



# MAJOR PROJECTS REPORT 2017

1 July 2016 – 30 June 2017

Volume 1

ISBN: 978-1-98-851500-7 (Print)  
ISBN: 978-1-98-851501-4 (Online)

Published February 2019

[www.defence.govt.nz](http://www.defence.govt.nz)

© Crown Copyright



This copyright work is licensed under the Creative Commons Attribution 3.0 New Zealand licence. In essence, you are free to copy, distribute and adapt the work, as long as you attribute the work to the Ministry of Defence and abide by the other licence terms.

To view a copy of this licence, visit

<http://creativecommons.org/licenses/by/3.0/nz/>. Please note that no Ministry of Defence or New Zealand Government emblem, logo or Coat of Arms may be used in any way which infringes any provision of the Flags, Emblems, and Names Protection Act 1981 or would infringe such provision if the relevant use occurred within New Zealand. Attribution to the Ministry of Defence should be in written form and not by reproduction of any such emblem, logo or Coat of Arms.

# CONTENTS

## VOLUME 1

|  |           |
|--|-----------|
| <b>Foreword</b>  | <b>3</b>  |
| <b>Structure of and Background to the 2017 Major Projects Report</b> | <b>5</b>  |
| <b>Part 1: Assessment of Performance</b>                             | <b>7</b>  |
| Assessment of Performance  | 7         |
| Performance in the 2016/17 Year                                      | 7         |
| Schedule   | 8         |
| Cost   | 8         |
| Capability   | 9         |
| Continuous Improvement in Performance                                | 13        |
| Introduction into Service  | 15        |
| Deputy Auditor-General's commentary                                  | 16        |
| <b>Part 2A: Summaries of Project Status Reports</b>                  | <b>22</b> |
| Readers' Guide   | 22        |
| Anzac Frigate Platform Systems Upgrade                               | 23        |
| Anzac Frigate Systems Upgrade  | 26        |
| Individual Weapons Replacement                                       | 31        |
| Strategic Bearer Network   | 36        |
| Maritime Sustainment Capability                                      | 40        |
| Special Operations Vehicles  | 44        |
| Underwater Intelligence, Surveillance And Reconnaissance             | 47        |
| <b>Part 2B: Summaries of Project Information Reports</b>             | <b>51</b> |
| Defence Command and Control System                                   | 51        |
| Network Enabled Army Tranche One                                     | 54        |

## VOLUME 2

|  |     |
|--|-----|
| <b>Part 3A: Project Data Sheets</b>                      | 58  |
| Anzac Frigate Platform Systems Upgrade                   | 58  |
| Anzac Frigate Systems Upgrade                            | 67  |
| Individual Weapons Replacement                           | 76  |
| Strategic Bearer Network                                 | 84  |
| Maritime Sustainment Capability                          | 94  |
| Special Operations Vehicles                              | 103 |
| Underwater Intelligence, Surveillance and Reconnaissance | 111 |
| <b>Part 3B: Project Information Reports</b>              | 119 |
| Defence Command & Control System                         | 119 |
| Network Enabled Army Tranche One                         | 127 |

## VOLUME 3

|  |     |
|--|-----|
| <b>Part 4A: Project Data Sheets</b>                      | 134 |
| Anzac Frigate Platform System Upgrade                    | 135 |
| Anzac Frigate Systems Upgrade                            | 143 |
| Individual Weapons Replacement                           | 151 |
| Strategic Bearer Network                                 | 159 |
| Maritime Sustainment Capability                          | 170 |
| Special Operations Vehicles                              | 180 |
| Underwater Intelligence, Surveillance and Reconnaissance | 189 |
| <b>Part 4B: Project Information Sheets</b>               | 199 |
| Defence Command And Control System                       | 199 |
| Network Enabled Army Tranche One                         | 201 |

# FOREWORD

---

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

---

This edition of the Major Projects Report, the eighth in the series, highlights both successes and some legacy challenges that were faced when delivering Defence's major capability acquisition programme. Through the reporting period, which spans 1 July 2016 to 30 June 2017, good progress was made in delivering on several major procurement projects.

This was during a time of significant upheaval for Defence. The 7.8 magnitude Kaikoura Earthquake that occurred in November 2016 was a moment of change that resulted in the loss of our building in Wellington, several months of limited access to systems and documentation, and a displaced workforce and the need to develop new ways of working.

For our projects to have delivered as much as they did during the course of the year is acknowledged here. The earthquake highlighted some areas of our operations and business continuity where improvements could be made, including centralised digital storage of documentation that ensure documents are accessible in the event of any future interruption to the usual business of either Defence, or any part of New Zealand.

Five projects included in the previous report that have completed their acquisition phase have been removed; C-130H Life Extension, NH90 Medium Utility Helicopter, Pilot Training Capability, Maritime Helicopter Capability and Project Protector Remediation. Two further projects – Anzac Frigates Platform Systems Upgrade and Defence Command and Control Systems – are expected to make their final appearance in this edition.

Three projects included for the first time are Maritime Sustainment Capability, Special Operations Vehicles and Underwater Intelligence, Surveillance and Reconnaissance.

All the projects included in this edition were underway during a significant period of growth and change for the Ministry of Defence, following a decision to invest additional operational funding of \$27.1 million over four years. The additional operational funding was provided to help ensure delivery of Defence capability on time, within budget and to Government's requirements for the delivery of benefits.

The funding, approved in Budget 2015, enabled the Ministry to implement a change process to manage the planned major acquisition programme. Major projects are those with a whole of life cost in excess of \$15 million. Changes to defence capability management are being delivered through the Defence Capability Change Action Programme. Known as DCCAP, the programme has been in place for two years and is at a stage where key activities needed to build the essential aspects of a contemporary capability management system are in place or in development.

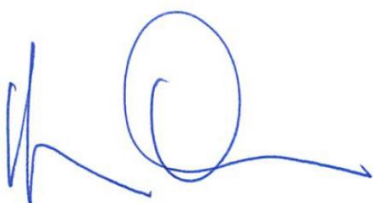
This has resulted in the expansion of the Ministry's division that is responsible for acquiring new major capability, another development that is already proving its worth in helping with project management and delivery.

One of the more significant issues flagged in this edition of the Major Projects Report was in relation to the Anzac Frigate Systems Upgrade project. Significant pressures in both cost and schedule were reported as at 30 June 2017. These were addressed by a Cabinet decision in December 2017 that increased the budget, and enabled the project's schedule to be rebaselined. A deeper reporting of that will be included in the 2018 edition of the Major Projects Report, but it is an influencing factor in Defence's self-assessment that performance across the projects for the year was at a good level.

As advised in the previous year's report, the goal of establishing fully integrated project teams (IPT) was achieved during this period. Since February 2017 the Frigate Systems Upgrade has been operating under the new IPT model, which sees the Ministry of Defence and Defence Force staff operating in single teams, spanning the life of each project. Two other projects in this report are managed by IPTs; the first tranche of the Network Enabled Army programme, and the Maritime Sustainment Capability. These teams span the life of their project and their focus encompasses major projects through the capability definition and selection, acquisition and introduction into service phases.

While benefits of the IPT model are discussed later in this volume, the value that can be delivered has been seen already and will help to ensure that pressures such as those faced by the Anzac Frigate Systems Upgrade project are avoided in future.

The value of this report series is enduring. It is a public document that offers a source of information about a range of major projects, and the way in which the Ministry of Defence and the New Zealand Defence Force are working together to deliver the capability that is needed. Access to this information is another way that the Government and the people of New Zealand can have confidence that our focus is the successful delivery of major military capability.



**HELENE QUILTER**

Secretary of Defence



**K. R. SHORT**

Air Marshal  
Chief of Defence Force

24 .10 2018

29 October 2018

# STRUCTURE OF AND BACKGROUND TO THE 2017 MAJOR PROJECTS REPORT

## Structure

The 2017 Report is presented in four parts, spread across three volumes:

- **Part 1**, in this volume, includes a qualitative and quantitative assessment of Defence's management of nine current projects, and performance with respect to projects' schedule, cost, and capability in the year 1 July 2016 to 30 June 2017. Part 1 also provides comment on what Defence is doing in order to improve its performance in managing projects.
- **Part 2**, also in this volume, provides project summaries for the nine projects. The summaries describe the projects' policy objectives, capability requirements, current status, active high level risks, recent developments and financial performance.
- **Part 3**, in volume 2, includes more detailed project data/information sheets. These form a focal point of the report and provide more detailed information on the acquisition phase and how the capability is being introduced into service.
- The final volume contains **Part 4**, which provides the projects' history and project definition information.

## Background

This is the eighth edition of the Major Projects Report, which was first published in 2010. This series has sought to improve the quality, transparency, and usefulness of reporting on defence capability projects. The result is a longitudinal overview of performance and the outcomes achieved. Several projects feature in multiple editions, reflecting the long-term lifecycle of major Defence projects.

## This edition

In the edition for the year to 30 June 2017, six projects that featured in the previous year's report are included in this edition with updates on their status, contract payments, risks, and schedule information:

- Anzac Frigate Platform Systems Upgrade
- Anzac Frigate Systems Upgrade
- Individual Weapons Replacement
- Strategic Bearer Network
- Defence Command and Control System
- Network Enabled Army Tranche One.

As in the 2016 edition, the Defence Command and Control System Project and the first tranche of the Network Enabled Army Programme are presented in information sheets rather than data sheets to better reflect the differences of these two projects, which formed part of ongoing programmes at the time of their introduction into the Major Projects Report, from the others discussed in the publication.

## Projects included for the first time

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 three new projects have been included in this edition:

- **Maritime Sustainment Capability:** building and introducing into service of the vessel to replace the now decommissioned HMNZS *Endeavour*. The *Aotearoa* will sustain the NZDF’s maritime, air and land forces with fuel, fresh water, ammunition and an amount of equipment and non-perishable stores. It will also deliver specialised Antarctic fuel, and transport containerised scientific material and supplies to McMurdo Sound.
- **Special Operations Vehicles:** replacing the Pinzgauer fleet with a vehicle fleet that ensures the New Zealand Special Operations Forces can continue to operate with improved capability and increased efficiency.
- **Underwater Intelligence, Surveillance and Reconnaissance:** progressively fitting the Royal New Zealand Air Force’s fleet of P-3K2 Orion aircraft with sensors to enable the locating and tracking of submarines. This will improve their combat capability and support New Zealand’s ability to protect maritime activity, including commercial shipping, national and foreign military maritime vessels, and underwater natural resources.

## Projects not included

The criteria for removing projects from the Major Project Report is when the project finishes its acquisition phase. On that basis five projects that featured in the 2016 Major Projects Report have been removed from the 2017 edition:

- C-130H Life Extension
- NH90 Medium Utility Helicopter
- Pilot Training Capability
- Maritime Helicopter Capability
- Project Protector Remediation Multi-Role Vessel, Offshore and Inshore Patrol vessels.



# PART 1: ASSESSMENT OF PERFORMANCE

This section provides an overview assessment of the nine projects included in this edition of the Major Projects Report. Performance has been considered across three metrics: schedule, budget, and capability.

## ASSESSMENT OF PERFORMANCE

Defence's approach, throughout all phases of a project, is to ensure that the capability and benefits sought can be realised within the approved budget, delivered within a reasonable timeframe, and in compliance with the contractual requirements that align with government policy.

The first Major Projects Report, published in 2010, discussed the difficulty experienced in meeting targets across all three of these performance metrics for the projects in that Report. If two of these are held steady, pressures may often be felt on the third. Where possible, Defence's preference is to hold steady on cost (through fixed price contracts) and performance. This means for legacy projects, often schedule has taken the pressure if contractors fail to meet contractual timeframes.

However, operational consequences may result from this approach, impacting on platform availability, scheduled maintenance, and training which require careful management and an integrated approach between the Ministry of Defence and the New Zealand Defence Force.

To mitigate this, Defence's objective has been to ensure no schedule slippage through options such as buying capability "off the shelf", while minimising where possible the need to undertake configuration changes, and the amount of change where required. This approach reflects and is consistent with comments made in 2010 by the Controller and Auditor-General for improving project management.

An example of where this has been successful is the Defence Command and Control project. The project expects to come in under budget as a result of the decision to purchase a system already in use with the United States' military, saving on developmental and testing costs. Both the Special Operations Vehicles and Individual Weapons Replacement projects have also tracked well, securing contracts that are delivering products that are already operational in other nations' military forces.

Where a project is complex in nature, "off the shelf" solutions may not be possible, but where a supplier has proven experience in delivering a solution, their existing approach or methodology may help in planning and delivering to the standard sought across all three metrics.

## PERFORMANCE IN THE 2016/17 YEAR

While performance across most projects met expectations across schedule, cost and capability, by 30 June 2017, one project – the Anzac Frigate Systems Upgrade project – was reporting significant pressure in relation to both cost and schedule.

By 30 June 2017 the project was reporting higher than originally anticipated cost estimates. Having delivered two of its three phases within budget (system design and acquisition of the

required equipment and systems), on completion of the installation design phase, the project identified that costs associated with installation would be substantially higher than provided for in its appropriation.

