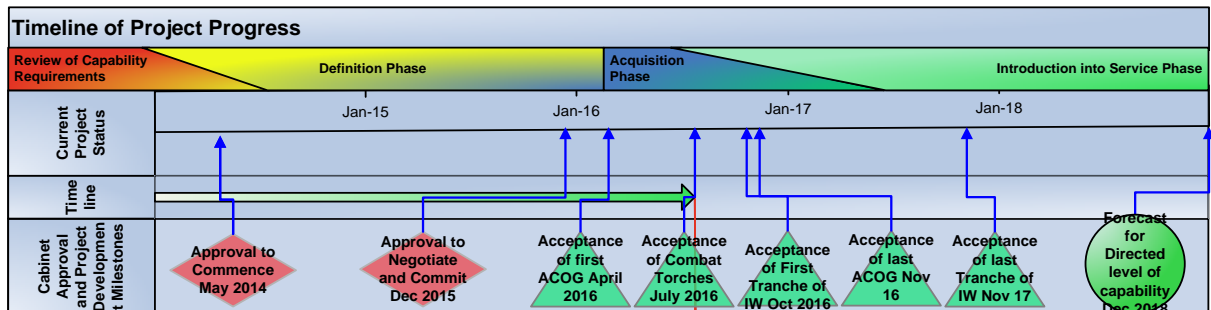
The capability requirements necessary to support policy objectives include:

- An individual weapon that, when fitted with a suitable sight, allows the detection, identification and effective engagement of adversaries at all ranges out to at least 600 metres by day and 300 metres by night.
- An individual weapon that is effective in all military operations by day and night in all weather and all environments (including alpine, desert and marine) for prolonged periods.
- An individual weapon that is able to be used in accordance with NZDF concepts of use and training techniques and procedures.

The operational requirements necessary to support the capability can be found at Part 4, page 212.

Project Status as at 30 June 2016

	Capability: Capability has been contracted and is in the production/delivery phase.
	Schedule: All tranches for Individual Weapon, Advanced Combat Optical Gunsight and Combat Torches are being delivered in accordance with contracted milestones.
	Cost: The project budget is on track and remains within the Cabinet approval.



Active Risks at 30 June 2016

Risk ID:	Description					Treatment			
1	Simulation costs If the cost of simulation is more than the Cabinet approval, then the actual work required may be greater than currently anticipated resulting in delays to the work completion and cost increases beyond that budgeted.					1. The Ministry of Defence (MoD) to ring-fence the initial allowance for the simulation work to ensure that it is available when required. 2. The MoD to commission an assessment of the scope of work required. 3. Overall simulation policy may mean that this is no longer a part of this specific project, but part of a broader simulation capability.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	2018	Risk Authority:	Project Director
						Acquisition Branch			
Risk ID:	Description					Treatment			
2	If the MoD does not take a consistent approach to the conduct of factory acceptance testing activities (FAT), conflict may arise between the MoD and the original equipment manufacturer (OEM) as to what is or is not an acceptable level of presentation.					1. FAT scope of work has been defined, agreed with the OEM and will be included in the contract. 2. The MoD to ensure, to the fullest extent possible, that the same personnel are used for all FATs. 3. The MoD to consider the introduction of a 'incident sentencing' regime such that all items picked up at FAT are considered in a consistent and objective manner.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	2016	Risk Authority:	Project Director
						Acquisition Branch			
Risk ID:	Description					Treatment			
3	If rifles are not manufactured to agreed quality levels system performance may be substandard.					1. Obtain independent analysis of the quality assurance risk. 2. Ensure effective inspection, assurance protocols and personnel are in place to monitor quality at the factory level before acceptance and payment. FAT process defined and will be included in the contract. 3. Ensure contract provisions clearly set out quality requirements and quality assurance measures.			
Current Risk:		Treated Risk:		Risk Trend:	Stable	Critical Timing:	2016-17	Risk Authority:	Project Director
						Acquisition Branch			

