



MINISTRY OF  
DEFENCE

Manatū Kaupapa Waonga

# DEFENCE ASSESSMENT

## JULY 2010

# Contents

	Page
Executive Summary	vi
<b>Chapter 1: Defence Assessment 2010</b>	
Introduction	1
The Evolving Strategic Environment	2
Capability Requirements of the NZDF	2
Funding Challenges	3
Organisational Capability	3
Terms of Reference	4
Process	5
Recommendations	6
<b>Chapter 2 Defence Within a National Security Framework</b>	
New Zealand's National Security Interests	7
The Whole of Government Approach to Promoting National Security	10
Recommendations	12
<b>Chapter 3 New Zealand's Strategic Context and Outlook to 2035</b>	
The Nature of Conflict	13
New Zealand, the Exclusive Economic Zone (EEZ), and the Realm	14
Australia	14
The South Pacific	15
United States	16
The Asian Region	17
The Wider World	19
The Proliferation of Weapons of Mass Destruction	20
Terrorism	20
Demographic Changes and Natural Hazards	21
Discontinuities, Disjunctions or Major Shifts	21
Recommendations	22
<b>Chapter 4 Principal Roles and Tasks for the NZDF</b>	
Principal Tasks for the NZDF	24
Defend New Zealand's Sovereignty	24
Our Alliance with Australia	25
Contribute to Peace and Stability in the South Pacific	25
Support Peace and Security in the Asia-Pacific Region	26
Contribute to International Peace and Security	27

Contribute to Whole of Government Security Efforts at Home	28
Whole of Government Efforts to Monitor the Strategic Environment	29
The NZDF's Military Characteristics	29
Operations in New Zealand's Maritime Zone and the South Pacific as the Starting Point for Choosing Military Capabilities	30
Capabilities and Conflict	30
Risk Mitigation and the Response to Major Shifts and Other Disjunctions	31
Recommendations	32
<b>Chapter 5 Military Capability Choices</b>	
The Value of Military Capabilities	34
Tasks and Capabilities	35
NZDF Contribution to Whole of Government Tasks	37
Building on Strong Foundations	38
Capability Choices	39
Pathways for the Future NZDF	39
The Three Pathways	40
Assessment of Pathways	45
Conclusion	48
Recommendations	49
<b>Chapter 6 The Total Defence Workforce</b>	
Strategic Objectives for the Defence Workforce	51
Demand	54
Low Pathway	57
Middle Pathway	58
High Pathway	59
Supply	63
Retention	65
Training	66
Career Development	67
Research	68
Conclusion	68
Recommendations	69
<b>Chapter 7 Financial Context and Costs of Capability Pathways</b>	
Financial Context	71
Offsetting Efficiencies	73
Current Financial Position	74
Characteristics of Costs Estimates	75
Fiscal Strategy and Indicative Funding Parameters	75

Costs of Capability Pathways	76
How Costs Might Change?	80
Conclusion	82
<b>Chapter 8 Funding and Financial Management</b>	
The Defence Decisions Environment	85
Capital Expenditure	86
Operating Expenditure	88
Cost Escalation	91
Military Inflation	91
Asset Revaluations	92
Conclusion	92
Recommendations	93
<b>Chapter 9 Defence Real Estate and Infrastructure</b>	
Introduction	94
Current Issues	95
Derivation of Principles and Criteria	96
Constraints and Opportunities	96
Public Private Partnerships	97
Scenarios for Recovery	98
The Way Ahead	99
Flexibility for Future Changes	100
Conclusion	100
Recommendations	101
<b>Chapter 10 Procurement and Organisational Reform</b>	
Introduction	102
Scope and Background	102
The Wintringham Report	103
The Aurecon Report	104
Procurement as a Continuous, Joined-up Process	105
Setting the Guidelines for Reform	106
Options for Structural Reform	107
Proposal to Establish a Joint Management Option	108
Revised Sole and Joint Functions in the Context of a Joint Management Board	108
Audit and Evaluation	111
Defence Science and Technology	112
Independent Advice to the Minister of Defence	113
Next Steps	115
Recommendations	115
<b>Chapter 11 Summary of Recommendations</b>	118
<b>Glossary</b>	127

Annex A	Terms of Reference	131
Annex B	The Three Capability Pathways	137
Annex C	Personnel Characteristics And Trends	143

# Executive Summary

In March 2009 Cabinet directed that the Secretary of Defence undertake a Defence Assessment, in consultation with the Chief of Defence Force and other stakeholders, as prescribed by Section 24(2)(c) of the Defence Act 1990. The Terms of Reference provided for an Assessment that addressed the following major issues:

- How does the present and potential future strategic environment impact on the security of New Zealand?
- How does Defence contribute, and may in future contribute, to the security of New Zealand, Australia, the South Pacific, the Asia-Pacific region and globally?
- How does Defence advance New Zealand's foreign policy and the relationship between Defence and other government agencies to enhance a 'whole of government' approach?
- How well do current New Zealand Defence Force (NZDF) outputs meet the actual needs now and in the near future, and how are the actual capabilities, including those under consideration or development, aligned to those outputs?
- Looking to the medium and longer term, what are the capabilities needed against requirements in the future and what are the implications arising from that analysis?
- What are the key issues around Defence personnel, including training, retention, recruitment and the role of Reserves?
- What is the best organisational structure for the Ministry of Defence and the NZDF?
- When and how should military capabilities be used for non-military purposes to support the work of other (civilian) government agencies?
- How best can procurement, defence infrastructure and real estate be managed?
- What are the best financial management procedures to meet the long term defence funding requirements?

## The Strategic Outlook

The strategic outlook set out in this Assessment reaffirms that a direct military threat to New Zealand remains unlikely. The nation's interests, however, extend well beyond our borders. New Zealand benefits from being an active participant in global affairs and from maintaining close connections with like-minded nations, particularly Australia. But the benefits we derive from these

connections are not without obligations. These include being willing to use armed force in preventing or resolving conflict, and in upholding the international rule of law.

Beyond our shores, the strategic outlook is for more instability. The island states of the South Pacific face a number of tensions. In the past two decades these have given rise to emergencies which have led to requests for military support from New Zealand, usually working alongside Australia. Such interventions bring increased obligations and greater expectations, including from Australia, that New Zealand will take an active role in addressing regional security issues.

The international outlook more generally is uncertain. Asia is an area where the major powers are closely engaged. The nature of that engagement will impact on New Zealand's economic and security interests. Key relationships in Asia are currently stable. But the strategic balance is changing. International and regional institutions will need to adjust.

The strategic outlook is further complicated by a number of non-conventional challenges, including rising global demographic pressures leading to increased resource competition and illegal migration flows, the continuing terrorist threat, the challenges posed by ungoverned spaces, and the proliferation of weapons of mass destruction.

Governments cannot, however, cover every conceivable risk. Deliberate decisions must therefore be made about what risks to cover. These decisions in turn determine investment priorities. New Zealand, with Australia, needs to be able to deal with any reasonably foreseeable contingency in the South Pacific. The ability to perform core military tasks in our immediate neighbourhood should therefore be the principal determinant of future NZDF capability development, and a priority over other areas for the actual conduct of military operations. It also means optimising the NZDF for intra-state conflict.

But this must not preclude the NZDF from deploying further afield. As mentioned above, New Zealand benefits from a stable international order which is sympathetic to our values and is based on the rule of international law. It is in our interest to contribute alongside friends and partners to the maintenance of such an order, including by contributing combat-capable forces when necessary.

This latter requirement need not drive capability decisions. We can structure our capabilities within a Pacific-centric framework, while at the same time not losing sight of the need to contribute to stability elsewhere. This will ensure that we have the resources needed to meet New Zealand's overall security requirements, to add weight to Australia, and to support our regional and international obligations as required by the Government.

## Military Capability

Building a Defence Force that is both broadly consistent with the forecast strategic environment set out above, and which fits within the Government's fiscal framework, does not require a radical departure from the *status quo*. The Assessment concludes that the NZDF's current capability mix and force structure provides a minimum capability to support government policy. But it is a floor not a ceiling. Given the expected strategic outlook, some rebuilding of the NZDF is recommended. A number of major platforms will need to be replaced and/or upgraded in the next 25 years, and there are capability gaps which need to be addressed.

The Assessment identifies three pathways for the future shape of the NZDF – Low, Middle and High. Each pathway represents a different gradient of capability. They are not exclusive, but rather provide pathways between which the Government can move over time. Indeed, Ministers are able, if they wish, to choose within and between the three pathways.

The Assessment concludes that the Middle pathway would best align capability with the expected strategic environment, although current fiscal constraints may necessitate a period of consolidation under the Low pathway. The Middle pathway would see modest improvement in some of the NZDF's capabilities, in particular an increase in the ability of the Army to sustain operations, as well as building greater depth in Intelligence, Surveillance and Reconnaissance. Other capabilities would remain at around existing levels.