Likewise, the project continued to track behind the Cabinet approved schedule, with a cumulative 21 month delay. This was an increase on the 12 months' delay reported in the 2016 edition of the Major Projects Report. Both the budget and schedule risks were addressed during the 2017/18 financial year when Cabinet approved additional funding for the project, and a rebaseline of the schedule in December 2017.

Apart from this project, performance across other projects has resulted in a self-assessment by Defence for the 2016/17 year determining overall standard of Good. This compares with a self-assessment of Very Good in the year to 30 June 2016.

## SCHEDULE

Updated schedules for each major project are provided in the individual project data/information sheets provided in Part 3 of the 2017 Report.

Minor variations were reported in the Individual Weapons Replacement, Maritime Sustainment Capability and Special Operations Vehicles projects, however none reported anticipated operational impacts.

A cumulative variation to the Defence Command and Control System project reflects the expected and previously reported<sup>1</sup> combination of delays in approvals, changes to and eventual withdrawal of the intelligence database that was initially selected. In relation to this edition, it reflects the availability of the vessels for system installation, and the required specialist staff. The project's acquisition phase has closed.

No additional delays were forecast to Strategic Bearer Network over those noted in the 2016 edition of the *Major Projects Report*.

As outlined on the previous page, significant slippage was reported in relation to the Anzac Frigate Systems Upgrade project.

## COST

As noted in the 2016 edition of the Major Projects Report, the Strategic Bearer Network project sought additional funding from government as activities under the project were greater than anticipated. The transfer of additional funding, from various projects in the Defence portfolio that had delivered under budget, was approved in July 2016, along with use of contingency in the amount of \$5.6 million to support acquisition of equipment and infrastructure. The project remained within this approved budget through the 2016/17 financial year.

A proportion of this additional funding was transferred from the Anzac Frigate Platform Systems Upgrade, which makes its final appearance in the Major Projects Report in this edition.

---

<sup>1</sup> As noted in earlier editions (2013 through 2016)

## CAPABILITY

Overall, there has been no change in capability requirements for the six projects carried over from the 2016 Major Projects Report and no capability changes were identified within the three new projects during the course of the year.

Projects can be affected by the lack of appropriately skilled personnel to undertake both the acquisition and introduction into service phases. As in previous years, this risk is managed actively.

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 for the year to 30 June 2017**

| <b>Project</b>                         | <b>Change in Cost (other than foreign exchange)</b>  | <b>Schedule variation or update</b>   | <b>Cumulative schedule variations since original contract forecast</b>            | <b>Capability changes</b> | <b>Operational Impact of Delay</b>  |
|--|--|---|---|---------------------------|---|
| Anzac Frigate Platform Systems Upgrade | Underspend of \$3 million was recorded.  | The project closed in December 2016. Phase 2 upgrade of the second frigate, HMNZS <i>Te Mana</i> , was completed with full operational release in October 2016.   | None to the re-baselined 2014 schedule.   | None.                     | No impact as the programme was designed around the frigates' availability.  |
| Anzac Frigate Systems Upgrade          | Installation costs at 30 June 2017 were forecast to exceed Cabinet approved appropriation. | Delays in project schedule were reported at 30 June 2017, with progress tracking behind the Cabinet approved major milestone dates.   | Cumulative 21 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 2017.   |
| Individual Weapons Replacement         | None   | A delay of 4 months was forecast for Individual Weapons acceptance at 30 June 2017 as a result of a delay in export approvals from the US Government and a re-calculation of production/delivery dates from Lewis Machine & Tools to cover off manufacturing processes. | 4 months  | None.                     | No operational impacts. Following early identification of the delay the project determined in June 2016 that the delivery schedule had time to absorb any potential delays. |

| Project  | Change in Cost (other than foreign exchange)  | Schedule variation or update  | Cumulative schedule variations since original contract forecast | Capability changes | Operational Impact of Delay   |
|--|---|---|---|--------------------|---|
| Strategic Bearer Network                                 | Budget from other projects totalling \$11.7m was approved for transfer in July 2016, along with approval of contingency use (\$5.6m) for acquisition of equipment and infrastructure. | Procurement of maritime terminals and the second Anchor Station proceeded after Cabinet Business Committee approved of additional funding.<br>Installation of maritime terminals will take place as planned maintenance programmes are undertaken on each vessel. | 30 months <sup>2</sup>  | None.              | No impact.  |
| Maritime Sustainment Capability                          | New in 2017 Major Projects Report   | Preliminary design work was not completed to schedule.  | 2 months  | None               | Any potential impact of the delay in the preliminary design was being assessed. |
| Special Operations Vehicles                              | New in 2017 Major Projects Report   | Delays in shipping and the relocation of the Jankel factory led to a minor delay in delivery and the schedule variation.  | 2 months  | None               | No impact.  |
| Underwater Intelligence, Surveillance and Reconnaissance | New in 2017 Major Projects Report.  | No schedule variations have impacted this project, which remains on track for completion in September 2018.   | None  | None               | N/A   |

<sup>2</sup> No additional variation from that reported in the 2016 edition of the Major Projects Report.

| <b>Project</b>                     | <b>Change in Cost (other than foreign exchange)</b> | <b>Schedule variation or update</b>   | <b>Cumulative schedule variations since original contract forecast</b> | <b>Capability changes</b> | <b>Operational Impact of Delay</b>  |
|------------------------------------|---|---|--|---------------------------|---|
| Defence Command and Control System | None  | Delivery of the GCCS-J Initial Operating Capability was achieved in April 2017, rather than the originally forecast December 2015 <sup>3</sup> .<br>Full Operational Capability is scheduled to be introduced by December 2018. | 16 months<br><br>42 months <sup>4</sup>                                | None                      | No impact. Delivery of capability is undertaken as personnel and platforms are available. |
| Network Enabled Army Tranche 1     | None  | No change since the Project was approved by Cabinet in April 2015.  | None   | None                      | Not applicable.   |

<sup>3</sup> GCCS-J was first introduced in the Major Projects Report for the year to 30 June 2015 with December 2015 the IOC forecast date.

<sup>4</sup> When GCCS-J was first introduced in the Major Projects Report 2015, Full Operational Capability was forecast for June 2015.

# CONTINUOUS IMPROVEMENT IN PERFORMANCE

In the 2010 Major Projects Report, 13 lessons learned had been 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;
- increasing numbers of staff with 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
- incremental acquisition strategies where complex and high risk projects are better suited to this approach.

Additional investment in Budget 2015 increased the Ministry of Defence's operating funding by \$27.1 million over four years. It recognised the demands of the large acquisition programme that, if implemented fully, would see replacement of most of Defence's current major military platforms.

This additional operational funding enabled a significant change programme to deliver improvements across the joint Capability Management System of the Ministry and the New Zealand Defence Force.

By the end of the 2016/17 financial year, the Defence Capability Change Action Programme (DCCAP) the means through which changes are being delivered, had been in place for two years.

DCCAP was established to systematically address 87 recommendations which had been made by a number of reviews of the capability management system and which identified some risks in the system. During the reporting period, good progress has been made. The DCCAP developed and delivered organisational capabilities that resulted in 33 (38%) of 87 extant recommendations being closed by June 2017, including 90% of all Whole of Life Costing recommendations and 59% of Industry and Procurement Improvement recommendations.

This included recommendations for:

- a New Zealand Industry Engagement Plan to be included as part of tender responses provided by industry suppliers where a project's whole-of-life value is \$15 million or more
- improving tender documentation so specifications are clearer, evaluation criteria are more transparent and contracting is standardised
- improved and standardised project reporting
- a systematic approach to measuring the benefits from Defence capabilities.

As at 30 June 2017, a further 35 DCCAP recommendations were being implemented.

A review of the Whole of Life Costing Framework by Ernst and Young, found the framework to be both leading edge across New Zealand Public Service agencies and fit-for-purpose.

In July 2016 Defence undertook its initial Investor Confidence Rating and achieved a 'B' rating, third in the Public Service.

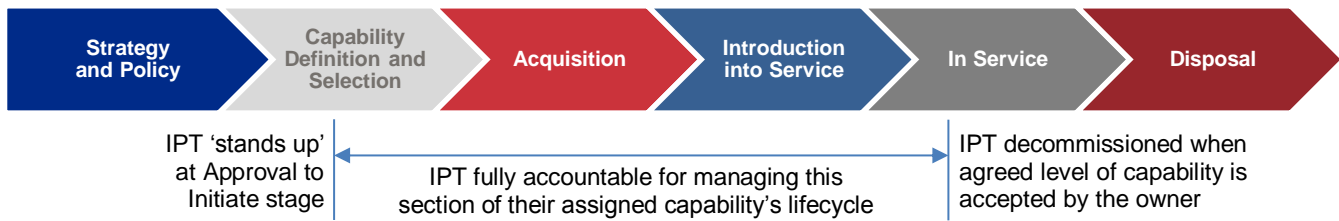
Development of organisational capabilities included approval of the overviews of the Capability Management System Target Operating Model overview and Capability Definition, enabling these to be developed further. The Target Operating Model is the central mechanism for joining-up the features of the Capability Management System into one unified whole, forming the basis of the CMF significant update.

Approval was also given for a separate work package to tailor the Target Operating Model to provide support for projects that do not fall into the Major Project category.

The ability to share documents and information across the Ministry and the New Zealand Defence Force was being implemented through the progressive rollout of a document management system, increasing the ability for collaborative and integrated approaches to project management and reporting.

The establishment of IPTs in February 2017 for some of the major capability projects, included three of the nine projects featured in this edition of the Major Projects Report: Anzac Frigate Systems Upgrade, Maritime Sustainment Capability, and Network Enabled Army.

Figure 1: How Integrated Project Teams fit in the lifecycle of defence capability procurement



Along with this, dedicated project boards were established to provide oversight of particularly large and complex projects and programmes, including five of the nine projects featured in this report: Anzac Frigate Systems Upgrade, Network Enabled Army, Maritime Sustainment Capability, Individual Weapons Replacement, and Underwater Intelligence, Surveillance and Reconnaissance.



## INTRODUCTION INTO SERVICE

Section 3 of the Project Data sheets outlines the intended Introduction into Service plans for each of the platforms or systems. Points to note for the 2016/17 year are:

- Anzac Frigate Platform System Upgrade: The Operational Test and Evaluation phase was completed. An Operational Capability Statement was prepared and Full Operational Release took place in October 2016.
- Defence Command and Control: while the project's acquisition phase has concluded, the Introduction into Service phase is expected to achieve full operational capability in December 2018.
- Anzac Frigate Systems Upgrade: while introduction into services of the first upgraded frigate had been planned to take place in 2018, the pressures noted in both cost and schedule were flagged during the 2016/17 year and at the end of the financial year the project was reporting 21 months behind schedule. The potential impact on introduction into service plans were being considered.
- Individual Weapon Replacement Project: The Introduction into Service plan was implemented during 2016 and 2017, with completion of maintainer training and the introduction of operator training in October 2016. The weapon instructors, drawn from all services, have been conducting cascade training throughout camps and bases in New Zealand. Phase one of initial training was completed in April 2017.
- Special Operations Vehicles: the Introduction into Service plan was signed in April 2017 and the project was tracking to schedule for initial capability release, testing and evaluation, and the full operational release across all vehicle types.

# DEPUTY AUDITOR-GENERAL'S COMMENTARY

## Background

In 2008, we 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 has 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 have reviewed these reports in order to provide assurance about the reliability of the information.

## Review of the *Major Projects Report 2017*

My commentary covers the *Major Projects Report 2017*. The report covers nine projects, three of which are new projects in 2017:

- Maritime Sustainment Capability;
- Special Operations Vehicles; and
- Underwater Intelligence, Surveillance and Reconnaissance (UWISR).

Five projects from the previous year's report (*Major Projects Report 2016*) have been successfully introduced into service and have therefore not been reported on. These five projects are outside the scope of our work.

My staff reviewed the changes to the project data sheets and project information sheets in Volumes 2 and 3 of the *Major Projects Report 2017*. 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 19 to 21.

My staff also reviewed Part 1 of the *Major Projects Report 2017*, which provides Defence's summary assessment of its performance in managing and delivering the nine projects.

## Overall view of the *Major Projects Report 2017*

Overall, I consider that Defence has realistically assessed its performance in managing the nine projects during the 2016-17 year. The *Major Projects Report 2017* demonstrates a commitment to transparency and continuous improvement.

At 30 June 2017, the ANZAC Frigate Systems Upgrade and the Strategic Bearer Network both required additional funding, which has since been approved by Cabinet. The ANZAC Frigate Systems Upgrade was also experiencing significant delays.

The limited availability of personnel remains a risk for a few projects, but has improved from previous years.

Six of the nine projects included in this report have been completed or soon will be. The ANZAC Frigate Platform Systems Upgrade was completed in late 2016. The Individual Weapons Replacement project was formally handed over in December 2017. The Strategic Bearer Network, UWISR, Special Operations Vehicles, and Network Enabled Army Tranche One projects are expected to be completed in 2018.