Issues

Issue ID:	Description	Status as at 30 June 2016	
1	Safety Case – Required before weapons are Introduced into service.	Reviewing current safety instructions to ensure compliance with the safety case requirements.	
Critical Timing:	December 2016	Issue Authority:	NZDF Programme Manager
2	Staffing – The project has a shortfall of staff to undertake sub-project activities.	Project will maintain tempo and will recruit additional staffing to meet the outputs.	
Critical Timing:	Ongoing	Issue Authority:	MoD Acquisition division and NZDF Capability Branch

Financial Performance

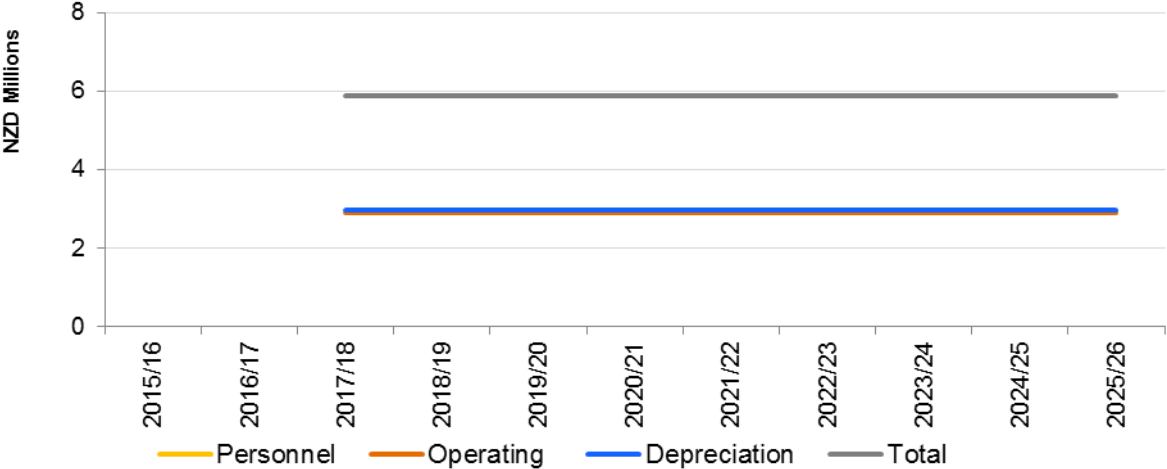
Further detail on financial performance can be found at Part 3, pages 121-122.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	59.2
Life to date expenditure	15.5
Total forecast expenditure	57.0
Gross project variation (forecast)	2.2
Foreign exchange impact	(2.2)
Actual project variation (forecast)	0.0

Summary of Individual Weapon Through Life Operating Cost Estimates

Individual Weapons (Steyr): Through Life Operating Costs



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 two 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.

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.

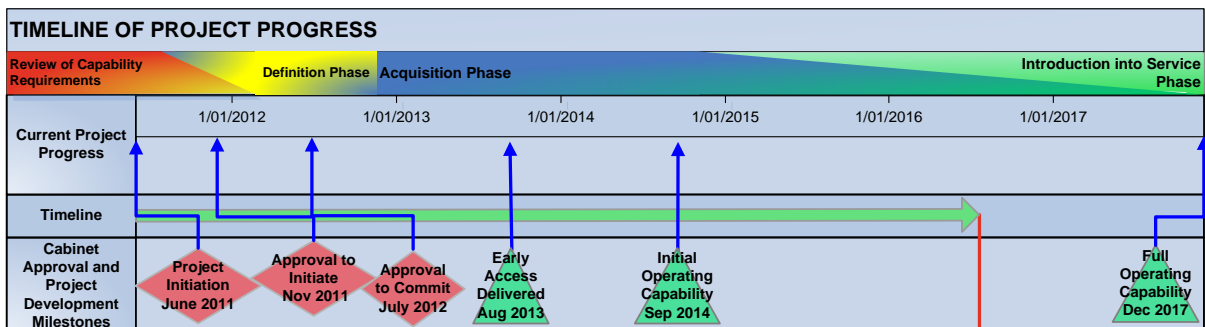
The operational requirements necessary to support the capability can be found at Part 4, page 221-222.