The Middle pathway would not mitigate all the weaknesses of the existing NZDF. There would continue, for example, to be some risk to the ability of the NZDF to conduct larger-scale and longer-duration operations, especially in high-intensity environments, where we would continue to rely on Australia or other partners for support.

The more limited Low pathway would enable the Government to respond to short-term fiscal pressures, but at a risk. While broadly retaining the same structure and platforms as the Middle pathway, it would do so at declining levels of effectiveness. The Low pathway would result in an NZDF which is combat-capable in the Pacific, but limitations in size and flexibility, particularly in the Army, would mean a reliance on partners or a need to undertake smaller and shorter operations.

The High pathway would see targeted enhancements to maintain and improve NZDF capabilities. It would provide the Government with a greater degree of risk mitigation, and would be welcomed by our partners. But it is not currently consistent with the fiscal restraint being applied by the Government across the board. The High pathway is nonetheless the direction the NZDF should take if the strategic outlook were to deteriorate.

Based on the Middle pathway, the Assessment recommends some new capabilities, the replacement of some major platforms as they reach the end



of their life and some targeted enhancements. It recommends that a new capital plan should be developed that reflects the following priority areas:

- increased Army strength;
- enhanced Special Forces;
- eight NH90 and eight A109 helicopters (of which five A109 are to be upgraded and possibly armed);
- the acquisition of a new shorter range maritime air patrol capability;
- the acquisition of an imagery satellite capability;
- upgrade of the ANZAC frigates and replacement at the end of their life with an equivalent capability;
- a replacement for HMNZS *Canterbury* at the end of her life;
- replacements for the C130 and B757 fleets at the end of their life;
- a more versatile replacement for HMNZS Endeavour;
- P3 Orion fleet enhanced and replaced at the end of the aircraft's life; and
- replacement of the Inshore and Offshore patrol vessels at the end of their life.

These refinements would address the most pressing deficiencies in those capabilities most likely to be deployed on operations, both at home and abroad: ground forces, self protection, air transport, air and surface maritime surveillance, and naval combat. They would also add greater depth to the NZDF.

Robust business cases for each capability enhancement and/or acquisition will need to be put to Cabinet before any upgrade or purchase decisions are made.

## Affordability

Expressed in 2009 dollars, the average annual increases needed to fund these Middle pathway refinements for the periods 2010/11 – 2014/15, 2015/16 – 2019/20 and 2020/21 – 2035/36 are \$70 million, \$32 million and \$11 million in operating expenditure respectively; and \$91 million, \$56 million and \$177 million in capital expenditure respectively.

The Government can afford to retain the Defence Force it currently has, even if it chooses to adopt the Middle pathway for up to the next ten years, but difficult choices could arise in the period after 2020 as core capabilities come up for replacement. The commitment to conduct a Defence Assessment every five years will provide an opportunity to review this fiscal trajectory.

## Defence Funding

Budget 2010 provided a baseline adjustment of \$35 million in operating expenditure to help cover the cost of the additional depreciation and other increased operating costs associated with bringing new capabilities into

service. This, coupled with a reprioritisation exercise, will enable the NZDF to remain within its appropriations for the 2010/11 fiscal year. This does not fully resolve the significant funding pressures facing Defence.

An operating deficit of around \$90 million is forecast for 2011/12, increasing in the out-years. Notwithstanding the increases in operating funding approved for 2010/11, the funding available for personnel and other operating expenditure will therefore be approximately \$45 million less in 2010/11, and approximately \$133 million less in 2011/12, than was available in 2009/10.

In the course of this Assessment, Ministers directed that an external and independent Value for Money Review of the NZDF be conducted which identifies options for narrowing this deficit by improving efficiency, cost effectiveness and sustainability. That review is well-advanced. Its findings will inform Government decisions on this Assessment and the content of the final Defence White Paper. Any remaining deficit, however, may require additional funding or a willingness on the part of the Government to accept a greater level of strategic risk. Where appropriate and possible, this Assessment cross-references the work of the Value for Money Review.

Improved decision-making will help avoid inefficiencies. The Assessment recommends a new funding and financial management regime for Defence, based on annual capex and opex re-forecasts and the use of rolling ten-year capital and operating expenditure planning profiles. It recommends a pragmatic scenario for the management of the Defence Estate for the five years to 2014/15, moving to a progressive scenario thereafter as soon as funding allows. This will provide an opportunity to complete changes and initiatives currently underway, while also allowing time to develop the planning and business case analyses needed to move to a more aggressive scenario from 2015/16 onwards, subject to available funding.

## Defence Organisation

The Assessment also recommends the reform of existing defence procurement and governance arrangements. The proposed Joint Management Board comprising the Defence Chief Executives and at least two independent non-executive directors will oversee a continuous defence capability life-cycle that encompasses policy, capability definition, business case consideration, Cabinet approval, acquisition, through-life operation, disposal and replacement.

The creation of the Board is intended to reconcile the apparent contradiction of retaining two defence organisations but operating certain functions as a joint activity. It would see the merger of some aspects of policy with capability development, acquisition and through-life support. The challenge is to create a new body within the defence organisations, with appropriate authority and accountability for such joint activities, yet retaining the singular accountability of each of the Defence Chief Executives.

The effectiveness of the NZDF depends on the quality of its people, military and civilian. Personnel are a key component of capability. To ensure that the

NZDF has enough of the right people, it must adopt a strategic approach to the management of its human resource requirements. The Assessment identifies a number of areas where the NZDF's ability to access the personnel it needs can be improved. These include better career development practices, changing traditional career paths and better utilising the Reserve Force.

## Conclusion

The conclusion reached by this Assessment is that the NZDF is a strong institution of national value – a disciplined, professional, well-trained and constitutionally-aware defence force is a rare and valuable asset. An NZDF like the one we currently have offers the Government the best minimum mix of effectiveness, value for money, value to our friends and partners, force projection and sustainment. The fiscal outlook might make it possible to enhance various features of the NZDF, or it might force a reduction in the existing level of capability, depending on affordability, particularly after 2020. But these decisions can be deferred until the next Defence Assessments in 2015 and 2020. For the moment we can afford to keep what we have, with some modest enhancements. This is the recommended approach. In an uncertain strategic environment it is important that the Government keep its options open.

## Chapter 1

# Defence Assessment 2010

## Introduction

- 1.1 The Defence Act 1990 provides that one function of the Secretary of Defence is to prepare a Defence Assessment from time to time in consultation with the Chief of Defence Force.<sup>1</sup> A Defence Assessment is a comprehensive review of defence policy, military capability, and resources. It tests current policy settings in the context of New Zealand's wider national security interests. It ensures that strategies and structures remain appropriate for our needs. Defence Assessments are forward-looking, considering New Zealand's interests over the decades to come.
- 1.2 Regular Defence Assessments are important. They form part of our response to uncertainty, helping to mitigate the possibility of a misalignment between preparedness and risk. They also provide assurance that the Ministry of Defence and the New Zealand Defence Force (NZDF) are providing government and taxpayers with value for their investment in defence.
- 1.3 The last formal defence assessment was completed in 1997, and published as the White Paper, *The Shape of New Zealand's Defence*. In 1999, the Foreign Affairs, Defence, and Trade Select Committee of Parliament published an alternative approach to defence, the *Inquiry into Defence Beyond 2000*. That report substantially informed defence policy for the next ten years. But it is time to look afresh at the issues. There is also a strong case for undertaking assessments at more regular intervals.
- 1.4 This current Assessment links New Zealand's enduring security interests and the evolving strategic environment to the roles which the NZDF and the Ministry of Defence are expected to perform. It then identifies the range of military and other capabilities needed to undertake those roles, and the management structures which best deliver high quality and cost-effective defence outcomes.
- 1.5 The Assessment has been driven by four principal factors:
  - the evolving strategic environment;
  - the need to plan the future equipment requirements of the NZDF;
  - funding challenges; and
  - shortcomings in organisational capacity.

---

<sup>1</sup> Defence Act 1990, s24(2)(c)

## The Evolving Strategic Environment

- 1.6 The years since 1999 have seen a number of significant changes in the international security environment, including:
- weakness in security, governance and overall stability in the South Pacific;
  - shifts in the balance of power in the Asia-Pacific region;
  - the weakening of core international institutions;
  - the impact of Islamist terrorism and associated consequences, including the war in Afghanistan;
  - the growing risk that terrorist groups could acquire and use weapons of mass destruction;
  - increasing pressures on scarce natural resources, and growing concerns over climate change; and
  - attempts to enter illegally Australia and New Zealand.
- 1.7 The Assessment's terms of reference reflect the complexities of defence planning in this environment. Defence policymakers must peer into an uncertain future.<sup>2</sup> They must then form judgements about the foreign and security challenges New Zealand may face in the coming decades, and consider the range of tasks which New Zealand's armed forces may need to perform in meeting these challenges.