No new projects are expected to be included in the *Major Projects Report 2018*.

## General commentary on the *Major Projects Report 2017*

Defence has continued to act on our Office's recommendations from 2010 and as a result has maintained improvements in how it manages and reports on new projects.

The new Maritime Sustainment Capability (MSC) project will build and introduce into service a new vessel to replace the now decommissioned HMNZS *Endeavour*. The new vessel, HMNZS Aotearoa, is expected to sustain the NZDF's maritime, air, and land forces with fuel, fresh water, ammunition, and an amount of equipment and non-perishable stores. It will also deliver specialised Antarctic fuel, and transport containerised scientific material and supplies to McMurdo Sound.

The Special Operations Vehicles project is expected to deliver replacements to the Pinzgauer fleet with a vehicle fleet that ensures that the New Zealand Special Operations Forces can continue to operate with improved capability and increased efficiency.

The UWISR project will progressively fit the Royal New Zealand Air Force's fleet of P-3K2 Orion aircraft with sensors to enable the locating and tracking of submarines. This is designed to improve the NZDF's combat capability and support New Zealand's ability to protect maritime activity, including commercial shipping, national and foreign military maritime vessels, and underwater natural resources.

These three projects were all subject to a Better Business Case review process, which looked at multiple criteria and a range of options to determine the best option for the NZDF.

The Special Operations Vehicles and UWISR projects are proceeding largely to schedule and budget. The MSC project has experienced some delays in the design stage, but there are no expected effects on budget. The Individual Weapons Replacement project also experienced minor schedule slippage as a result of delays in obtaining export approval from the United States Government.

Two projects will exceed their original Cabinet-approved funding as a result of costs being significantly more than original project estimates. Several other projects are expected to be completed under budget, but the amount of the underexpenditure is less than the overexpenditure. There have also been relatively minor delays in several projects, although some of these appear to have been outside the control of Defence. The Defence Capability Change Action Programme is intended to support improved planning and management for major capability 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.

My staff observed that good documentation process was not followed in some projects, resulting in difficulty finding information and key project documents. This was especially the case when project personnel had changed. Defence has recently introduced a new document management system which is intended to deliver improvements in document management. This is supported by a new information management policy in the Ministry of Defence.

## Personnel risks

Personnel risks to projects have improved from earlier reports, with a lack of personnel being identified as a significant risk or issue for only two of the nine projects. This is due partly to risk reduction and planning and partly to the completion of some projects.

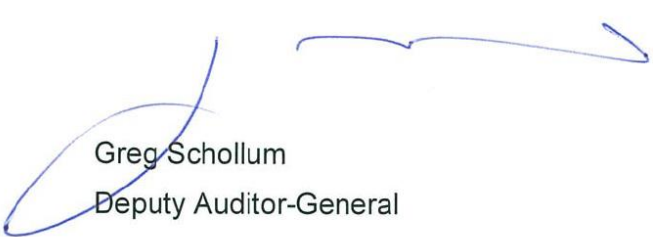
Defence has taken steps to mitigate the personnel risks for the older projects, and newer projects are benefiting from increased awareness and preparation. There may be room for improvement in how projects are handed over when a project co-ordinator or manager leaves Defence.

Overall, Defence's performance in this area has improved significantly since it began producing these reports in 2010. I encourage Defence to continue monitoring personnel risks for current and future projects.

## Timeliness of preparation of Major Project Reports

My staff have been in discussions with Defence about how the timeliness of the preparation of major project reports can be improved in the future. In my view the value of these reports is reduced when they are not prepared in a timely manner.

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

5 November 2018

**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 2017**

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 2017* 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 23-57<sup>5</sup>, the project data sheets on pages 58-118<sup>6</sup>, the project information reports on pages 119-133<sup>7</sup>, and the project definition information on pages 134-204<sup>8</sup> cover the following acquisition projects:

- Individual Weapons Replacement;
- Anzac Platform Systems Upgrade;
- Anzac Frigate Systems Upgrade;
- Strategic Bearer Network;
- Maritime Sustainment Capability;
- Special Operations Vehicles;
- Underwater Intelligence, Surveillance and Reconnaissance;
- Defence Command and Control System; 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 by or on behalf of the Auditor-General* and the External Reporting Board International Standard on Assurance Engagements (New Zealand) 3000: *Assurance Engagements Other than Auditors 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:

---

<sup>5</sup> This volume.

<sup>6</sup> See Volume 2.

<sup>7</sup> Ibid.

<sup>8</sup> See Volume 3.

- Reconciling the non-financial 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 2017;
- Seeking explanations from Defence staff for any questions arising from the reconciliations; and
- Seeking assurances from Defence about events subsequent to 30 June 2017.

### **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 each 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 2017* 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 or 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 2017* has not been fairly disclosed.



Greg Schollum

Deputy Auditor-General

Wellington, New Zealand

5 November 2018

# 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 |  |
|---------------------------------|--|
|                                 | <b>On track.</b> 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.       |
|                                 | <b>Medium.</b> 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.          |
|                                 | <b>High.</b> 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.                          |
|                                 | <b>Critical.</b> 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 |  |
|--|--|
| <b>Current Risk</b>                        | 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). |
| <b>Treated Risk</b>                        | An assessment of the risk if the stated treatment action is applied.   |
| <b>Risk Trend</b>                          | The expected progression of the risk and whether it is improving, stable or worsening compared to the previous report.   |
| <b>Critical Timing</b>                     | The point at which the risk needs to be resolved.  |
| <b>Risk or Issue Authority</b>             | The part of the organisation that is responsible for managing the risk or issue.   |



# ANZAC FRIGATE PLATFORM SYSTEMS UPGRADE

---

**Project Description:** The Platform Systems Upgrade has addressed 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 has maintained the operational effectiveness and efficiency of the Anzac frigates, *Te Kaha* and *Te Mana*, over their remaining lives, thereby sustaining and enhancing 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

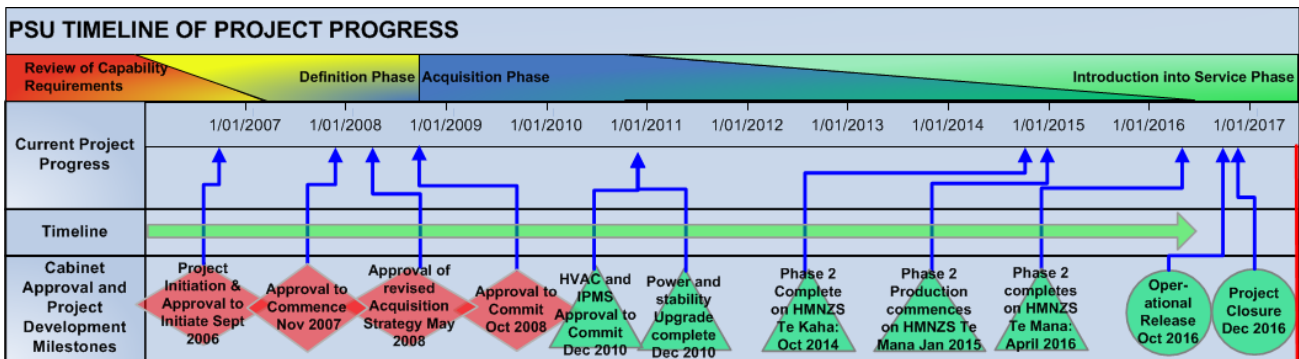
The capability requirements necessary to support policy objectives included:

- 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 Volume 3, Part 4, page 140.*

## Project Status as at 30 June 2017

|  |   |
|--|---|
|  | <p><b>Capability:</b> 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> 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><b>Schedule:</b> <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” was drafted for Naval Capability Board endorsement prior to “Operational Release” by the Chief of Navy. The operational release planned for the last quarter of 2016 was completed on 18 October that year.</p> |
|  | <p><b>Cost:</b> Expenditure against the Crown Appropriation of \$87.600 million is \$81.5 million (30 June 2017), with an estimate at completion (EAC) of \$81.5 million producing a variance at completion (VAC), when adjusted for FX Impact (-\$1.6million) of \$3 million (underspend).</p>   |



## Active Risks at 30 June 2017

Nil Risks.

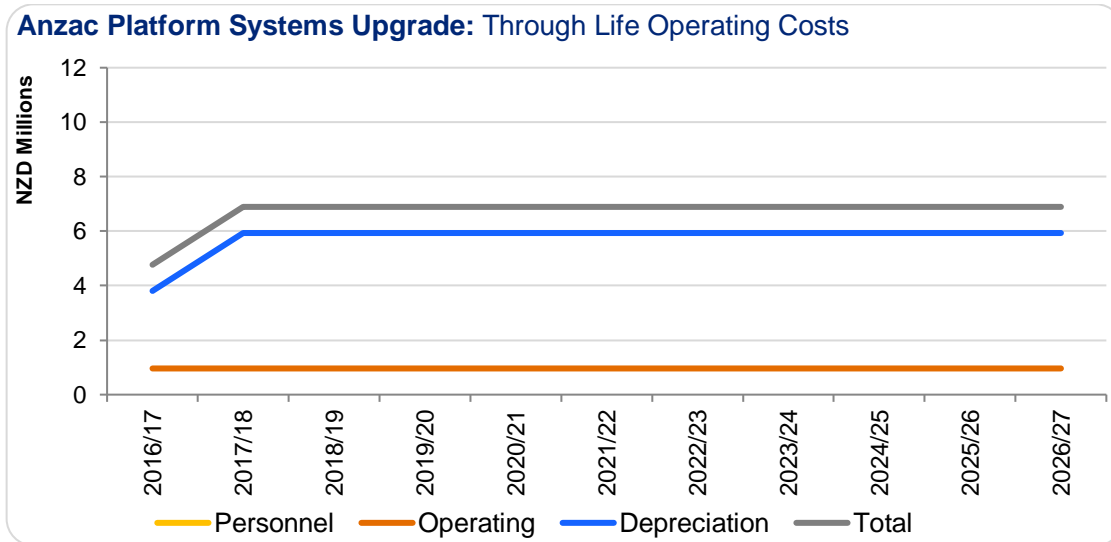
## Financial Performance

Further detail on financial performance can be found at Volume 2, Part 3, pages 61-62.

### Approved budget and expenditure

|  | Total (NZ\$ million)  |
|--|---|
| Approved budget                        | 86.1  |
| Life to date expenditure               | 81.5  |
| Total forecast expenditure             | 81.5  |
| Gross project variation<br>(forecast)  | 4.6   |
| Foreign exchange impact                | 1.6   |
| Actual project variation<br>(forecast) | 3.0   |
| Explanation                            | 30 June 2017 forecast results in a project underspend. The project was closed substantially in November 2016 when remaining project budget was transferred. |

## Summary of Anzac Platform Systems Upgrade Through-Life Operating Cost Estimates



# ANZAC FRIGATE SYSTEMS UPGRADE

---

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

---

## Policy Value

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

- defending New Zealand's sovereignty, its Exclusive Economic Zone and territorial waters
- operating with the Australian Defence Force to discharge our obligations as an ally of Australia
- contributing to peace and stability operations in the South Pacific
- contributing to whole-of-government efforts at home in resource protection
- participating in Five Power Defence Arrangements and other multilateral exercises or operations
- protecting New Zealand's interests in the Southern Ocean and Ross Dependency
- 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 in close proximity 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 to the Commander Joint Forces New Zealand a platform that can complete a mission throughout its remaining life.

*Operational requirements necessary to support the capability can be found in Volume 3, Part 4, page 148-149.*

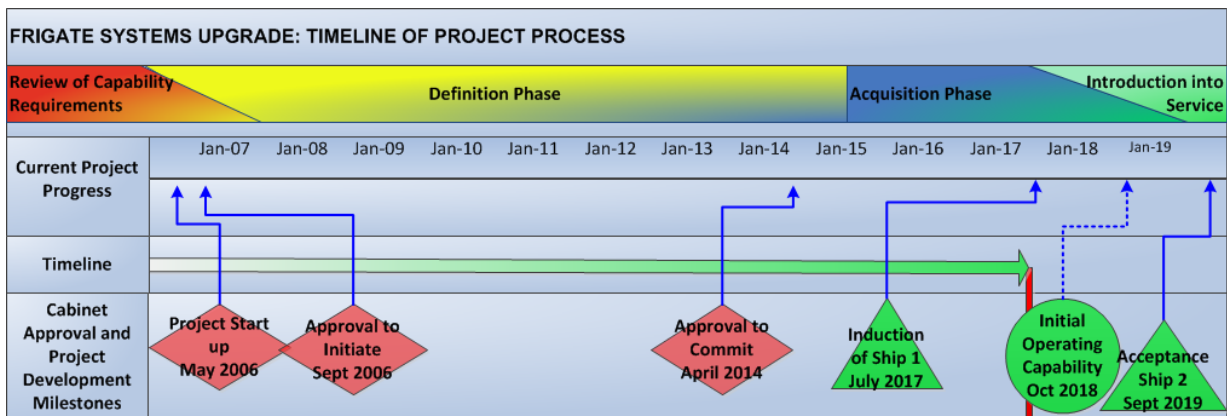
## Project Status as at 30 June 2017

|  |   |
|--|---|
|  | <b>Capability:</b> The Project installed and set to work the Anzac Frigate System Upgrade Combat System Trainer at the Maritime Warfare Training Centre. The Critical Design Review was completed on schedule on 12 May 2017. |
|  | <b>Schedule:</b> There were significant delays in the Project schedule as at 30 June 2017, with progress tracking behind the Cabinet approved major milestone dates.  |
|  | <b>Cost:</b> As at 30 June 2017, the project costs were forecast to exceed the Cabinet approved funding, based on cost estimates for the installation phase which were significantly higher than original project estimates.  |

## Developments post 30 June 2017

Cabinet approved additional funding for the project in December 2017. A contract change proposal for the installation phase was signed with Lockheed Martin Canada in December 2017. The project schedule and costs have been rebaselined to reflect these changes.