Project Status as at 30 June 2016

	<p>Capability: The first tranche of equipment for the Defence Force has been used in a number of operational scenarios, in both local and overseas deployment. This has allowed the Defence Force to work through Introduction into Service activities. The equipment was declared operational in September 2014. The contract for maritime terminals and the order for the second anchor station are subject to Cabinet approval of additional funds for the project.</p>
	<p>Schedule: All of the mobile terminals and the first of two anchor stations have been delivered. A tender for maritime terminals was unsuccessful, consequently a Foreign Military Sale for the terminals is being finalised with the US Government. The second anchor station is due to be ordered in August 2016.</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. Access to the project contingency and underspends in the defence portfolio have been requested due to the higher than anticipated costs of the maritime terminals.</p>

Developments post 30 June 2016

Access to additional funds in the defence portfolio has been confirmed by Cabinet. The order for the second anchor station and the contract for the maritime terminals was signed in August 2016.



Active Risks at 30 June 2016

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:		Treated Risk:		Risk Trend:		Critical Timing:	July 2016	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:		Treated Risk:		Risk Trend:		Critical Timing:	July 2016	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 foreign military sales case to manage this.			
Current Risk:		Treated Risk:		Risk Trend:		Critical Timing:	Feb 2016	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:		Treated Risk:		Risk Trend:		Critical Timing:	July 2016	Risk Authority:	MoD
						Acquisition Division			

Issues

Issue ID:	Description	Status as at 30 June 2016
1	Additional funding is required to meet the higher than expected costs of the remaining terminals.	Access to the project contingency funds and underspends in the defence portfolio have been requested.
Issue Authority:	Ministry of Defence Acquisition Division	
2	Option to install a terminal to HMNZS <i>Canterbury</i> in early 2016 was missed.	Terminals will be delivered to New Zealand as soon as possible once the Foreign Military Sale is initiated.
Issue Authority:	Ministry of Defence Acquisition Division	

Financial Performance

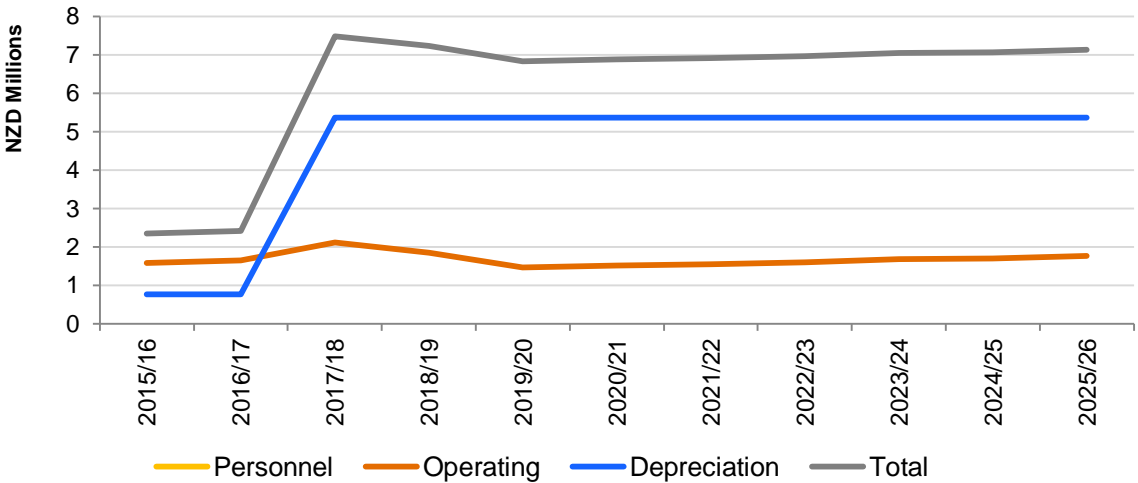
Further detail on financial performance can be found at Part 3, pages 129-130.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	88.9
Life to date expenditure	57.4
Total forecast expenditure	83.2
Gross project variation (forecast)	5.7
Foreign exchange impact	(1.4)
Actual project variation (forecast)	7.1

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

Strategic Bearer Network Phase 1: Through Life Operating Costs



Comment: Last report incorrectly showed contractor costs as personnel – this has been fixed in this reporting round

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, including ships.

- 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.