## Capability Requirements of the NZDF

- 1.8 High level considerations regarding the strategic environment must be converted into decisions about military capabilities.
- 1.9 Ensuring that the NZDF is appropriately equipped to perform the tasks required of it involves the acquisition of major items of equipment such as military ships, aircraft, vehicles, and IT systems. These then need to be integrated with other components of military capability, especially personnel and infrastructure. Major items of equipment may cost hundreds of millions, or billions, of dollars. They may employ leading edge technologies. They may also take many years to acquire and may remain in service over many decades. The process of acquiring new capability is therefore a major activity for Defence.
- 1.10 People are the key component in delivering defence capability. Underpinning military operations, the introduction into service and through-life management of new platforms, is the equally essential job of raising, training, sustaining and managing a regular force of around 10,000.
- 1.11 It is becoming increasingly difficult for countries such as New Zealand to meet the cost of defence. The NZDF has traditionally bridged the resulting deficit by using a narrow range of capabilities to perform a wide range of security roles. But our capabilities, including our people, are under pressure. They need to

---

<sup>2</sup> 'Defence' refers to both the NZDF and the Ministry of Defence.

deploy within New Zealand, within our Exclusive Economic Zone, in the near region, and in the wider world. Operations may be launched with little notice in response to sudden or unpredictable events. They may need to be sustained for years or even decades.

- 1.12 The capabilities we adopt therefore need to sustain a utility throughout varying strategic and fiscal contexts, over very long periods. Our major capability choices have an enduring impact, and New Zealand must get these choices right.

## Funding Challenges

- 1.13 The operating expenditure of the NZDF is under significant pressure. This is partly a result of equipment revaluation and the increasing cost of depreciation. Operational commitments and the need to maintain personnel numbers, and to remunerate appropriately, are also factors. The higher operating costs of equipment currently being introduced into service will lead to further demands on operating expenditure.
- 1.14 Capital expenditure is also under pressure. Not only is the cost of military equipment high and inflating but New Zealand faces the encroaching obsolescence of a number of major platforms. The twenty years following 2012 will see the C130 Hercules, the P3 Orions, and the ANZAC frigates all going out of service. Replacing these capabilities will require significant levels of capital expenditure.
- 1.15 Unless fiscal conditions improve unexpectedly, or a marked deterioration in the security environment demands that we commit greater resources to defence, financial constraints will remain a fact of life. Like all government agencies, the NZDF and the Ministry of Defence must make a clear case for their spending requirements, keeping a sharp focus on the Government's strategic objectives and priorities.
- 1.16 The NZDF will also have to manage its budget to deliver efficiencies and effectiveness. Where a capability gap in skills, equipment, or infrastructure is identified, the Government should be presented with a range of options on how the associated risks might be managed.
- 1.17 Alongside this Assessment, an external team is conducting a Value for Money analysis of the NZDF. This exercise seeks to identify savings within existing NZDF baselines, to help off-set expenditure on military capabilities. The Value for Money analysis is intended to provide assurance that all reasonable steps are being taken to make the NZDF as efficient and effective as possible. It will also identify any significant changes to the NZDF's business model that could improve financial sustainability and narrow the funding gap.

## Organisational Capability

- 1.18 The structure and functions of the two defence organisations (the Ministry of Defence and the NZDF) were established by the Defence Act 1990. Further reforms were recommended in a review by Don Hunn in 2002, only some of

which were implemented. Further reviews, such as the Defence Capability and Resourcing Review of 2005, suggested that elements of the restructuring had produced some perverse incentives and that some reforms remained to be implemented.

- 1.19 Several recent reports have highlighted issues concerning major defence acquisition projects. In June 2008, the Controller and Auditor General reported to the Foreign Affairs, Defence and Trade Select Committee on time and cost issues with defence projects. This was followed in September 2008 by the Coles Report on Project Protector which resulted in mediation and a financial settlement. More recently there have been delays in the upgrading of the C130 Hercules and the P3 Orion aircraft. The new NH90 medium utility helicopters have been delayed slightly.
- 1.20 The Government has placed a high priority on procurement reform. It is seeking assurance that Defence's processes for procuring major platforms are robust. This is connected to the wider question of what is the most appropriate higher management structure for Defence.

## Terms of Reference

- 1.21 Cabinet approved the Terms of Reference for Defence Review 2009 on 30 March 2009. They require the Secretary of Defence, in consultation with the Chief of Defence Force and other stakeholders, to undertake a defence assessment as prescribed by Section 24(2)(c) of the Defence Act 1990 and to review and report on other specified matters. The Terms of Reference are at Annex A.
- 1.22 The Assessment is to report to the Government its analysis and conclusions and the outcome of the consultation processes required by the Terms of Reference. Upon receipt of the Assessment, the Government will finalise its defence policy. That policy will be published in the form of a Defence White Paper in 2010.
- 1.23 As directed by the Terms of Reference, the major issues addressed in this Assessment are as follows:

### *Defence within a national security framework*

- How does Defence contribute to New Zealand's overall national security? What is the relationship between Defence and other government agencies to enhance a 'whole of Government' approach towards achieving security?

### *New Zealand's Strategic Context and Outlook to 2035*

- How does the present and potential future strategic environment impact on the security of New Zealand?

### *Principal Tasks for the New Zealand Defence Force*

- How does the NZDF contribute, and how may it contribute in the future, to the security of New Zealand, Australia, the South Pacific, the Asia-Pacific region and globally?

- When and how should military capabilities be used for non-military purposes to support the work of other government agencies?

#### *Capability options allowing us to implement policy*

- How well do the current NZDF outputs meet the actual needs of policy now and in the near future, and how well are actual capabilities, including those under consideration or development, aligned to those outputs?
- Looking to the medium and longer term, what are the options that will allow us to achieve policy requirements in the future and what implications arise from the preferred capability mix?

#### *Future Development of the NZDF*

- What are the key issues around NZDF personnel, including training, retention, recruitment and the role of Reserves?

#### *Organisational and Management Issues*

- What is the best organisational structure for the Ministry of Defence and the NZDF?
- How can procurement, defence infrastructure and real estate best be managed?
- What are the best financial management practices to meet the long term defence funding requirements?

1.24 Additionally, the Terms of Reference provide that the Associate Minister of Defence will lead three concurrent companion studies concerning:

- New Zealand's Defence Industry, examining options for economic improvement in the sector;
- The role of the NZDF in Youth Programmes and the New Zealand Cadet Force; and
- Voluntary National Service, including examining future options for a whole of government strategy.

## Process

1.25 This Assessment has been largely completed by staff from the Ministry of Defence and the NZDF operating within eight workstreams:

1. Policy, Objectives and Strategy
2. Military Capability Options
3. Human Resource Issues
4. Real Estate and Infrastructure
5. Defence Organisational Structure (undertaken by a contracted reviewer)
6. Procurement (undertaken by an independent reviewer)
7. Funding and Financial Management (undertaken by a contracted reviewer)
8. Cost and Personnel Modelling (undertaken by a contracted reviewer).



- 1.26 The Assessment team has consulted closely with other government departments. These include the Ministry of Foreign Affairs and Trade, the Treasury, the State Services Commission, the Department of the Prime Minister and Cabinet, and a range of 'customer agencies' such as NZ Police and the NZ Customs Service. To ensure that 'whole of government' considerations are kept in focus, the Officials' Committee for Domestic and External Security Coordination (ODESC) has been the principal inter-departmental body considering the Assessment.
- 1.27 Independent expertise has been incorporated at several levels. The Minister of Defence, the Associate Minister of Defence and the Secretary of Defence have been advised on Assessment matters by a Panel of three independent advisers, selected for their experience in international relations, military matters, commercial affairs, and management and organisational change. The Panel comprised:
- Simon Murdoch, former Secretary of Foreign Affairs and Trade
  - Martyn Dunne, Comptroller, New Zealand Customs Service, and former Commander Joint Forces New Zealand
  - Robert McLeod, Managing Partner, Ernst & Young, New Zealand.
- 1.28 The Minister of Defence and the Associate Minister of Defence have briefed and conferred with the Foreign Affairs, Defence and Trade Select Committee of Parliament. The Assessment team has also consulted with New Zealand's security partners, particularly Australia.
- 1.29 A public consultation process generated over 600 written submissions and oral submissions at 16 meetings around New Zealand. The submissions were independently evaluated and have informed this Assessment. As well, discussions were held with leading New Zealand and international academics, and submissions from within the Defence organisations were sought and considered as a part of the Assessment process.

## Recommendations

- 1.30 That a Defence Assessment be undertaken at regular intervals of at least every five years which:
- tests current policy settings;
  - updates New Zealand's international strategic context and outlook;
  - establishes a clear logic linking New Zealand's strategic environment with the roles and tasks of the NZDF and the capabilities required to undertake them; and
  - provides government with advice on any funding and operational implications.