The first ship to undergo upgrade is HMNZS *Te Kaha*.



## Active Risks at 30 June 2017

| Risk ID:      | Description  |               |      |             |          | Treatment  |                     |                 |                 |
|---------------|--|---------------|------|-------------|----------|--|---------------------|-----------------|-----------------|
| 1             | <b>Commercial Leverage</b><br>If the NZDF deploys HMNZS <i>Te Mana</i> to Canada for refit in advance of a Contract Change Proposal (CCP) for installation being agreed, then Lockheed Martin Canada may interpret this as a commitment to agree the CCP by the Crown that would be too costly both financially and organisationally to reverse. This would weaken the Crown's position in negotiating the cost, terms and scope of the CCP. |               |      |             |          | The following mitigations are being considered: <ul style="list-style-type: none"> <li>• The undertaking of due diligence on the LMC pricing and bidding process to determine their process and how it is applied with respect to margins/profit etc/</li> <li>• The pre-negotiation of as many points including scope and terms as possible prior to the sailing of <i>Te Mana</i>.</li> <li>• An analysis of the costs and impacts of delaying schedule by two or more months as a result of leaving <i>Te Mana</i> in New Zealand, vs the costs/risks of having to return the ship to New Zealand or leave it in Canada.</li> </ul> |                     |                 |                 |
| Current Risk: |  | Treated Risk: |      | Risk Trend: | Reducing | Critical Timing:   | Jul-17              | Risk Authority: | Domain Director |
|               |  |               |      |             |          |  | Capability Delivery |                 |                 |
| Risk ID:      | Description  |               |      |             |          | Treatment  |                     |                 |                 |
| 2             | <b>Installation work package 08 (IWP08)</b><br>If the cost of IWP08 is higher than forecast, then it will require additional funding.  |               |      |             |          | Review the impact on completion of the preliminary design that is underway.  |                     |                 |                 |
| Current Risk: | High   | Treated Risk: | High | Risk Trend: | Stable   | Critical Timing:   | Sep-17              | Risk Authority: | Project Manager |
|               |  |               |      |             |          |  | Capability Delivery |                 |                 |
| Risk ID:      | Description  |               |      |             |          | Treatment  |                     |                 |                 |
| Current Risk: |  | Treated Risk: |      | Risk Trend: | Stable   | Critical Timing:   | Sept -17            | Risk Authority: | Domain Director |
|               |  |               |      |             |          |  | Capability Delivery |                 |                 |

## Issues

| Issue ID: | Description  | Status as at 30 June 2017       |
|-----------|--|---------------------------------|
| 1         | <b>Cost of Installation:</b><br>If it is not possible to fund the installation costs associated from within the existing budget, or options to increase the budget and contingency are not approved, it is likely the Project will be unable to deliver the proposed upgraded FSU capability on TE MANA and TE KAHA, or meet a number of the | Escalated for management action |

|                         |  |                                  |  |
|-------------------------|--|----------------------------------|--|
|                         | Project's key User Requirements and/or benefits.   |                                  |  |
| <b>Critical Timing:</b> | August 2017  | <b>Issue Authority:</b>          | MoD Capability Delivery and NZDF Capability Branch |
| <b>Issue ID:</b>        | <b>Description</b>   | <b>Status as at 30 June 2017</b> |  |
| 2                       | <b>Timing of key decisions:</b><br>If critical decisions are not made in accordance with the proposed schedule then delays to associated critical path activities will have an impact on schedule and costs. | Treatment plan in development.   |  |
| <b>Critical Timing:</b> | August 2017  | <b>Issue Authority:</b>          | MoD Capability Delivery and NZDF Capability Branch |

## Financial Performance

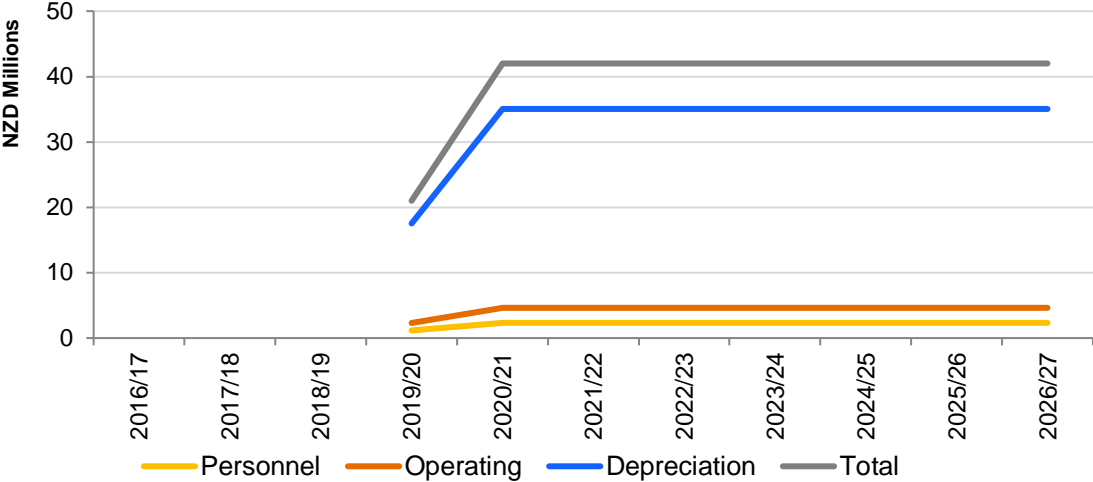
Further detail on financial performance can be found in Volume 2, Part 3, pages 68-70.

### *Approved budget and expenditure*

|  | Total (NZ\$ million)    |
|--|-------------------------|
| <b>Approved budget</b>                     | 490.9                   |
| <b>Life to date expenditure</b>            | 314.1                   |
| <b>Total forecast expenditure</b>          | 448.7                   |
| <b>Gross project variation (forecast)</b>  | 42.2                    |
| <b>Foreign exchange impact</b>             | 42.2                    |
| <b>Actual project variation (forecast)</b> | 0.0                     |
| <b>Explanation</b>                         | Foreign exchange impact |

# Summary of Anzac Frigate Systems Upgrade Through Life Operating Cost Estimates

Anzac Frigate Systems Upgrade: Through Life Operating Costs





# INDIVIDUAL WEAPONS REPLACEMENT

**Project Description:** The Individual Weapon Replacement project has been replacing 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 an open architecture design, to provide an Individual Weapon that delivers a modular capability.

## 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:

- an increased ability to effectively detect, recognise, identify and engage targets; and
- 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:

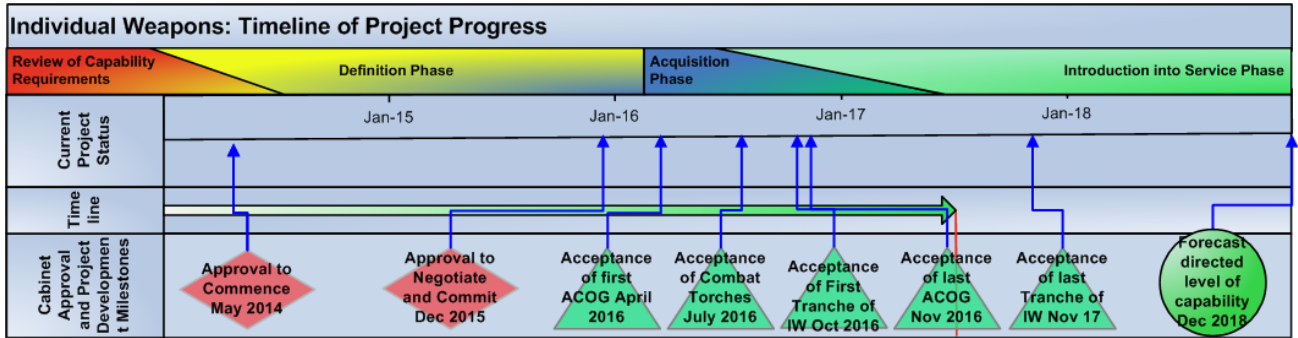
- An individual weapon that, when fitted with a suitable sight, allows the detection, identification and effective engagement of adversaries at all ranges out to at least 600 metres by day and 300 metres by night.
- An individual weapon that is effective in all military operations by day and night in 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 157.*

## Project Status as at 30 June 2017

|  |  |
|--|--|
|  | <b>Capability:</b> Capability has been contracted and is in the production/delivery /Introduction into Service phase.  |
|  | <b>Schedule:</b> 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 approved appropriation.



### Developments post 30 June 2017

Several areas of work were completed in the period following 30 June 2017, including delivery and acceptance of Tranches 3 and 4, which saw delivery of all weapons. The Simulation Contract was awarded on 1 November 2017. A formal handover ceremony for the project was held at Trentham Military Camp in early December 2017.

### Active Risks at 30 June 2017

| Risk ID:      | Description  | Treatment  |
|---------------|--|--|
| 1             | Simulation costs<br>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. | <ol style="list-style-type: none"> <li>The Ministry of Defence (MoD) to ring-fence the initial allowance for the simulation work to ensure that it is available when required.</li> <li>The MoD to commission an assessment of the scope of work required.</li> <li>Overall simulation policy may mean that this is no longer part of this specific project, but part of a broader simulation capability.</li> <li>The Original Equipment Manufacturer has provided a solution that can be funded from within the original approval. The MoD is negotiating a contract for this activity.</li> </ol> |
| Current Risk: | Treated Risk:  | Risk Trend: Stable   |
|               |  | Critical Timing: 2018  |
|               |  | Risk Authority: Acquisition Lead   |
|               |  | MoD Capability Delivery  |
| Risk ID:      | Description  | Treatment  |

|                      |   |                      |  |                    |        |  |                         |                        |                  |
|----------------------|---|----------------------|--|--------------------|--------|--|-------------------------|------------------------|------------------|
| 2                    | <p>Factory Acceptance Testing</p> <p>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.</p>                      |                      |  |                    | Stable | <p>1. FAT scope of work has been defined, agreed with the OEM and will be included in the contract.</p> <p>2. The MoD to ensure, to the fullest extent possible, that the same personnel are used for all FATs.</p> <p>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.</p> <p>4. All individual weapons, grenade launchers, spares and associated deliverables have been inspected by the NZDF Factory Acceptance teams and all items tagged as compliant.</p> |                         |                        |                  |
| <b>Current Risk:</b> |   | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> |        | <b>Critical Timing:</b>  | 2016/2017               | <b>Risk Authority:</b> | Acquisition Lead |
|                      |   |                      |  |                    |        |  | MoD Capability Delivery |                        |                  |
| <b>Risk ID:</b>      | <b>Description</b>  |                      |  |                    |        | <b>Treatment</b>   |                         |                        |                  |
| 3                    | <p>Quality Assurance</p> <p>If rifles are not manufactured to agreed quality levels system performance may be substandard.</p>  |                      |  |                    | Stable | <p>1. Obtain independent analysis of the quality assurance risk.</p> <p>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.</p> <p>3. Ensure contract provisions clearly set out quality requirements and quality assurance measures.</p> <p>4. All weapons have been inspected and passed fit for service.</p>  |                         |                        |                  |
| <b>Current Risk:</b> |   | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> |        | <b>Critical Timing:</b>  | 2016/2017               | <b>Risk Authority:</b> | Acquisition Lead |
|                      |   |                      |  |                    |        |  | MoD Capability Delivery |                        |                  |
| <b>Risk ID:</b>      | <b>Description</b>  |                      |  |                    |        | <b>Treatment</b>   |                         |                        |                  |
| 4                    | <p>Trijicon Warranty</p> <p>If the warranty claim for the RMR06 of the Trijicon Advanced Combat Optical Gunsight (ACOG) is not resolved and a fix determined, there is a potential reputation risk that the ACOG will not form part of the weapon system and will therefore not meet the project's user expectations.</p> |                      |  |                    | Stable | <p>1. Manage warranty claim in accordance with contract conditions.</p> <p>2. MoD/NZDF work with the OEM to assist in a speedy resolution.</p> <p>3. Advise the Individual Weapons project board of the warranty claim and any impacts that may affect weapon operation and distribution.</p> <p>4. With the Individual Weapons project board, decide if the warranty claim needs to be elevated within the organisations.</p> <p>5. Ensure a communication strategy is in place to advise users of issues and outcomes.</p>   |                         |                        |                  |
| <b>Current Risk:</b> |   | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> |        | <b>Critical Timing:</b>  | May 2018                | <b>Risk Authority:</b> | Acquisition Lead |
|                      |   |                      |  |                    |        |  | MoD Capability Delivery |                        |                  |