Schedule

The date estimated for delivery of GCCS-J full operating capability is 30 June 2018.

Active Risks as of 30 June 2016

Risk ID:	Description					Treatment			
25640	<p>Resource (People) availability</p> <p>If sufficient resource is not allocated to project delivery tasks, including the acquisition, build, and rollout of defence command and control systems then Project work may not get completed on time, and there may be schedule and cost impacts.</p>					<p>A number of actions are being taken:</p> <ul style="list-style-type: none"> Resource Managers have ensured their resources are available for project tasks. Ensure dedicated resources are not reassigned. Agreement has been reached that the Defence Command and Control System Project is a high priority. Ensure high demand resources are provided in a timely manner. 			
Current Risk:		Treated Risk:		Risk Trend:		Critical Timing:	Now	Risk Authority:	NZDF
25638	<p>Common Operating Picture (COP)/Common Intelligence Picture (CIP) quality and Data Currency.</p> <p>If the quality of information delivered by the COP or CIP is poor, arising from lack of currency (timeliness) or precision (accuracy) then this could result in a failure to adopt it as an integral element of the NZDF for command and control.</p>					<p>A number of actions are being taken:</p> <ul style="list-style-type: none"> Commander's intent needs have been defined, and actioned. The concept of operations has been updated. Processes and procedures for COP and CIP management have been defined and updated. Ensuring operational resources are available to maintain data to defined levels i.e. desired manning level maintained. 			
Current Risk:		Treated Risk:		Risk Trend:		Critical Timing:	Nil	Risk Authority:	NZDF
								Capability Branch	
18521	<p>Agreement on Employment of defence command and control system</p> <p>If there is failure to reach agreement on how the Defence Command and Control System is to be used then this may delay its effective introduction into service, its on-going use once in service and the realisation of benefits.</p>					<p>Treatment action needed includes: updating the Defence Command and Control System concept of operations, so there is agreement how Command and Control will be done, and Commanders have a clear reference and having a written Chief of Defence Force instruction as an over-arching mandate for how the Defence Command and Control System is to be employed across Defence.</p>			
Current Risk:		Treated Risk:		Risk Trend:		Critical Timing:	---Nil	Risk Authority:	NZDF
								Capability Branch	

Issues

Issue ID:	Description	Status as at 30 June 2016	
25646	<p>AIS (Automated Identification System for vessels) The AIS feed into the defence information exchange service (DIXS) has continued to show a significant amount of erroneous data, resulting in COP tracks being unreliable.</p>	There is ongoing communication between the NZDF and the National Maritime Coordination Centre (NMCC) concerning the AIS feed with International Maritime Information Systems (IMIS) and Kordia. Data has been sent to DISA USA for analysis. The NMCC to looking to obtain quality data from Kordia and IMIS.	
Critical Timing:	Current	Issue Authority:	NMCC Manager
28533	<p>JIFC manning (Joint Intelligence Fusion Centre) The JIFC, which is responsible for managing Defence Command and Control System COP data and providing quality control, is unable to support sustained 24x7 operations, due to its manning levels.</p>	JIFC manning could be increased from the single services, or by hiring civilian staff. The length of time required to complete security clearances also has an impact on possible start dates for new staff being recruited. There is ongoing recruitment effort.	
Critical Timing:	Current	Issue Authority:	NZDF Commander Joint Intelligence Fusion Centre
26347	<p>Command Information Systems (CIS) resource availability CIS subject matter expert support is periodically not available to close off design, build and testing tasks.</p>	<p>Treatment options include:</p> <ul style="list-style-type: none"> • Dedicate CIS resource to the Defence Command and Control System Project. • Reduce the workload on allocated CIS resource. • Give higher priority to Defence Command and Control System Project tasks, rather than queue them behind other projects and business as usual. • Provide a flexible and responsive resource pool in CIS. 	
Critical Timing:	Current	Issue Authority:	CIS Resource Managers