## Chapter 2

# Defence Within A National Security Framework

## New Zealand's National Security Interests

- 2.1 In order to thrive as an independent and prosperous nation, New Zealand must be secure. In the widest sense, a secure New Zealand means:
- that New Zealand – our land, maritime environs and airspace – is not threatened by hostile forces, and that our resources are protected;
  - having a domestic environment in which citizens and residents can conduct their lives confidently;
  - sustaining our capacity to promote better standards of living for New Zealand; and
  - extending our influence and securing recognition of our values internationally.
- 2.2 New Zealand's physical isolation is our principal source of protection from direct military threats from another state. It also offers some protection from non-state challenges. We do, however, see our security in terms broader than the defence of New Zealand's territory. New Zealand has benefited from being an active member of the wider international community and maintaining close connections with like-minded states. But there are obligations associated with these connections, including being willing to play a constructive role in preventing or resolving conflict.
- 2.3 New Zealand does not have a formal national security policy, and it is not the purpose of this Assessment to construct one. We do, however, suggest that a national policy framework would be desirable. Defence is an important part in the whole of government approach to national security. Acting in a leading or supporting role, Defence contributes to the following national security interests:
- a secure border and approaches to New Zealand;
  - a rules-based international order which respects national sovereignty;
  - a network of strong international partnerships; and
  - a sound global economy under-pinned by the freedom of commerce and navigation.

- 2.4 These national security interests are enduring. They reflect New Zealand's geography, our values, and our aspirations in the international community. What varies are the circumstances in which we pursue them, and the means by which we do so.

*A secure border and approaches to New Zealand*

- 2.5 We need to ensure that entry to, and exit from, New Zealand is by legal means only. This means having the knowledge and ability to interdict any suspicious or unwelcome presence in our waters.
- 2.6 New Zealand has the world's fifth largest exclusive economic zone. It contains rich marine resources, and further valuable resources may be contained in the seabed. The pressure these offshore resources are already under is likely to increase in the coming years as the world's population swells, and food and other resources become increasingly scarce.
- 2.7 The NZDF contributes to the security of New Zealand's borders and approaches through its surveillance efforts and interdiction capabilities in our maritime zone. It shares these duties with a range of agencies in a whole of government effort. Coordination between these agencies, in managing our air and maritime approaches, are tasks in which the NZDF shares (see paragraph 2.26).

*A rules-based international order*

- 2.8 New Zealand has long promoted a rules-based international order as the most sustainable and equitable basis for international stability. This is the best foundation from which to pursue the development of New Zealand and its people. New Zealand benefits from an international order which disciplines the exercise of power through law, custom, and convention, and which accords to all nations, large and small, the same rights. That the current international order reflects many of the values and principles embedded in New Zealand's own constitutional and legal heritage is helpful to us. But there are contrary pressures.
- 2.9 It is in New Zealand's interests that the current international order continues to underpin inter-state relations. War between states, while uncommon, remains an element of the international strategic environment. New Zealand therefore supports the institutions and arrangements which bring states together to resolve conflict peacefully, especially the United Nations.
- 2.10 The existing international order can be challenged by hostile non-state actors, of which terrorists who owe no allegiance to a state are the prime example. Other challenges to the international order include weak or fragile states; potentially aggressive strong states; and other states that choose to ignore the generally accepted rules and norms of international society.
- 2.11 Weak or fragile states are prone to internal anarchy which can lead to regional and international disorder. The absence of an effective government in Somalia enables pirates to operate off the Horn of Africa, disrupting global trade and endangering lives. Equally, without effective government in Afghanistan, that

state would remain a safe haven for terrorists, and the international community would continue to be plagued by regional and wider disorder.

- 2.12 Possession of nuclear weapons by rogue states and non-state entities outside the nuclear non-proliferation regime represents a serious threat. Such states or entities may not wish to overturn the international order, or be capable of doing so, but the risk posed to regional and global stability is such that coordinated counter-proliferation and disarmament initiatives need to be intensified.
- 2.13 New Zealand's defence contributions to the international order range from the participation of forces in peacekeeping and other forms of stabilisation activity, to active support for international regimes and other practical forms of collective security, such as the Proliferation Security Initiative, to ensure that there is robust support for international rules.

*A network of strong international partnerships*

- 2.14 As well as relying on a rules-based international order, New Zealand has always sought security in partnership with others who share our interests, values and concerns. All such partnerships carry expectations that we will sustain and use our defence force for a collective good.
- 2.15 New Zealand's closest security relationship is with Australia. New Zealand also has longstanding and close security relationships with the United States, the United Kingdom and Canada.<sup>1</sup> These relationships are grounded in common traditions, experiences and values. They are strengthened through defence force exchanges, training, exercises, technology transfer, intelligence sharing and the application of military doctrine. These links amplify and draw on the capabilities of the NZDF, and will be of value to New Zealand for the foreseeable future.
- 2.16 The strength of these links does not prevent New Zealand from determining for itself when, where, and under what circumstances to deploy the NZDF. Nor do these links prescribe particular policies.
- 2.17 In the South Pacific, regional institutions and bilateral relationships are the means whereby we assist our neighbours and safeguard our interests. Instruments such as the Biketawa Declaration demonstrate that regional governments are willing to act collectively in responding to crises in the region. Such initiatives, however, bring increased obligations and greater expectations of a leadership role by New Zealand.
- 2.18 Our international security partnerships have expanded as our security environment has changed. In particular, fostering close relationships with the countries of East, Southeast, and South Asia has become important for New Zealand. Our bilateral and multilateral security relationships in the region are valuable in themselves but they also support and complement an evolving security architecture. That architecture has to be able to accommodate the diverse interests of the states of the region, adjust to any changes in the

---

<sup>1</sup> Only the relationship with Australia is embodied in a formal security alliance. The US suspended its obligations to New Zealand under that alliance in 1986.

balance of power, build confidence between defence forces, and thereby reduce the risks of miscalculation, including between the major powers.

- 2.19 Active participation by New Zealand in the Five Power Defence Arrangements (FPDA) with Malaysia, Singapore, Australia and the United Kingdom is a key component of this approach to regional engagement. In addition to its focus on the defence of Malaysia and Singapore, the FPDA's role in supporting confidence-building and stability in Southeast Asia, and encouraging interoperability between the five defence forces, means it is now an integral part of the regional security architecture. As New Zealand's most significant operational security link to Southeast Asia, the FPDA provides a valuable anchor for the presence of our defence assets in the region.
- 2.20 We have developed a functional relationship with NATO and its member countries where our security concerns overlap. Currently, the focus of the relationship is on our contribution to the NATO-led International Security Assistance Force in Afghanistan (ISAF).
- 2.21 International relationships require attention. It is important for New Zealand to recognise and understand our partners' interests and perspectives. It is also important that we are prepared to contribute to the protection and advancement of shared interests.
- 2.22 International defence relationships also contribute to New Zealand's security by enhancing our wider knowledge of trends and events, and by strengthening our ability to help shape security responses as they are being formulated.

#### *Sound global economy and open and safe trade routes*

- 2.23 New Zealand has a strong interest in the international trade in goods and services. A key focus for both the Government and business is on improving market access and reducing regulatory barriers to trade. Our success, however, is predicated on a stable international order. New Zealand's economic position would be affected by any physical disruption to the security of international trade, whether through civil disorder, piracy, or inter-state conflict. So would any event which affected the New Zealand 'brand', including our reputation as a safe and clean place to visit.
- 2.24 We therefore have a national interest, as well as an interest as a good regional and international citizen, in supporting multilateral efforts to safeguard freedom of commerce and navigation. This is particularly the case in Southeast Asia, but also in the Middle East and the Horn of Africa, where sea lines of communication are vulnerable.

### **The Whole of Government Approach to Promoting National Security**

- 2.25 Responsibility for promoting and defending national security rests individually and collectively with a range of agencies, including the NZDF and the Ministry of Defence. These agencies work closely together in a whole of government effort to achieve optimal outcomes for New Zealand, both at home and abroad. In the future, as in the recent past, it will be rare for the NZDF to undertake any operation without partnering another agency in some way.

2.26 The broad utility of the NZDF's core capabilities in supporting the work of other government agencies at home and abroad is highlighted in the green shaded boxes below.