## Issues

| Issue ID:               | Description  | Status as at 30 June 2017  |
|-------------------------|--|--|
| 1                       | Safety Case – Required before weapons are Introduced into Service. | Reviewing current safety instructions to ensure compliance with the safety case requirements. Draft Safety Case has been written and is going through the formal review process. |
| <b>Critical Timing:</b> | April 2017   | <b>Issue Authority:</b> NZDF Programme Manager   |

## Financial Performance

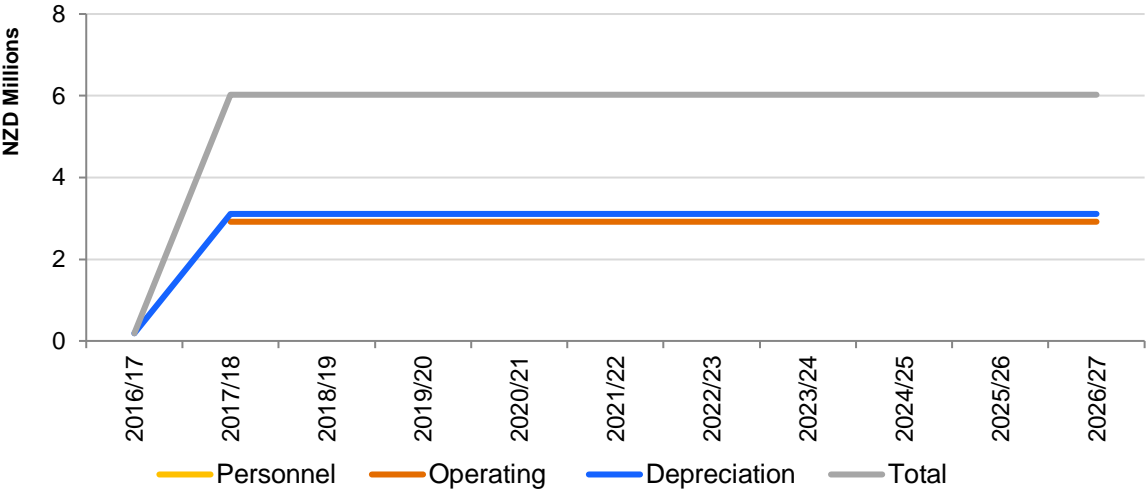
Further detail on financial performance can be found in Volume 3, Part 3, pages 78-79.

### *Approved budget and expenditure*

|  | Total (NZ\$ million) |
|--|----------------------|
| Approved budget                        | 59.2                 |
| Life to date expenditure               | 41.3                 |
| Total forecast expenditure             | 57.4                 |
| Gross project variation<br>(forecast)  | 1.8                  |
| Foreign exchange impact                | (1.8)                |
| Actual project variation<br>(forecast) | 0.0                  |

# Summary of Individual Weapon Through Life Operating Cost Estimates

## Individual Weapons (Steyr) Upgrade: Through Life Operating Costs



# STRATEGIC BEARER NETWORK

**Project Description:** This project will provide high capacity military satellite communications equipment to the New Zealand Defence Force. This Strategic Bearer Network will access the United States Department of Defense Wideband Global Satellite Communications, a constellation of nine satellites that will enable deployed forces to meet current and future strategic information exchange requirements and meet the growing demand for bandwidth. The Network is made up of two fixed anchor stations and a number of maritime terminals fitted to the Navy fleet.

## Policy Value

Strategic Bearer Network is an enabling project supporting a number of key Defence Force functions within Land, Maritime and Air domains. The Network is also a key enabler for Command and Control systems such as the Defence Command and Control System and Network Enabled Army. 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 in Volume 3, Part 4, page 166-167.*

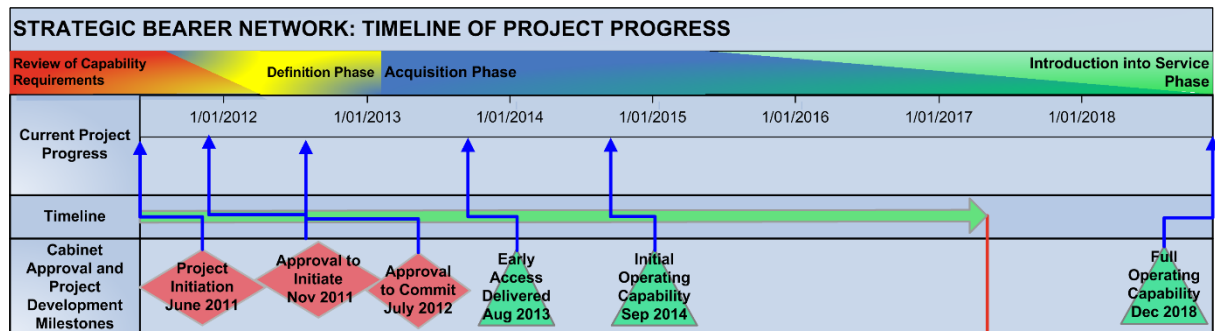
## Project Status as at 30 June 2017

|  |   |
|--|---|
|  | <b>Capability:</b> The delivery of the second anchor station encountered delays both to the Factory Acceptance Test (FAT) of its terminal, and to planned infrastructure ground |
|--|---|

|  |  |
|--|--|
|  | work, but the terminal's FAT was accepted on 30 June 2017. The contract for maritime terminals was approved, together with the second anchor station.  |
|  | <b>Schedule:</b> Maritime terminal installations have slipped, with CANTERBURY being the first to install the system in September 2017 (5 month delay). Anchor station infrastructure ground works completion date has moved from June 2017 to the first quarter of 2018. Initial analysis of the schedule suggests that it will not be possible to pull back any of this time, but this will have minimal impact on the overall benefits realised for the projects. |
|  | <b>Cost:</b> An additional NZ\$11.7 million was approved by Cabinet along with a draw down of the NZ\$5.6 million contingency to be used for acquisition of equipment and infrastructure. Only NZ\$2 million of this contingency was allocated at this time. Continued cost overruns for both the maritime terminal installations and the second anchor station indicate it is likely the project will need to access more contingency.                              |

### Developments post 30 June 2017

In November 2017, the Secretary of Defence approved a contingency drawdown of \$740k from the remaining \$3.6 million. This allowed for the engagement of the main contractor for the Anchor station infrastructure work with a revised project forecast of \$1.585 million.



### Active Risks at 30 June 2017

| Risk ID:             | Description   | Treatment   |
|----------------------|---|---|
| 1                    | Construction company availability<br>The anchor station infrastructure is currently on the critical path, if there are any further delays this will impact on the overall project timeline. | Construction companies to be engaged as early as possible and timeframes locked down in tender documents. |
| <b>Current Risk:</b> | <b>Treated Risk:</b>  | <b>Risk Trend:</b> Stable   |
|                      |   | <b>Critical Timing:</b> Sept 2017   |
|                      |   | <b>Risk Authority:</b> Project Manager  |
|                      |   | Delivery/Build/Acceptance   |
| 2                    | Integrated Logistical Support (ILS) Resource<br>If the ILS documentation delivered by the FMS case is inadequate for NZDF purposes then an ILS Manager will be required to adapt it.        | FMS deliverables need to be assessed so preparation for any ILS resourcing can be progressed.             |

|                           |  |               |  |             |        |                  |           |                 |                 |
|---------------------------|--|---------------|--|-------------|--------|------------------|-----------|-----------------|-----------------|
| Current Risk:             |  | Treated Risk: |  | Risk Trend: | Stable | Critical Timing: | Sept 2017 | Risk Authority: | Project Manager |
| Delivery/Build/Acceptance |  |               |  |             |        |                  |           |                 |                 |

## Issues

| Issue ID:               | Description   | Status as at 30 June 2017  |
|-------------------------|---|--|
| 1                       | Installation costs have risen:<br>Maritime terminal installation costs have risen since the original estimate was provided during the design feasibility study.   | Treatment plan in development with provider, looking for options to reduce current cost estimate.                        |
| <b>Issue Authority:</b> | Ministry of Defence   |  |
| 2                       | Delay with ship installations:<br>Installation to CANTERBURY and WELLINGTON has been delayed due to the time required and complexities of the installation design.  | Treatment plan in place.   |
| <b>Issue Authority:</b> | Ministry of Defence   |  |
| 3                       | Second Anchor Station operational date delayed by infrastructure ground work:<br>A delay of up to nine months in completing required ground works and infrastructure has been indicated by Defence Estate and Infrastructure. | Treatment plan in development, with project reviewing delivery timeline and looking to lock down an achievable schedule. |
| <b>Issue Authority:</b> | Ministry of Defence   |  |
| 4                       | Second Anchor Station infrastructure ground work costs have risen:<br>The latest estimate has increased from the first estimate and forecast  | Treatment plan in place to agreed and lock down firm and fixed costs.  |
| <b>Issue Authority:</b> | Ministry of Defence   |  |

## Financial Performance

*Further detail on financial performance can be found in Volume 2, Part 3, pages 86-87.*

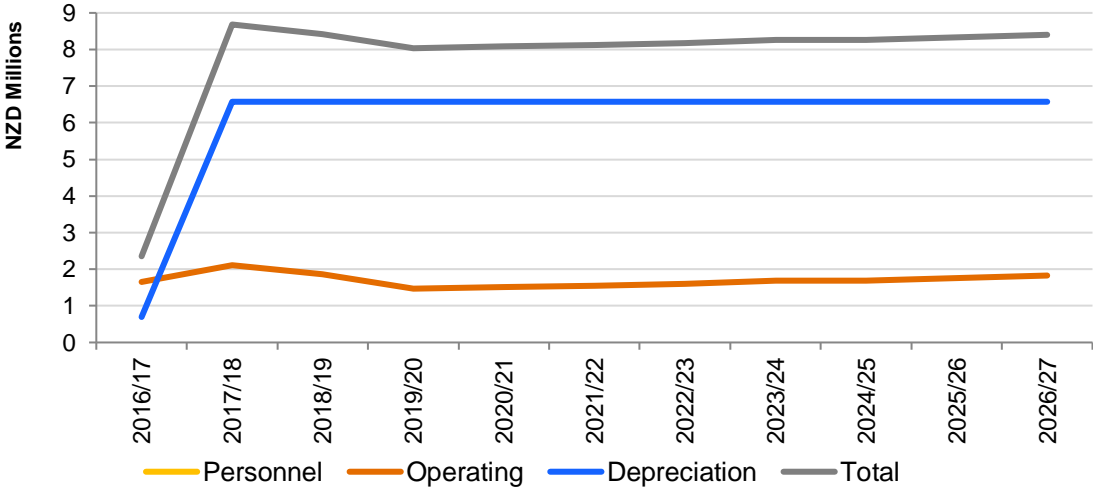


**Approved budget and expenditure**

|  | Total (NZ\$ million) |
|--|----------------------|
| Approved budget                        | 100.6                |
| Life to date expenditure               | 82.9                 |
| Total forecast expenditure             | 97.4                 |
| Gross project variation<br>(forecast)  | 3.2                  |
| Foreign exchange impact                | (2.9)                |
| Actual project variation<br>(forecast) | 0.3                  |

**Summary of Strategic Bearer Network Wideband Global Satellite Through Life Operating Cost Estimates**

**Strategic Bearer Network: Through Life Operating Costs**



# MARITIME SUSTAINMENT CAPABILITY

---

**Project Description:** The Maritime Sustainment Capability (MSC) will replace the Navy's existing replenishment tanker HMNZS *Endeavour*. The replacement vessel will provide an enhanced capability which is better able to support land operations and is polar code compliant, allowing the ship to operate to Antarctica in the summer season.

---

## Policy Value

HMNZS *Endeavour* has played a key supporting role in the delivery of the Defence Force's principal roles, articulated in the Defence White Paper 2016. *Endeavour's* role has been particularly significant due to New Zealand's unique geostrategic environment. No other country of comparable size and political and economic standing has at a minimum to be able to deploy equipment and personnel from the Equator to Antarctica. The naval tanker has extended the endurance and range of the Defence Force's naval vessels, significantly increasing the utility of the Defence Force's naval combat capability.

The Maritime Sustainment Capability will maintain the Government's options to contribute to operations outside New Zealand's immediate region by providing a continued ability to sustain Defence Force and coalition platforms deployed further afield. The overarching benefits of the Maritime Sustainment Capability are:

- Provision of an independent and complementary Maritime Sustainment Capability to New Zealand and its security partners.
- An improved ability to shape and react to events in New Zealand, Australia and the South Pacific.
- The provision to government of a greater flexibility in response options to threats and emergencies.
- The provision to government of support to New Zealand's civilian presence in Antarctica.