Financial Performance

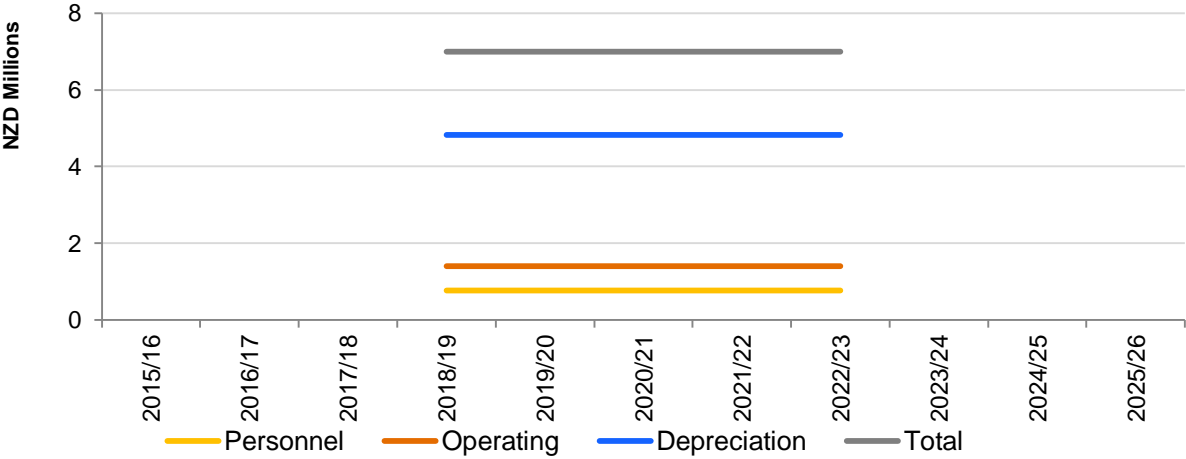
Further detail on financial performance can be found at Part 3, pages 138-139.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	23.6
Life to date expenditure	18.3
Total forecast expenditure	21.1
Gross project variation (forecast)	2.5 under spend
Foreign exchange impact	0.5 (favourable)
Actual project variation (forecast)	3.0
Explanation	N/A

Summary of Defence Command and Control Through Life Cost Estimates

Defence Command and Control: Through Life Operating Costs



Comment: This project has informed us that the useful life of the asset is shorter than the operating shown, as they expect a midlife upgrade- but this upgrade has not yet been confirmed. This is pending finance review

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 New Zealand 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 2016 the project was 97% complete and the plan anticipates project closure for both Project Protector and Protector Remediation in 2016.

Items remaining outstanding for *Canterbury* are: Void 14 ballast and software installation for the sensor management system. The completion of the ballast work requires the ship to be docked and is scheduled for September 2016.

The Offshore Patrol Vessels *Wellington* and *Otago* are complete.

All work is completed on the Inshore Patrol Vessels *Hawea*, *Rotoiti* and *Taupo*. The same work is complete on *Pukaki*. However, final testing by the Navy is delayed through sea day availability within the RNZN Fleet Plan.

“Operational Capability Statements” for all vessels incorporating both Protector and Protector Remediation projects have been endorsed by the Naval Capability Board. “Operational Release” by the Chief of Navy is imminent.

Active Risks as at 30 June 2016

Nil risks.

Issues

Issue ID:	Description:	Status as at 30 June 2016	
1	The reprogramming of <i>Canterbury</i> for <i>Op Pacific Relief</i> and other operations.	Three <i>Canterbury</i> production items have been contracted. It is likely, however, that the ballast work will not be commissioned until after November 2016.	
Critical Timing:	--	Issue Authority:	NZDF: Navy

Financial Performance

Further detail on financial performance can be found at Part 3, pages 146-147

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	60.8
Life to date expenditure	55.9
Total forecast expenditure	58.8
Gross project variation (forecast)	1.9 (under spend)
Foreign exchange impact	0.0
Actual project variation (forecast)	1.9 (under spend)

NETWORK ENABLED ARMY TRANCHE ONE

Background: Network Enabled Army (NEA) Tranche One 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. It is part of the wider NEA Programme.

ACQUISITION PHASE

Summary of acquisition phase

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

The Charter for NEA Tranche One was approved by the Capability Management Board on 18 April 2016.