<b>Tasking support to other government agencies</b>	Naval Combat Force	Replenishment	Sealift	Navy Dive Team	Naval Patrol Forces	Hydrography	Land Combat Force	Land Service Spt	Special Operations	Naval Helicopter	P3 Orion	Fixed Wing transport	Helicopter
Support to police operations (ground and air support, maritime and land surveillance)	■		■	■	■	■	■	■	■	■	■	■	■
Short notice land, sea and air search and rescue	■	■	■	■	■	■	■	■	■	■	■	■	■
Short notice logistics, communications, and transport support during natural disasters and emergencies	■	■	■	■	■	■	■	■		■	■	■	■
Support to the Department of Conservation	■	■	■	■	■	■	■	■		■	■	■	■
Provision of assistance to the civil power (i.e. prison management) <sup>2</sup>	■	■	■	■	■	■	■	■		■	■	■	■
Environmental Risk Management Authority	■	■	■	■	■	■	■	■		■	■	■	■
Ground and air support to National Rural Fire Authority							■	■				■	■
Fisheries surveillance (air and surface)	■	■	■		■	■				■	■		
Support to New Zealand's foreign and security policies	■	■	■	■	■	■	■	■	■	■	■	■	■
Medical rescue, hospital assistance, and hyperbaric treatment	■		■		■					■			
Ceremonial and logistics support to events of national significance (i.e. ANZAC day)	■		■		■		■	■					
Contribute to New Zealand's intelligence awareness	■	■	■	■	■	■			■	■	■	■	■
Maritime air, surface and sub-surface surveillance	■	■	■	■	■	■				■	■	■	■
Explosive Ordnance Disposal	■			■				■	■				
Air, personnel, and logistics support to Antarctic New Zealand											■	■	■
Counter-terrorism	■		■	■	■		■	■	■	■	■	■	■

<sup>2</sup> All military platforms and personnel may be used in support of the civil power in the provision of any public service or in times of emergency.

Support for youth development (i.e. Limited Service Volunteer)																						
Support to New Zealand's overseas development programme																						

2.27 In the international environment, there is a close partnership between Defence and the Ministry of Foreign Affairs and Trade (MFAT). Defence and MFAT, along with partners such as the New Zealand Police, work closely in stabilisation and reconstruction activities in the Pacific, Afghanistan and elsewhere. Defence is also a partner with MFAT in advancing New Zealand's diplomatic objectives and in supporting the effective delivery of development assistance, particularly in post-conflict and/or post-disaster environments.

2.28 This Assessment has not analysed in any detail the shape of the NZDF defence attaché network. Nor was this issue addressed by the Review of New Zealand's Offshore Network, led by MFAT and recently agreed by Cabinet, as the focus of that Review was predominantly trade and economic. But the shape of the defence attaché network has recently been evaluated as part of a broader internal examination of Defence's international engagements. Such evaluations will in future be conducted regularly. They will include an examination of the location and value of the defence attaché network.

2.29 The national security outcomes identified in this chapter are enduring. They will continue to remain vital to New Zealand irrespective of any change to the international security environment. But they do not exist in isolation from international events. It is only by viewing these outcomes in the context of the world as it is and might become that future tasks and capabilities of the NZDF can be determined. The next chapter outlines the regional and global security context in which our national security outcomes need to be considered.

**Recommendations**

- 2.30 That an overarching national security policy for protecting New Zealand, our people, and our interests be developed which:
- reflects New Zealand's core values;
  - responds to the major security challenges and drivers of instability; and
  - brings together the objectives of all ministries, agencies, and forces involved in protecting our national security.

## Chapter 3

# New Zealand's Strategic Context and Outlook to 2035

- 3.1 How much we invest in defence is in part determined by the level of strategic risk we are willing to accept. For this reason we need a clear view of our strategic environment now and in the years to come.
- 3.2 This chapter initially reviews the nature of conflict, before assessing the strategic outlook by geographic region, and then by cross-border themes. Mindful that unexpected events do occur, it concentrates more on the coming fifteen years, than the subsequent ten. The chapter describes New Zealand's strategic context. The policy and operational consequences of this context are discussed in Chapter Four.

### The Nature of Conflict

- 3.3 Conflict within state borders will remain the most common form of conflict in the period out to 2035. But the risk of inter-state war or conflict short of war remains. Conflict between states, although increasingly uncommon, will thus continue to be a feature of the strategic environment.
- 3.4 While the distinction between inter-state and intra-state conflict is useful, it can be overdrawn. In reality, the categories of conflict are blurring. The regular forces of hostile states may operate alongside irregular forces; and irregular forces may, from time to time, use conventional tactics.
- 3.5 Under-estimating the scale and intensity of intra-state warfare would also be a mistake. This type of conflict can and does affect neighbouring states and the international system. Interventions in an intra-state conflict, such as the war in Afghanistan, can also cover the full spectrum of intensity short of major conflict between large-scale conventional armed forces. The skill sets, weapon systems, and combat support required for interventions within states can be similar to those required for warfare between states. While all parts of the NZDF should be capable of playing some role in an inter-state war, we do have (and should retain) some particular high-end capabilities.
- 3.6 The application of military force may stabilise a conflict situation. Finding an enduring solution, however, will also need to involve the rule of law, good governance, restoring economic activity, capacity development, and confidence building. Military engagement will remain a significant component in stability and reconstruction efforts. As we have seen in operations in Timor Leste and Solomon Islands, the timeframe to rebuild a community is often long and frequently underestimated.



## New Zealand, the Exclusive Economic Zone (EEZ), and the Realm<sup>1</sup>

- 3.7 New Zealand, the Cook Islands, Niue and Tokelau, and their respective EEZs, are highly unlikely to face any direct military threat within the period of this Assessment.
- 3.8 More likely are increasing instances of illegal fishing and other illegal resource extraction in the EEZs. The most serious incident we could face in this context would be illegal resource exploitation undertaken by, or supported by, another state. At worst this would involve a military presence by another state in or near our EEZ, although on current trends this is unlikely.
- 3.9 The unregulated movement of people into New Zealand, whether asylum seekers, criminal elements or terrorists, is of security concern. Because of our geographic isolation and sea border, the potential for a terrorist attack on New Zealand is lower than in other western states. But the potential is not zero and we still need to meet our international obligations in this area. New Zealand could also be used as a base for terrorist activities directed outside the country. The same geographic factors reduce, but do not eliminate, the likelihood of asylum seekers or illegal migrants reaching our shores by sea.
- 3.10 Remote attacks on the national infrastructure, for example through cyber attack, are likely to increase in the future. It is important that this risk is managed effectively. Modern defence forces and intelligence services are increasingly reliant on web-based information and communication networks for their effective operation. It is also a key area in which the technological gap between our key partners and potential adversaries is not so great that it might not be bridged. New Zealand must guard against becoming a weak link in the shared effort to deter hostile cyber intrusions.
- 3.11 Maintenance of the Antarctic Treaty System is important for New Zealand. The Antarctic Treaty, which seeks to ensure that Antarctica shall not become the 'scene or object of international discord', applies to the area below 60 degrees south latitude. The Treaty serves to protect our national interests in the Ross Dependency. It prohibits military activity in Antarctica, although military personnel and equipment may be used in support of scientific research or other peaceful purposes.
- 3.12 The Antarctic Treaty System is in good order. But there is heightened interest in Antarctica's resources, and also in the fisheries in the adjacent Southern Ocean where competition is increasing. This is likely to intensify.

## Australia

- 3.13 Our closest security relationship is with Australia. The relationship is founded not only on proximity, but also on shared values, history, and strong democratic traditions. New Zealand could have no closer friend and no better ally.

---

<sup>1</sup> There was a very high degree of consensus amongst the submitters to the public consultation process that the defence of New Zealand and its people was paramount, and that this included protection of our land, EEZ, and self-governing territories.

- 3.14 Through its size, its location and its strategic reach, Australia makes a major contribution to New Zealand's security. It shares with us common interests in the peaceful development of the South Pacific and in the stability of the Asia-Pacific region, to which end New Zealand and Australia regularly work together. Our security relationship is anchored in a formal agreement, and is given effect through training, combined exercises, logistic support, intelligence sharing, and capability development.
- 3.15 There are significant differences in the capabilities of our Defence Forces. Despite this, Australia values the contribution which New Zealand makes to combined operations in such places as Timor Leste and Solomon Islands, and the overall addition to Australia's own capability that the NZDF provides. Australia will continue to hold expectations of New Zealand in regard to these.