## Capability Requirements

- Conduct maritime force logistic support
- Maintain deployable bulk fuel reserves
- Provide an effective and appropriate maritime platform
- Provide support to other government agencies with specific fitted capabilities.

*The operational requirements necessary to support the capability can be found in Volume 3, Part 4, page 177-178.*

## Project Status as at 30 June 2017

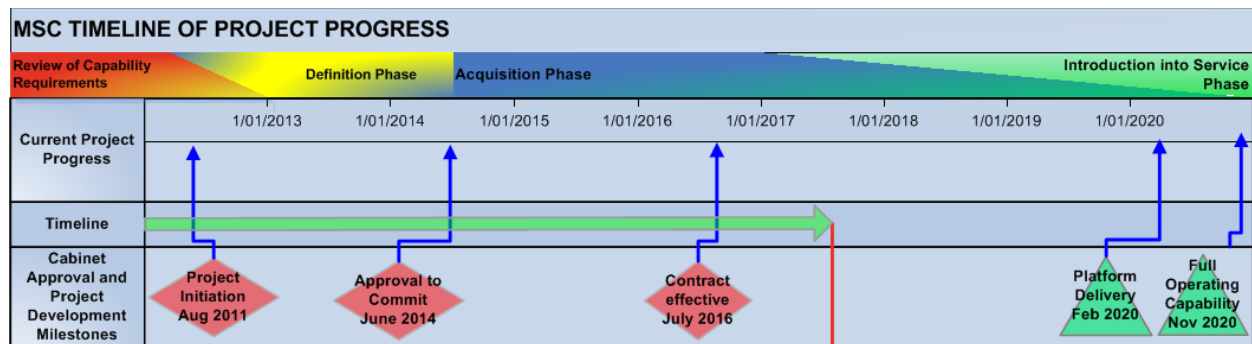
|  |   |
|--|---|
|  | <p><b>Capability:</b> The milestone associated with preliminary design schedule was not met. Main outstanding issues were:</p> <ul style="list-style-type: none"><li>• Seakeeping performance (actions and revised schedule now agreed)</li><li>• Flight deck airflow analysis (analysis to be re-run with additional criteria)</li></ul> |
|--|---|

|  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>Lifeboat selection (approach now agreed).</li> </ul> <p>HHI have been informed of the status of each issue and criteria that need to be met before each issue will be closed.</p>  |
|  | <p><b>Schedule:</b> The Preliminary Design was not completed on schedule. However the bulk of work, allowing progress into Detailed Design, was complete so the outstanding issues will be addressed in parallel. It is forecast that all Preliminary Design work will be complete by 30 September 2017. The outstanding work involves systems and analysis rather than design of the hull so HHI have given assurance that this delay will not impact upon the overall ship delivery schedule.</p> |
|  | <p><b>Cost:</b> It is anticipated that the project will be able to manage costs throughout the life of the project and ensure no overall overspend.</p>   |

### Developments post 30 June 2017

The fleet replenishment tanker HMNZS *Endeavour*, which is being replaced by *Aotearoa*, was decommissioned on 15 December 2017.

The first steel cutting for the new ship (which will be called *Aotearoa*) took place on 29 January 2018.



### Active Risks at 30 June 2017

| Risk ID:            | Description   | Treatment   |                    |  |  |  |   |               |  |  |  |  |   |             |        |   |                  |        |                 |                    |                     |  |  |  |
|---------------------|---|---|--------------------|--|--|--|---|---------------|--|--|--|--|---|-------------|--------|---|------------------|--------|-----------------|--------------------|---------------------|--|--|--|
| 1                   | <p><b>Seakeeping Model Test Data:</b></p> <p>If the seakeeping model-test data results in non-compliance with the Crown's requirement there is a risk that the scope of testing may need to be increased to understand the degree of non-compliance, or changes in design to address non-compliance, resulting in schedule delays and increased work.</p> | <p>A treatment plan is in place to ensure Crown representatives attend key model testing.</p> <p>Contract non-compliances will be recorded and the contractor will provide correction mitigation strategies to correct items.</p> |                    |  |  |  |   |               |  |  |  |  |   |             |        |   |                  |        |                 |                    |                     |  |  |  |
| Current Risk:       | <table border="1"> <tr> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> </tr> </table>  |   |                    |  |  |  | <table border="1"> <tr> <td>Treated Risk:</td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> <td style="background-color: yellow;"></td> </tr> </table> | Treated Risk: |  |  |  |  | <table border="1"> <tr> <td>Risk Trend:</td> <td>Stable</td> </tr> </table> | Risk Trend: | Stable | <table border="1"> <tr> <td>Critical Timing:</td> <td>Oct 17</td> <td>Risk Authority:</td> <td>MSC Design Manager</td> </tr> <tr> <td colspan="4">Capability Delivery</td> </tr> </table> | Critical Timing: | Oct 17 | Risk Authority: | MSC Design Manager | Capability Delivery |  |  |  |
|                     |   |   |                    |  |  |  |   |               |  |  |  |  |   |             |        |   |                  |        |                 |                    |                     |  |  |  |
| Treated Risk:       |   |   |                    |  |  |  |   |               |  |  |  |  |   |             |        |   |                  |        |                 |                    |                     |  |  |  |
| Risk Trend:         | Stable  |   |                    |  |  |  |   |               |  |  |  |  |   |             |        |   |                  |        |                 |                    |                     |  |  |  |
| Critical Timing:    | Oct 17  | Risk Authority:   | MSC Design Manager |  |  |  |   |               |  |  |  |  |   |             |        |   |                  |        |                 |                    |                     |  |  |  |
| Capability Delivery |   |   |                    |  |  |  |   |               |  |  |  |  |   |             |        |   |                  |        |                 |                    |                     |  |  |  |

|                      |   |                      |  |                    |   |                         |                     |                        |        |
|----------------------|---|----------------------|--|--------------------|---|-------------------------|---------------------|------------------------|--------|
| 2                    | <b>Schedule slippage:</b><br>If technical specification requirements are not met, or deliverables do not meet the ILS requirement then rework or change in design requirements may be required. |                      |  |                    | Additional resource has been recommended. |                         |                     |                        |        |
| <b>Current Risk:</b> |   | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> | Stable                                    | <b>Critical Timing:</b> | June 17             | <b>Risk Authority:</b> | MSC PM |
|                      |   |                      |  |                    |   |                         | Capability Delivery |                        |        |

## Issues

| Issue ID:               | Description  | Status as at 30 June 2017  |  |
|-------------------------|--|--|--|
| 1                       | <b>Meeting Preliminary Design Review dates:</b><br>If rework is required after the Preliminary Design Review dates, this may impact on the project schedule and create additional review work for the Crown. | HHI have not met the scheduled PDR completion date. The Crown has written formally to HHI requesting actions plans for outstanding issues and assurance that delays will not impact completion of DDR. |  |
| <b>Critical Timing:</b> | Ongoing  | <b>Issue Authority:</b>  | Integrated Project Team Leader (Ministry of Defence) |

## Financial Performance

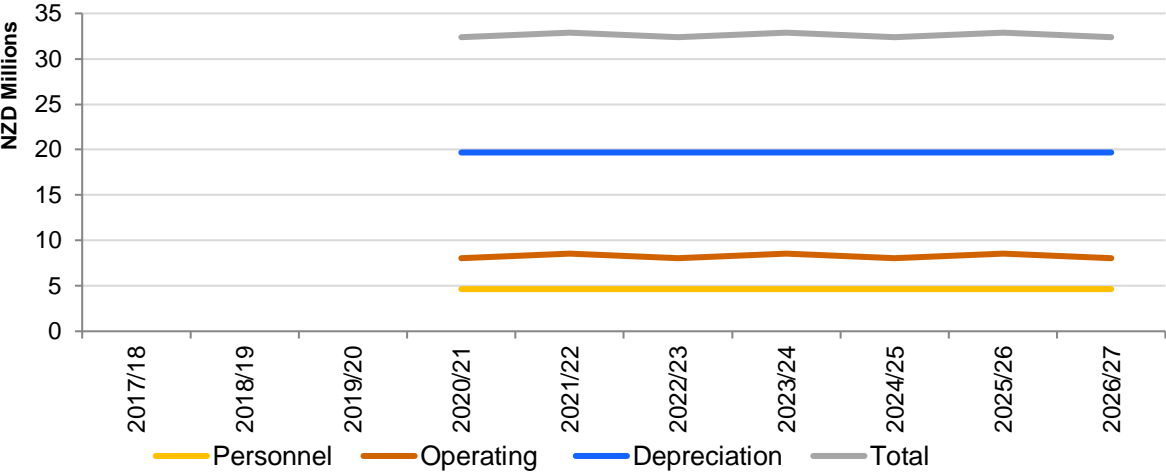
Further detail on financial performance can be found in Volume 2, Part 3, pages 96-97.

### *Approved budget and expenditure*

|                                     | Total (NZ\$ million) |
|-------------------------------------|----------------------|
| Approved budget                     | 492.9                |
| Life to date expenditure            | 101.7                |
| Total forecast expenditure          | 474.0                |
| Gross project variation (forecast)  | 19.0                 |
| Foreign exchange impact             | (18.3)               |
| Actual project variation (forecast) | 0.6                  |

# Summary of Maritime Sustainment Capability Through Life Operating Cost Estimates

## Maritime Sustainment Capability: Through Life Operating Costs



# SPECIAL OPERATIONS VEHICLES

**Project Description:** The Special Operations Vehicles (SOV) project is to provide the NZDF with a fully supported special operations land mobility capability to enable the conduct of New Zealand Special Operations Forces core tasks in delivering directed operational outputs. The project will focus on the enabling of special reconnaissance and direct action operations to meet the challenges of the contemporary operating environment, emerging threats, and future operating concepts.

## Policy Value

The benefits of the project are to ensure that the New Zealand Special Operations Forces can continue to do their job with improved capability, via increased effectiveness (through having vehicles that are better suited to the range of tasks undertaken), increased efficiency (through vehicles that are more fit for purpose) and with reduced risk.

The specific benefits identified are:

- Reduced constraints on directed tasks;
- Reduced risk of avoidable harm to personnel; and
- Improved Special Operations Forces performance.

## Capability Requirements

The following vehicle types are best suited to the tasks performed by New Zealand’s Special Operations Forces:

- **Mobility Heavy** – provides endurance, mobility, and has ample capacity for personnel, weapons and equipment;
- **Protected Heavy** – provides better protection for direct action and counter-terrorism tasks; and,
- **Low Profile Protected and Utility** – allow Special Operations Forces to adopt a low profile and undertake less overt operations, whilst retaining some combat capabilities.

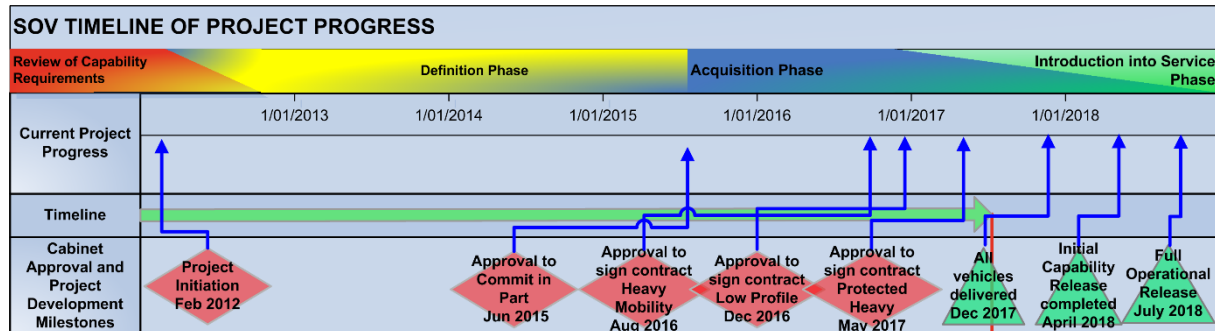
*The operational requirements necessary to support the capability can be found in Volume 3, Part 4, page 187.*

## Project Status as at 30 June 2017

|  |   |
|--|---|
|  | <b>Capability:</b> The capability has been contracted and is in the production and delivery phases. |
|  | <b>Schedule:</b> Production activity is on track to meet delivery schedules.                        |
|  | <b>Cost:</b> Project expenditure is on track and remains within the Cabinet approved appropriation. |

## Developments post 30 June 2017

All vehicles, specialist equipment, spares, publications and training have been delivered and accepted by NZDF. The construction of a storage hangar to house vehicles has been completed and is currently being commissioned. Full Operational Release is on track for August 2018.



## Active Risks at 30 June 2017

| Risk ID:      | Description  | Treatment   |
|---------------|--|---|
| 1             | <p><b>Technical Support</b></p> <p>If NZDF logistics staff are unavailable, specifically for Materiel Document Data Controller (MDDC) and technical writing, then delays to completion of Introduction Into Service items will result.</p> | <p>NZDF to recruit/train the experienced individual required to fulfil the role of MDDC. NZDF to assign priority to SOV in order to re-allocate existing resources to do the work required. This risk/action to be raised for action.</p> <p>The Special Operations Vehicles Project Manager to ensure that required data is provided as complete as possible and in a defined format in order to minimise NZDF effort.</p> |
| Current Risk: | Treated Risk:  | Risk Trend: Stable  |
|               |  | Critical Timing: Introduction in Service  |
|               |  | Risk Authority:   |

## Issues

No issues were reported as at 30 June 2017.