How Defence decided to acquire the Capability Solution

NEA Tranche One has a range of interlinked capability sets that are being delivered through a series of acquisitions. These capability sets are outlined in Volume 3. They were developed through the NEA Programme Business Case. This was referred to the Minister of Defence and provided the basis for Tranche One approval by Cabinet.

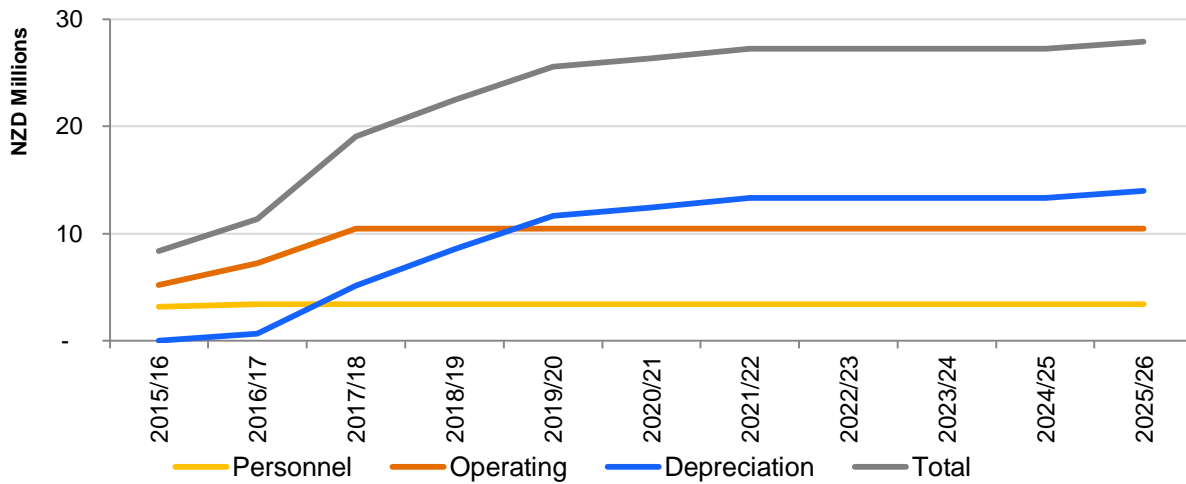
Financial Performance

Further detail on financial performance can be found at Part 3, pages 151-153.

Approved budget and expenditure

	Total (NZ\$ million)
Approved budget	106
Life to date expenditure	3.5
Total forecast expenditure	106
Gross project variation (forecast)	0.0
Foreign exchange impact	0.0
Actual project variation (forecast)	0.0

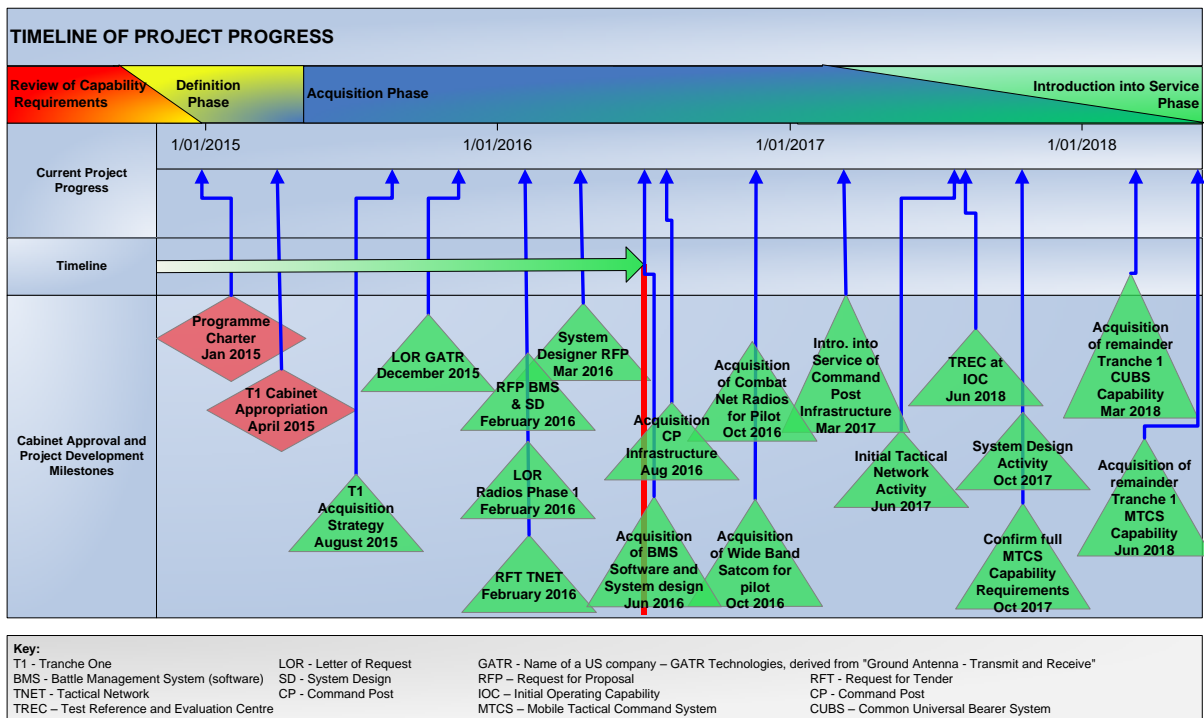
Network Enabled Army Tranche One: Through Life Operating Costs