## The South Pacific

- 3.16 New Zealand has close political, cultural and constitutional connections with the island states of the South Pacific.<sup>2</sup> New Zealand, along with Australia, currently plays a leadership role in the region. We contribute to stability, capacity strengthening and economic development, regional maritime surveillance, search and rescue, humanitarian aid, and disaster relief when required. In pursuing these objectives, we also work with France in the context of FRANZ;<sup>3</sup> with the United States, Australia, and France in the context of the Quadrilaterals; with the countries of the Pacific Islands Forum (PIF) in the context of the PIF Pacific Plan; and with a range of development partners.
- 3.17 This Assessment assumes that for the foreseeable future New Zealand will continue to fill a leadership role. It is in our interests to do so: a weak or unstable South Pacific region poses demographic, economic, criminal, and reputational risks to New Zealand. Active and stabilising involvement by New Zealand in the region is also something which New Zealanders, as well as the wider international community, expect.
- 3.18 Many Pacific Island states face chronic social, economic, environmental, and governance stresses:
- Economic challenges: economic stagnation, dwindling resources, land disputes, unchecked exploitation of resources, risks to tourism, food insecurity;
  - Weak governance: corruption, undisciplined police and defence forces, porous borders;
  - Social tensions: unplanned urbanisation; large youthful populations and high youth unemployment, HIV/AIDS, ethnic rivalries;
  - Environmental challenges: resource exploitation, poor waste management, severe weather events, rising sea levels; and

---

<sup>2</sup> Ninety-one public submissions to the public consultation process saw the South Pacific as our second international defence relations priority, after Australia.

<sup>3</sup> Signed by representatives of the Governments of France, Australia and New Zealand in December 1992, the FRANZ Statement commits its signatories to 'exchange information to ensure the best use of their assets and other resources for relief operations ... in the [South Pacific] region'.

- Crime: arising from weak employment opportunities, openness to international crime syndicates.
- 3.19 The cumulative nature of these stresses means that the outlook for the South Pacific is one of increasing fragility.
- 3.20 Past and current military interventions in the region have been at the invitation of the host government or the conflicting parties. In the future, the operating context may become more complex. Although assistance will not necessarily be limited to military assistance, the NZDF will continue to play a role in responding to a range of events, from natural disasters to the support of sovereignty and internal stability.
- 3.21 Many more external countries and non-governmental organisations are involved in the Pacific than previously, and this trend is likely to continue. Much of this involvement is constructive and cooperative.
- 3.22 If South Pacific governments were to become resentful or opposed to Australian and New Zealand influence this could change the consent environment in the South Pacific during the period covered by this Assessment. This places a premium on maintaining our presence and profile in the region, including through the NZDF, so that New Zealand remains a trusted friend to Pacific Island states.
- 3.23 The stresses found in the South Pacific are more acute in Timor Leste. The Government of Timor Leste is likely to continue to require substantial foreign assistance in the coming decades to establish itself as a viable state.

## United States

- 3.24 The United States is the pre-eminent military power in the world and is likely to remain so in absolute terms for the duration of the period covered by this Assessment. The United States will continue to lead most major international coalitions and will remain a source of innovation and development in defence doctrine and capability. It anchors NATO and a host of other bilateral and regional security arrangements. When it puts its weight behind multilateral institutions and the international rule of law, it gives both an immense impetus.
- 3.25 The United States' position as the most powerful and influential actor in the Asia-Pacific region is unlikely to change over the period of this Assessment. The US contribution to regional stability will be welcomed by most of the region's governments. Strategic rivalry between China and the US is not inevitable, but a wariness of each other's intentions could manifest itself in their decisions on force structure and capabilities.
- 3.26 New Zealand is an engaged, active and stalwart friend of the United States. Consistent with the many shared interests and values between New Zealand and the United States, there has been a welcome increase in military contact and cooperation between us. Greater New Zealand participation in multilateral defence activities in which the US is involved will be welcomed by our security partners in the region, especially Australia and Singapore.

## The Asian Region

- 3.27 New Zealand's economic prosperity is increasingly tied to the continued stability and prosperity of Asia. Our interests are best served by a region in which the major actors are generally in accord on key issues and share a common understanding of how they should be managed. Such regional accord cannot be taken for granted.
- 3.28 The establishment of a well-grounded architecture for the security of the region is a work in progress. There are a variety of regional institutions centred on the Association of Southeast Asian Nations (ASEAN) – the ASEAN Post-Ministerial Conference (PMC), ASEAN Plus 3, the ASEAN Regional Forum (ARF), the ASEAN Defence Ministers Meeting, and the East Asia Summit. The security agenda of these groupings is diverse and useful insofar as they bring together the armed forces and security establishments of the region to address common concerns or to act together in times of crisis. We would welcome a more robust regional security architecture, but recognise that achieving this will be a gradual process.
- 3.29 The Asia-Pacific Economic Cooperation (APEC) brings together all the major economies of the region on an equal footing, but for a number of reasons is not security focused. The path to an inclusive and comprehensive regional security community is not straightforward, but the impetus towards it will continue.

### *North Asia*

- 3.30 Security in North Asia rests largely on the state of the relationships between the major powers. Of these by far and away the most important is that between China and the United States, followed by the China-Japan and United States-Japan relationships.
- 3.31 In recent decades major power relations in the region have been more or less stable. China in particular, has been focused on being a responsible international citizen. The more integrated the major powers, including China, are into international and regional systems, the less likely it is that they will adopt zero-sum approaches in their international relations. But the pace of China's military modernisation programme, the response this could prompt from the neighbouring states, may test the relationships of the major powers. Conversely, tensions in the relationship between China and Japan may be eased by moves to develop the regional political and security architecture.
- 3.32 Japan's continued close relationship with the United States and its commitment to multilateralism adds to its strategic weight in North Asia. But there is no doubt that the strategic balance is becoming more diffused.
- 3.33 This is generating increased nervousness in Japan, and the Japanese Self-Defence Force is likely therefore to remain a formidable force. Japan will also seek to accommodate any shift in the strategic balance within regional and multilateral structures and moves, albeit tentatively, to develop security relationships in North Asia.

- 3.34 There is an outside possibility of conflict in North Asia in the timeframe of this Assessment. This could be precipitated by a dispute in China's maritime periphery. Conflict is only likely to occur as the culmination of a period of tension. It would have a devastating effect on security and confidence in the region.
- 3.35 The Korean peninsula will continue to be a source of regional instability. There is some prospect that the Democratic Peoples Republic of Korea (DPRK) may collapse in the timeframe of this Assessment.

#### *Southeast Asia*

- 3.36 Economic growth in recent years has enabled substantial military modernisation programmes in Southeast Asia, including naval and submarine fleets. But there is no immediate prospect of significant or long-lasting inter-state conflict in the region. ASEAN states generally recognise that their interests in economic growth are best served by continued peace. Security challenges include Islamist and other forms of terrorism, piracy, weapons proliferation, and state fragility.
- 3.37 There are tensions within and between ASEAN countries which regional structures can help ameliorate but not remove. The outlook for mainland Southeast Asia in particular does have some fragility. Myanmar is under military control. Any reform will likely be incremental and within existing military structures.
- 3.38 Thailand, which shares a 2,400 kilometre porous land border with Myanmar, may face further instability. Vietnam will continue its strong economic growth, and on the back of this could look to reclaim its historical role as a regional leader. Cambodia will continue to be forthright in advancing its interests vis-à-vis its neighbours.
- 3.39 None of this is to suggest that serious conflict on mainland Southeast Asia is likely. Economic growth, economic integration, ASEAN ties, and unity based on shared concerns over the strategic balance in the region, will help to underwrite regional stability. But there are nonetheless points of tension and abrasion.
- 3.40 The situation in maritime Southeast Asia is ostensibly more stable. Partly because Indonesia is going through a period of sustained economic growth and democratisation. And partly because external powers are not challenging the status quo. But none of these factors can be guaranteed. There remain a number of enduring and unresolved territorial disputes in maritime Southeast Asia.
- 3.41 Our security relationships with Singapore and Malaysia, founded on the four decades old FPDA, are our most enduring in the region. So long as both countries support the FPDA, we should continue to do so.

#### *South Asia*

- 3.42 India's growing economic and military power is giving it a stronger voice both in the region and internationally. India's growth is more an opportunity for New

Zealand than a threat. This is likely to be reflected in greater military engagement.

- 3.43 The possibility of conflict between Pakistan and India will remain a major concern, and the risk of an escalation to nuclear confrontation cannot be ruled out. The possibility of miscalculation leading to military conflict is heightened by the presence of violent non-state actors in both countries. Conflict between India and Pakistan would have a serious impact on security and confidence in the region. Confidence-building measures being pursued by both countries should be supported.