## Financial Performance

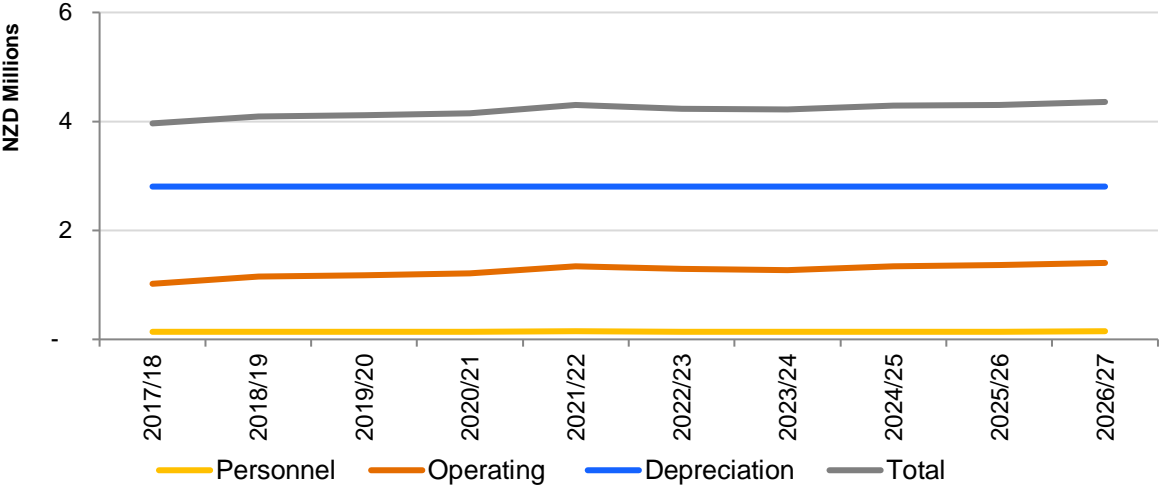
Further detail on financial performance can be found in Volume 2, Part 3, pages 105-106.

**Approved budget and expenditure**

|  | Total (NZ\$ million) |
|--|----------------------|
| Approved budget                        | 28.0                 |
| Life to date expenditure               | 16.2                 |
| Total forecast expenditure             | 28.5                 |
| Gross project variation<br>(forecast)  | (0.5)                |
| Foreign exchange impact                | 0.5                  |
| Actual project variation<br>(forecast) | 0.0                  |

**Summary of Special Operations Vehicles Through Life Operating Cost Estimates**

**Special Operational Vehicles: Through Life Operating Costs**





# UNDERWATER INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE

**Project Description:** The Underwater Intelligence, Surveillance and Reconnaissance project is being undertaken to restore the underwater surveillance capabilities of the P-3K2 Orion to contemporary standards.

### Policy Value

The identified problem for the project was the inability to locate and track submarines. This leads to a reduced ability to protect maritime activity, and limited deployment options for Government (both for national tasking and coalition contributions).

The policy benefits that will be delivered by an UWISR capability include an improved ability to protect maritime activity. This includes the ability to protect commercial shipping, national and foreign military maritime vessels, and underwater natural resources.

It also provides increased assurance to Government about the ability to respond. This includes the ability to contribute credibly to coalition operations, the ability to demonstrate a credible UWISR capability, and provides a range of response options, e.g. from surveillance to attack.

### Capability Requirements

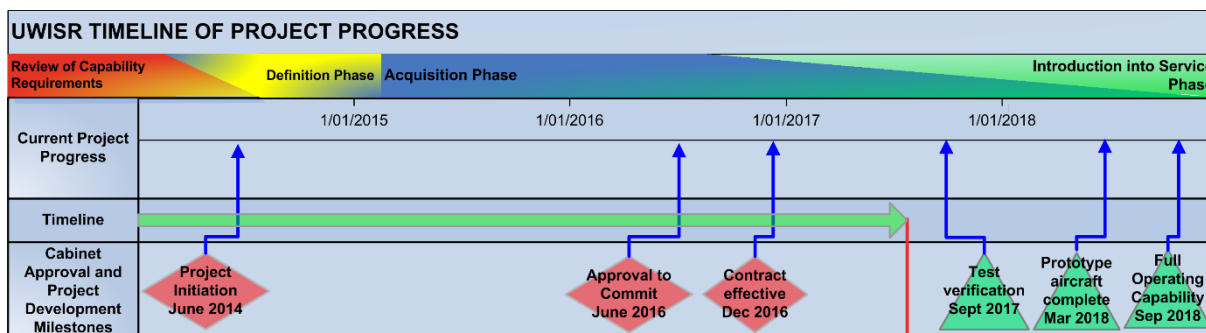
The *Defence White Paper 2010* noted that the six P-3 Orion aircraft currently undergoing upgrade "...may progressively be fitted with...anti-submarine sensors, improving their combat capability and enhancing the ability of New Zealand to contribute more robustly to global efforts". The actual capabilities needed to achieve this included:

- Advanced acoustic processing equipment
- Simulation systems
- Analysis facilities, and
- Support equipment, such as new air compressors to deploy sonobuoys.

*The operational requirements necessary to support the capability can be found in Volume 3, Part 4, page 196.*

### Project Status as at 30 June 2017

|  |   |
|--|---|
|  | <b>Capability:</b> Capability has been contracted and is in the production/delivery phase.  |
|  | <b>Schedule:</b> The project schedule is based on the dates from the Cabinet approval. There are minor changes in the forecast schedule primarily based on the one month between Cabinet approval and contract signing. The project is on track for completion in September 2018. |
|  | <b>Cost:</b> The project budget is on track and remains within the Cabinet approval. Contingency funding was approved for the implementation of the sonobuoy positioning system.  |



### Active Risks at 30 June 2017

| Risk ID:             | Description   | Treatment   |        |                         |                     |                        |                  |
|----------------------|---|---|--------|-------------------------|---------------------|------------------------|------------------|
| 1                    | If unable to access necessary project team specialist support, due to higher prioritisation of scarce personnel resources, then completion of project milestones are likely to be delayed.  | Contracted specialist support could be used to cover NZDF personnel short-falls. Acquisition Lead to raise requests for contracted support as required.   |        |                         |                     |                        |                  |
| <b>Current Risk:</b> | <b>Treated Risk:</b>  | <b>Risk Trend:</b>  | Stable | <b>Critical Timing:</b> | 2017                | <b>Risk Authority:</b> | Acquisition Lead |
|                      |   |   |        |                         | Capability Delivery |                        |                  |
| 2                    | If vendor's solution does not work with aircraft Intercommunication System or current headsets (i.e. audio bandwidth), then this will result in reduced functionality (ability to work from any station), increased headset configuration, and increased wiring / complexity. | To be monitored and reviewed at contract finalisation, Final Design Review and aircraft Acceptance Test and Evaluation.   |        |                         |                     |                        |                  |
| <b>Current Risk:</b> | <b>Treated Risk:</b>  | <b>Risk Trend:</b>  | Stable | <b>Critical Timing:</b> | 2018                | <b>Risk Authority:</b> | Acquisition Lead |
|                      |   |   |        |                         | Capability Delivery |                        |                  |
| 3                    | The System Integration and Test Laboratory is required for integration and testing of project software. If the System Integration and Test Laboratory is not available when required, then system integration, testing and training would be delayed.                         | System Integration and Test Laboratory is the responsibility of NZDF. Project team to ensure that the correct organisations are made fully aware of the dependency of UWISR on the System Integration and Test Laboratory and the intended schedule that the project requires it to be available.   |        |                         |                     |                        |                  |
| <b>Current Risk:</b> | <b>Treated Risk:</b>  | <b>Risk Trend:</b>  | Stable | <b>Critical Timing:</b> | 2017                | <b>Risk Authority:</b> | Acquisition Lead |
|                      |   |   |        |                         | Capability Delivery |                        |                  |
| 4                    | If Government Furnished Equipment is provided late, or not identified that it is required, then the delivery of the contract will be delayed.   | <ol style="list-style-type: none"> <li>1. Project team schedule to clearly identify when aircraft need to be available for UWISR. Schedule to be provided to Whenuapai Joint Project Office to manage / coordinate.</li> <li>2. Project team to review and update the schedule for Government Furnished Equipment provision and ensure that it is agreed with Boeing prior to contract award.</li> <li>3. Project team to track the progress of Government Furnished Equipment provision</li> </ol> |        |                         |                     |                        |                  |

|                      |   |                      |  |                    |        |   |                     |                        |                  |  |
|----------------------|---|----------------------|--|--------------------|--------|---|---------------------|------------------------|------------------|--|
|                      |   |                      |  |                    |        | versus the agreed list and schedule.  |                     |                        |                  |  |
| <b>Current Risk:</b> |   | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> | Stable | <b>Critical Timing:</b>   | 2018                | <b>Risk Authority:</b> | Acquisition Lead |  |
|                      |   |                      |  |                    |        |   | Capability Delivery |                        |                  |  |
| 5                    | If 5 Squadron crew are not available for integration testing, then testing schedule will be delayed.  |                      |  |                    |        | <ol style="list-style-type: none"> <li>1. Project Team to liaise with NZDF regarding availability of aircrew and aircraft.</li> <li>2. Project team to provide schedule to Whenuapai and allow them to manage the timely provision of aircraft and aircrew.</li> <li>3. RNZAF to be tasked to ensure that sufficient spares and logistic support are in place such that aircraft serviceability is maintained during testing.</li> </ol>  |                     |                        |                  |  |
| <b>Current Risk:</b> |   | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> | Stable | <b>Critical Timing:</b>   | 2017                | <b>Risk Authority:</b> | Acquisition Lead |  |
|                      |   |                      |  |                    |        |   | Capability Delivery |                        |                  |  |
| 6                    | Some development work is required for the Data Management System software and other non-core systems. If the development work extended beyond that planned, then the project may experience schedule delays and cost increases. |                      |  |                    |        | <ol style="list-style-type: none"> <li>1. Due diligence to ascertain a greater understanding of the level of software development work required to ensure that the scope of work has not been underestimated.</li> <li>2. Project team to ensure that the schedule allows sufficient time to account for minor software development delays.</li> <li>3. Project Team to develop some Confidence Indicators to assess progress towards certification of Data Management System Software, along with off-ramps. In the event that software testing is incomplete will still want to have an option to return the prototype aircraft to the flight line and delay start on the rest of the fleet.</li> </ol> |                     |                        |                  |  |
| <b>Current Risk:</b> |   | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> | Stable | <b>Critical Timing:</b>   | 2017                | <b>Risk Authority:</b> | Acquisition Lead |  |
|                      |   |                      |  |                    |        |   | Capability Delivery |                        |                  |  |

## Issues

| Issue ID:               | Description  | Status as at 30 June 2017 |
|-------------------------|--|---------------------------|
| 1                       | No issues have been identified as at 30 June 2017. |                           |
| <b>Issue Authority:</b> | Ministry of Defence Capability Delivery            |                           |

### Financial Performance

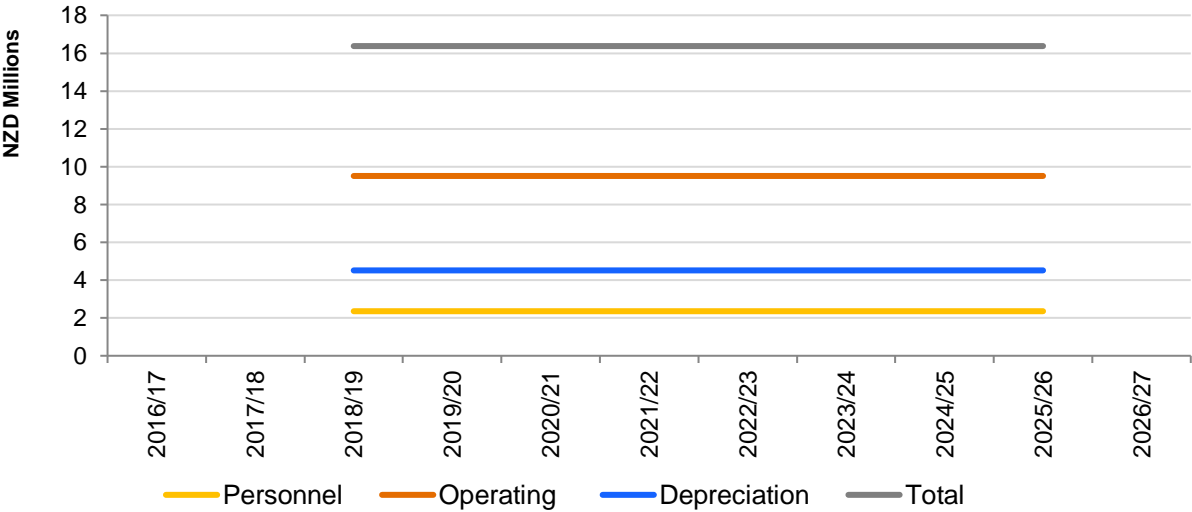
Further detail on financial performance can be found in Volume 2, Part 3, pages 112-114.