Schedule/Timeframe/Progress

The Tranche One Acquisition Phase Charter went through the Defence NEA Governance process in April 2016. This established the agreed schedule.

Tranche One is due for completion by June 2018.



Active Risks as at 30 June 2016

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

Risk ID:	Description:					Treatment				
1	<p>Programme Affordability</p> <p>If the cost of Tranche One is in excess of the Cabinet approval, then impacts could be a reduction in the volume of equipment acquired under Tranche 1 or a reduction in the capability sought under later Tranches as a result of adverse variations in the value of the New Zealand dollar (foreign exchange risk).</p>					<ul style="list-style-type: none"> Defer acquisition planned for Tranche One to Tranches Three-Four. 				
Current Risk:		Treated Risk:		Risk Trend:		Critical Timing:	June 2016 - June 2017	Risk Authority:	MoD	Acquisition
Risk ID:	Description:					Treatment				
2	<p>Continuity of Key Personnel</p> <p>The reliance of the programme on key personnel could result in a single point of failure, if continuity is not maintained or if unavoidable change-overs are not managed in a planned and controlled manner, resulting in a loss of NEA corporate knowledge and a failure to deliver work elements to schedule.</p>					<ul style="list-style-type: none"> Succession plan for the Technical Director developed by Royal New Zealand Signals Regiment with the Army Military Secretary Branch. Engagement of System Designer to reduce reliance on key individuals. 				
Current Risk:		Treated Risk:		Risk Trend:	Up (Worsening)	Critical Timing:	June - Dec 2016	Risk Authority:	NZDF	Acquisition
Risk ID:	Description:					Treatment				
3	<p>Synchronisation with Dependent Projects</p> <p>There is a need to co-ordinate NEA with a variety of both internal (to NEA) and external (wider NZDF, such as Strategic Bearer Network) projects and if there is a failure to plan for and meet any project deliverables then it may impact on either NEA or the other external projects.</p>					<ul style="list-style-type: none"> The Boundary Agreement with the Information Environment Project needs to be updated. Provide visibility of dependent project major milestones in the programme schedule. 				
Current Risk:		Treated Risk:		Risk Trend:	Up (Worsening)	Critical Timing:	Now	Risk Authority:	NZDF	Acquisition

Risk ID:	Description:				Treatment				
4	<p>Obsolescence of Existing Equipment</p> <p>If the obsolescence of existing equipment forces an unplanned acquisition in order to meet required capability outputs, then it may prevent an integrated capability being fielded, especially in relation to the current radios (PRC-117F and SINCGARS).</p>				<ul style="list-style-type: none"> • Redistribution of equipment in the legacy fleet to mitigate against the demand for new systems in the scope of NEA. 				
Current Risk:		Treated Risk:		Risk Trend:		Critical Timing:	2018 2020	Risk Authority:	NZDF
							Acquisition		