## The Wider World

- 3.44 New Zealand's strategic interests extend beyond the Asia-Pacific region. The Middle East provides a persistent challenge. Its fractured politics, the risks of nuclear proliferation, the prevalence of Islamist terrorism, and the presence of the world's largest reserves of hydrocarbons, mean that the international community is regularly engaged in preventing conflict or dealing with the consequences of conflict in this region. We expect that New Zealand, whether under the United Nations flag, or in international coalitions, will be asked to make further contributions to regional stability operations, as we have over many years.
- 3.45 Sub-Saharan Africa does not have the same strategic significance as the Middle East. But weak governments, civil strife and ethnic conflicts have regularly called for an international response. Currently, Africa is the largest single theatre of United Nations peacekeeping operations. This is likely to continue.
- 3.46 NATO is a benchmark for military doctrine, has been redefining its mission since the end of the Cold War, and is currently carrying the mandate of the international community in Afghanistan. NATO has reached out to like-minded countries in the Asia-Pacific region: Japan, Korea, Australia, and New Zealand. It is unlikely that NATO will retreat from this expanded role in international peace and security. We expect that New Zealand will continue gradually to develop its relationship with the Alliance.
- 3.47 The United Nations has cemented its position as the principal source of legitimacy for the use of force in international affairs, either through UN-led operations or through operations authorised by the United Nations but not UN-led. The balance of New Zealand's military commitments is currently weighted in favour of the latter. This may not always be the case. Since the end of the Cold War, the number of UN-led interventions has increased substantially. This trend will continue. As at February 2010, the United Nations led 16 peacekeeping operations, involving 124,000 military personnel. This represents a nine-fold increase in UN peacekeepers since 1999.<sup>4</sup>
- 3.48 Building a UN force can take time. There will be occasions, such as in Timor Leste in 1999, where the initial effort to stabilise a situation might be more

---

<sup>4</sup> *United Nations Peacekeeping Fact Sheet*, February 2010.

effectively led by nation states or under other collective security arrangements, including regional arrangements, albeit approved by the United Nations.

## The Proliferation of Weapons of Mass Destruction (WMD)

- 3.49 The proliferation of WMD and their delivery systems will increase over the period of this Assessment. The proliferation of dual-use technology will also increase the number of states with a latent WMD capability. These issues are important both because they can affect New Zealand directly and will affect the stability of the international system. The possible nuclearisation of space is also a latent future risk.
- 3.50 The international nuclear non-proliferation regime, based on the Nuclear Non-Proliferation Treaty (NPT), is under strain. Non-proliferation efforts involving like-minded states acting within the framework of international law but outside the NPT, such as the Proliferation Security Initiative (PSI), are therefore likely to continue.
- 3.51 New Zealand has a long history of active participation in international disarmament efforts. As nuclear, biological and chemical technologies come within reach of more state and non-state actors, nuclear security and counter proliferation initiatives, such as the PSI, will become more important.

## Terrorism

- 3.52 Terrorism and extremism will remain an enduring feature of the international landscape. As members of the global workforce and as travellers, New Zealanders will continue to be affected by terrorism.
- 3.53 Specific mass attacks remain a possibility. Were an attack to involve the use of nuclear material, the consequences would be potentially devastating and far-reaching. Countering the risk of nuclear terrorism will involve continuing initiatives to secure nuclear materials and limit proliferation.
- 3.54 The more immediate cost of terrorism, however, will be its disruption to the freedom of movement, safe passage, and community life. The way states choose to respond to the threat of terrorism will also have an impact on New Zealand, not only in terms of the movement of people, goods, and capital, but also in terms of complying with strict international standards.
- 3.55 Terrorist activities in Southeast Asia are expected to remain a source of risk where the underlying factors leading to extremism remain a cause of concern.

## Demographic Changes and Natural Hazards

- 3.56 With the world's population projected to reach 9.3 billion by 2050 (up from 6.8 billion currently) there are likely to be increased social tensions and resource pressures in the urbanised developing world, where population growth will be concentrated and in which there will be an increasing number of young people, many of them unemployed.

- 3.57 Meanwhile, in the developed world, populations are both declining and aging when the effects of immigration are removed, and in some cases even when immigration is included. This trend will diminish governments' revenue bases, add to health care expenses, and increase competition for labour. These trends may have implications for defence expenditure and recruitment.
- 3.58 There is a global consensus that climate change is occurring. Extreme weather events may become more common. In the South Pacific, the possibility of more intense cyclones, coupled with rising sea levels, could have serious consequences. Natural hazards more generally pose a disproportionate danger to the people of the South Pacific, who live in high-risk areas and have limited national infrastructure to fall back on.
- 3.59 As the world's population increases, and perhaps as climate change becomes more manifest, resources (water, food, energy and minerals) are likely to become scarce in some regions, leading to increased competition for their allocation. The world as a whole is expected to have enough food and water to supply the growing population, but the uneven distribution of these key resources and others is likely to generate strategic tensions. Protection of the resources in New Zealand's maritime region is already a priority and may become more so. The need for us to manage the risks of illegal migration and people-smuggling is likely to intensify.
- 3.60 Collectively climate change and resource scarcity could exacerbate existing tensions and pressures, increasing the risk of conflict both within states and between them. These tensions and pressures might most acutely be felt in countries sharing land borders, but New Zealand itself will not automatically be immune.

### Discontinuities, Disjunctions or Major Shifts

- 3.61 The analysis of the strategic environment in this Chapter has focused on the foreseeable environment. Events not yet observed could be just as important in shaping the future as those identified. Major shifts are sometimes difficult to predict. Yet they have the ability rapidly to alter the strategic framework. This could be by a single event, such as the 11 September 2001 terrorist attacks on the United States, or by gradual accretion leading to change, such as the events leading to the collapse of the Berlin Wall in 1989. Events that could cause a paradigm shift in New Zealand's defence posture, depending on how they manifest, include:
- a large state acting against New Zealand with little warning;
  - the emergence of a new hegemonic power;
  - simultaneous widespread conflict in the South Pacific;
  - a state using military force to assert a claim in Antarctica; and/or
  - a sudden acceleration of global climate change.
- 3.62 Risk mitigation strategies to avoid missing the early signs of a possible paradigm shift will remain an important aspect of the New Zealand security and intelligence environment. They will buy time for reorientation, decision and action. Key risk mitigation strategies for defence planners include scanning the



strategic environment, the ability to process information in an accurate and useable manner, and a willingness to challenge existing strategic paradigms.

## Recommendations

3.63 The Assessment recommends that future decisions around defence capability should be guided by the following judgements:

- New Zealand continues to face no direct military threat;
- the international strategic outlook is for more instability, including in the South Pacific;
- the strategic balance in Asia is shifting;
- international military operations will continue to be more common than unilateral action;
- conflict within states is more probable than war between states;
- inter-state warfare will remain a feature of the international security environment; and
- New Zealand's security interests are best served by strong partnerships with friendly countries, and an international environment in which the rules and norms of international behaviour align with those of New Zealand and are widely accepted.

## Chapter 4

# Principal Tasks for the New Zealand Defence Force

- 4.1 This Chapter discusses the principal tasks required of the NZDF and is a link between the policy and the environmental circumstances underpinning the use of the armed forces, discussed in Chapters Two and Three, and the force structure and capability options for the NZDF, discussed in Chapters 5 and 6.
- 4.2 The NZDF is a disciplined national asset of considerable utility. Its purpose is to provide military capability options which enable the Government to promote and protect New Zealand's national security interests. These interests include, but go beyond, conflict situations, and will normally involve domestic or international partnerships.
- 4.3 In an uncertain and sometimes violent world there will be occasions when the deployment of military force is appropriate. Although circumstances and requests would be assessed on their merits, it is likely that New Zealand would consider the possible use of military force, particularly in the following circumstances,
- in response to a direct threat to New Zealand and its territories;
  - in response to a direct external threat to Australia;
  - as part of collective action in support of a member of the Pacific Islands Forum facing a direct threat;
  - as part of collective action in support of a member of ASEAN facing a direct external threat, and specifically in support of the FPDA; or
  - if requested or mandated by the United Nations Security Council.
- 4.4 It seems likely that ad hoc 'coalitions of the willing' will arise in the future, and that New Zealand might be asked to contribute. The possible scale and nature of such a contribution would depend on our assessment of the merits; the extent to which New Zealand's interests were directly involved; the international legality; the conditions on the ground; and whether we would be acting in the company of like-minded states.
- 4.5 By virtue of its current set of military capabilities, the NZDF is able to perform a wide range of national security roles. The NZDF maintains disciplined forces which are available for operations at short notice. It also operates integrated fleets of vehicles, ships, and aircraft. As such, the NZDF is operationally self-sufficient and is able to sustain commitments over extended periods. It can undertake or support such tasks as search and rescue, disaster relief, and other roles as directed by civil authorities.

## Principal Tasks for the NZDF

4.6 Flowing from our national security interests, and the broad role described for Defence, the principal tasks proposed by this Assessment for the NZDF are:

- to defend New Zealand's sovereignty by having a credible, professional, versatile, and appropriately equipped Defence Force which is able to respond to threats to New Zealand's territory;
- to discharge our obligations as an ally of Australia in support of shared values and common interests;
- to contribute to peace and stability in the South Pacific, including by being able to take an independent leadership role when necessary;
- to make a credible contribution in support of peace and security in the Asia-Pacific region;
- to protect New Zealand's interests by contributing to international peace and security, and the international rule of law;
- to contribute to whole of government efforts at home and abroad in resource protection, disaster relief and humanitarian assistance;
- to participate in whole of government efforts to monitor the international strategic environment; and
- to be prepared to respond to sudden shifts and other disjunctions in the strategic environment.