#### Approved budget and expenditure

|                                     | Total (NZ\$ million) |
|-------------------------------------|----------------------|
| Approved budget                     | 36.4                 |
| Life to date expenditure            | 17.5                 |
| Total forecast expenditure          | 36.2                 |
| Gross project variation (forecast)  | 0.1                  |
| Foreign exchange impact             | 0.0                  |
| Actual project variation (forecast) | 0.1                  |

### Summary of Underwater Intelligence, Surveillance and Reconnaissance Capability Through Life Operating Cost Estimates

#### UWISR: Through Life Operating Costs



# 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 the end of 2018.

### Active Risks as of 30 June 2017

| Risk ID:             | Description  |                      |  |                    |        | Treatment   |         |                        |      |
|----------------------|--|----------------------|--|--------------------|--------|---|---------|------------------------|------|
| 99048                | Competing Command and Control Systems<br>If incompatible and/or competing Command, Control, Communications and Intelligence systems proliferate across the NZDF, then there will be duplication and dissipation of assets, technical resources, training and whole of life costs accompanied by fragmented function and effectiveness. |                      |  |                    |        | <ul style="list-style-type: none"> <li>Continue to empower the Joint Command and Control Office to order NZDF's command and control development roadmap and timetable. Scope includes GCCS-J, Integrated Imagery and Intelligence, C2 Core (Air Tasking Order System in GCCS-J), Palantir and SitaWare (Army situational awareness system).</li> </ul>  |         |                        |      |
| <b>Current Risk:</b> |  | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> | Stable | <b>Critical Timing:</b>   | Now     | <b>Risk Authority:</b> | NZDF |
| 99249                | <b>User skill fade:</b> If users' skills are not reinvigorated, then use of DC2S services will decline in quantity and quality to the detriment of benefits realisation.   |                      |  |                    |        | <ul style="list-style-type: none"> <li>DC2S Operations team to monitor and encourage use of DC2S.</li> <li>DC2S Operations team to identify and address where DC2S applications are not aligned with workplace practice. Like the Joint Command and Control Office, this will become business as usual. Continuous use of DC2S applications plus CIS support will mitigate skill fade.</li> </ul> |         |                        |      |
| <b>Current Risk:</b> |  | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> | Stable | <b>Critical Timing:</b>   | Ongoing | <b>Risk Authority:</b> | NZDF |
| 99256                | <b>Critical resources:</b> If individuals with critical skills and knowledge leave, then NZDF's ability to realise project benefits will be significantly reduced.   |                      |  |                    |        | <ul style="list-style-type: none"> <li>Business Relationship Manager to maintain a list of critical resources/single points of failure and manage risk through a mix of internal role diversification and external resourcing. Another function of the DC2S Operations team in business as usual.</li> </ul>  |         |                        |      |
| <b>Current Risk:</b> |  | <b>Treated Risk:</b> |  | <b>Risk Trend:</b> | Stable | <b>Critical Timing:</b>   | Ongoing | <b>Risk Authority:</b> | NZDF |
|                      |  |                      |  |                    |        |   |         | Capability Branch      |      |

## Financial Performance

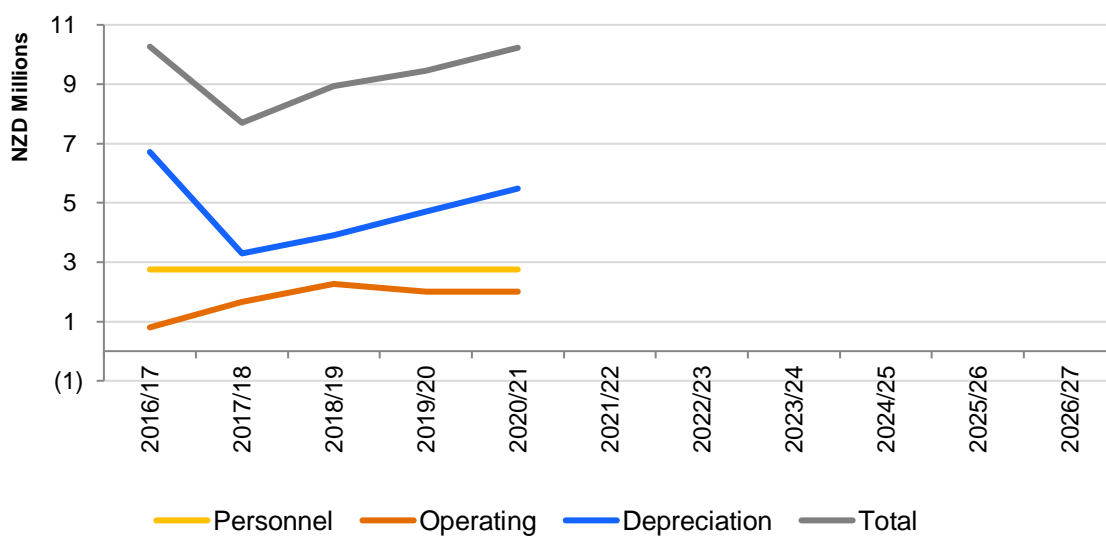
Further detail on financial performance can be found in Volume 2, Part 3, pages 119-121.

### Approved budget and expenditure

|                                     | Total (NZ\$ million)   |
|-------------------------------------|--|
| Approved budget                     | 23.6   |
| Life to date expenditure            | 20.0   |
| Total forecast expenditure          | 20.6   |
| Gross project variation (forecast)  | 3.1  |
| Foreign exchange impact             | 1.1  |
| Actual project variation (forecast) | 4.2  |
| Explanation                         | Underspend of \$4.2 million due to no longer anticipating use of project contingency and favourable foreign exchange gain. |

## Summary of Defence Command and Control Through Life Cost Estimates

### Defence Command and Control: Through Life Operating Costs



# 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*

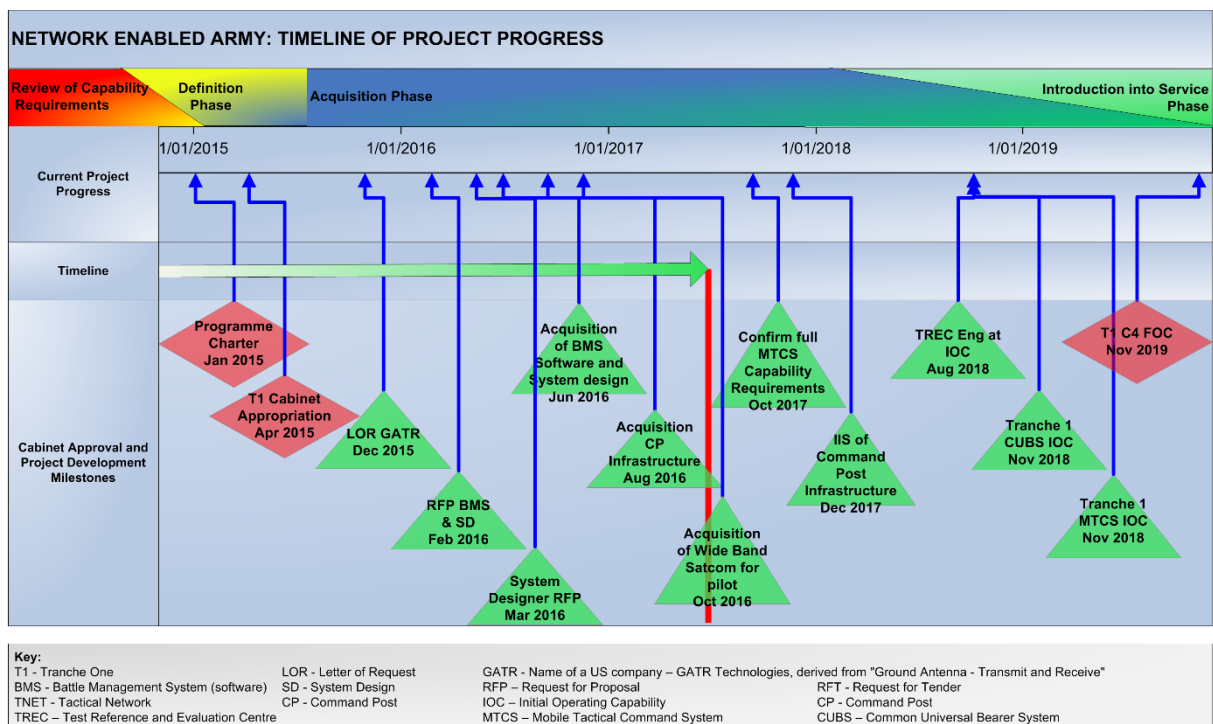
NEA Tranche One has a range of interlinked capability sets that are being delivered through a series of acquisitions. These capability sets are outlined in Volume 3. They were developed through the NEA Programme Business Case. This was referred to the Minister of Defence and provided the basis for Tranche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

### 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 2017

Risks identified in the Governance Report at the end of June 2017 are noted below. These are managed on an ongoing basis and reported monthly.

| Risk ID:                       | Description:   | Treatment  |        |             |        |                  |         |             |                     |
|--------------------------------|--|--|--------|-------------|--------|------------------|---------|-------------|---------------------|
| 39255                          | <p><b>NEA / MOD 14 - Programme Affordability</b></p> <p>If the cost of the Tranche One projects 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.</p>  | <ul style="list-style-type: none"> <li>Treatment plan in development.</li> <li>A treatment is to defer acquisition planned for Tranche 1 to Tranches 3 and 4.</li> <li>Development of detailed projected spend as part of the Affordability Review.</li> </ul>   |        |             |        |                  |         |             |                     |
| Current Risk:                  | MEDIUM   | Treated Risk:  | MEDIUM | Risk Trend: | STABLE | Critical Timing: | May 17  | Risk Owner: | Burke Dean, Mr      |
| Acquisition/Tender/Procurement |  |  |        |             |        |                  |         |             |                     |
| Risk ID:                       | Description:   | Treatment  |        |             |        |                  |         |             |                     |
| 39257                          | <p><b>NEA / MOD 16 - Synchronisation with Dependent Projects</b></p> <p>There is a need to co-ordinate NEA with a variety of both internal (to NEA) and external (wider NZDF, such as SBN) projects. If there is a failure to plan for and meet any project deliverables then it will impact on either NEA or the other external projects.</p> | <ul style="list-style-type: none"> <li>Treatment plan in development.</li> <li>The Boundary Agreement with Secret Information Environment (SIE) is to be updated; however CTO level oversight is required to deconflict this.</li> <li>Provide visibility of dependent project major milestones in the Programme Schedule.</li> <li>There is a Boundary Agreement with SOF.</li> </ul> |        |             |        |                  |         |             |                     |
| Current Risk:                  | HIGH   | Treated Risk:  | MEDIUM | Risk Trend: | STABLE | Critical Timing: | Ongoing | Risk Owner: | Collett Phillip, Mr |
| Acquisition/Tender/Procurement |  |  |        |             |        |                  |         |             |                     |

| Risk ID:      | Description:  |               |        |             | Treatment  |                  |         |                                |                     |
|---------------|---|---------------|--------|-------------|--|------------------|---------|--------------------------------|---------------------|
| 39262         | <p><b>NEA / MOD 21 - Defence Structural Changes</b></p> <p>If the on-going Defence structural and process management changes result in further delays to the completion of the required business cases or results in the imposition of further governance requirements, then processes will remain poorly defined, projects will be delayed.</p> <p>Governance bodies will not be in place, potentially resulting in either delays or insufficient quality assurance.</p> |               |        |             | <ul style="list-style-type: none"> <li>Treatment plan in development.</li> </ul> |                  |         |                                |                     |
| Current Risk: | MEDIUM  | Treated Risk: | MEDIUM | Risk Trend: |  | Critical Timing: | Ongoing | Risk Owner:                    | Collett Phillip, Mr |
|               |   |               |        |             |  |                  |         | Acquisition/Tender/Procurement |                     |
|               |   |               |        |             |  |                  |         | Acquisition/Tender/Procurement |                     |

## Financial Performance

Further detail on financial performance can be found in Volume 2, Part 3, pages 128-129.

### *Approved budget and expenditure*

|                                     | Total (NZ\$ million) |
|-------------------------------------|----------------------|
| Approved budget                     | 106.0                |
| Life to date expenditure            | 20.2                 |
| Total forecast expenditure          | 103.5                |
| Gross project variation (forecast)  | 2.5                  |
| Foreign exchange impact             | (2.5)                |
| Actual project variation (forecast) | 0.0                  |

# Summary of Network Enabled Army Tranche One Capability Through Life Operating Cost Estimates

Network Enabled Army Tranche One: Through Life Operating Costs