4.7 The order of these tasks is significant. New Zealand would necessarily respond to any direct threat to its territory and seas by a hostile state or terrorist group. A direct threat to Australia would elicit the same response. Looking further afield, we have to be able to respond to security challenges in the South Pacific. This would usually be in partnership with Australia, but there may be times when we will choose to act independently.

4.8 Beyond the South Pacific, we have more discretion over the shape and location of our contributions. Nonetheless, New Zealand will continue to uphold its obligations to collective security under the authority of the Charter of the United Nations. We will also continue, where appropriate, to work with like-minded states to uphold and promote international rules and norms of conduct between states, and to restore order in states that may have suffered from civil disorder, internal conflict or natural disaster.

## Defend New Zealand's Sovereignty

4.9 In the highly unlikely event of a direct conventional military threat to New Zealand, the NZDF would be called upon to respond. The NZDF needs to maintain a military capability in the maritime approaches to New Zealand, and land forces necessary to deter an aggressor. Depending on the intensity of the threat, international assistance might be sought.

4.10 New Zealand will also benefit from continuing to have military forces with sufficient utility to conduct a range of surveillance and patrol tasks within its maritime zone.

4.11 New Zealand's interests extend to the Southern Ocean and Antarctica. These interests are upheld, in part, by our continuous presence at Scott Base. Sustaining our presence in this difficult and resource intensive environment is dependent on our ability to access critical support through the joint logistics pool with the United States, to which New Zealand contributes military airlift and other services. It is important that our contribution to the pool remains credible.

## Our Alliance with Australia

4.12 Australia is our principal defence and security partner. We benefit from the investment which Australia has made in its national defence. We therefore need to share the burden of our common security.<sup>1</sup> It is inconceivable that we would not respond were there to be a direct attack on Australia.

4.13 Australia has military capabilities that we do not have, but which are essential for higher-end contingencies. The ANZAC relationship therefore adds to the overall depth and reach of the NZDF. New Zealand will work closely with Australia to identify areas of common interest in ensuring international peace and stability beyond our region. At times this might mean that New Zealand will combine with Australia in an extra-regional intervention. Alternatively, New Zealand may operate with other partners.

4.14 As signalled by political leaders in 2009, New Zealand and Australia will work closely together to give the ANZAC spirit greater contemporary relevance. The first major step towards realising this vision is the commitment to investigate options for a Pacific-focused Ready Response Force to respond to short-notice security events, including stabilisation operations, humanitarian assistance and disaster relief.

4.15 Continued and close interaction with the Australian Defence Force (ADF), at all levels, is important to ensure that the NZDF remains interoperable with the ADF. Much is already done in this area through the mechanism of Closer Defence Relations (CDR). New Zealand remains firmly committed to CDR by:

- promoting military interoperability;
- interacting with the Department of Defence/ADF at every level;
- determining areas where equivalent capabilities are sensible and areas where supplementation might be necessary;
- undertaking coordinated responses to regional issues; and
- actively pursuing opportunities for new ways of working with Australia.

## Contribute to Peace and Stability in the South Pacific

4.16 New Zealanders will continue to expect the Government to play a significant and sometimes leading security and assistance role in the South Pacific. These expectations are matched in the region itself, and shared by our principal security partner, Australia. In those parts of the region where other states might

---

<sup>1</sup> This is consistent with the views of many New Zealanders. Eighty-nine submissions to the public consultation process saw a closer defence relationship with Australia, based on greater interoperability, as important.

be expected to take the lead (the US in the case of Micronesia, and France in New Caledonia and French Polynesia), New Zealand should be ready to assist. In Timor Leste, New Zealand and Australia are likely to remain at the forefront in terms of providing security.

- 4.17 New Zealand, with Australia, needs to be able to deal with any reasonably foreseeable contingency in the South Pacific. This makes operations in the region the principal determinant of New Zealand's military capability requirements, and a priority over other areas for the actual conduct of military operations.
- 4.18 There are a variety of means whereby the NZDF can support peace and stability in the South Pacific:
- contributing to military operations (as in Solomon Islands, Timor Leste, and elsewhere as required);
  - contributing to whole of government efforts to support peace and security;
  - providing humanitarian assistance and disaster relief;
  - assisting with maritime surveillance, and search and rescue; and
  - supporting the professional development of indigenous defence and security forces.
- 4.19 There may be circumstances in the future, whether for our own reasons or because our partners are pressed elsewhere, where we would want the NZDF to lead an operation in the South Pacific or to operate without needing to rely on others. This would be difficult at the moment, but our assessment of the strategic prospects for the region over the next 25 years suggests strongly that this is a capability which New Zealand governments should seek to develop.
- 4.20 Contributing to the national security of Pacific countries is also likely to figure prominently in the work of other New Zealand government agencies. Defence will work with these agencies as part of a whole of government response to regional challenges. We also need to maintain a clear, whole of government view of our security interests and commitments in the South Pacific.

## Support Peace and Security in the Asia-Pacific Region

- 4.21 New Zealand's political and economic linkages with the Asia-Pacific region are significant and growing. A peaceful and secure region is a vital national interest. In addition, we have specific commitments to Malaysia and Singapore through the FPDA; we are a dialogue partner of ASEAN; and we have a long-standing interest in peace on the Korean peninsula.
- 4.22 The significant benefits New Zealand derives from a peaceful and stable Asia bring with them the requirement to support and contribute to that favourable environment. There are a variety of defence and diplomatic activities which enable us to do this, including:
- supporting open and inclusive regional security and defence arrangements, for their own sake and as a means of building confidence amongst the defence forces of the region;

- maintaining our commitment to the security of Malaysia and Singapore through the FPDA, including through exercises;
  - developing good bilateral defence relations with Brunei, China, Indonesia, Japan, Korea, Philippines, Thailand, and Viet Nam, encouraging them to operate constructively in the region;
  - supporting a continuing US security presence as a contribution to regional stability;
  - exercising and training with regional armed forces;
  - maintaining a naval and air presence in support of freedom of commerce and navigation;
  - supporting efforts to prevent the proliferation of WMD and related delivery systems and achieve nuclear disarmament in the region;
  - supporting regional efforts to deal with terrorism and other transnational security threats;
  - making an appropriate contribution in support of peace and security in the Asia-Pacific region; and
  - being willing and able to assist at times of natural or humanitarian disasters.
- 4.23 Some of these activities are region-wide and collective in nature. Others are geared towards bilateral links or particular relationships, such as the FPDA.
- 4.24 New Zealand's interests would be affected by a deterioration in the security of the region, such as through the eruption of a flash point, or through a clash between major powers. This is a contingency, however remote, which the US and its allies are taking into account as they plan their force capabilities.
- 4.25 Given New Zealand's current and historic ties with the Republic of Korea we would almost certainly wish to support any internationally mandated operation to monitor or staff a new peace agreement. This would likely be on the same basis that we support other similar agreements.

## Contribute to International Peace and Security

### *Combat, peace support, and other security operations*

- 4.26 New Zealand has a record over several decades of contributing to international efforts to resolve conflict. Participation in combat, peace support and other international security operations will almost always be as a partner in a coalition operation, mandated or endorsed by the United Nations or by a regional organisation. Our contribution could vary widely from peacekeeping and peace enforcement, to disaster relief and humanitarian assistance, to demining, to maritime security operations, through to state building.
- 4.27 There is no necessary size or shape to international military contributions. The NZDF, however, is a small force. There will be limits to what we can provide and sustain, but within those limits there is some flexibility. What we commit will be determined by a range of factors, such as availability, location, tasks, risk, and international expectations. It may extend to taking on a robust combat

role. Our willingness to assume such a role, when appropriate, is valued by our partners. These capabilities are all part of the inventory we require in the South Pacific.

#### *Defence diplomacy and security partnerships*

4.28 New Zealand will also contribute to regional and international peace and security by building defence and security partnerships. Partnerships can be promoted through interactions ranging from the assignment of defence attachés, through to formal military-to-military talks and participation in bilateral and multilateral exercises.

4.29 Defence partnerships add value by:

- building influence with security partners so that our interests are taken into account, including support for New Zealand *in extremis*;
- helping to keep us informed of security issues through dialogue and intelligence exchange;
- providing professional development for the NZDF through exercises, exchanges and other interaction;
- enabling the NZDF to be well-informed about state-of-the-art defence technology and military doctrinal developments; and
- adding another strand of engagement to our bilateral relationships, especially where partner countries place a particular value on defence relations.

### Contribute to Whole of Government Security Efforts at Home

4.30 In the domestic environment, the NZDF partners a number of agencies to promote economic, security, environmental, and social objectives. The defining characteristic of these partnerships is the use of military forces to perform essentially non-military roles.<sup>2</sup>

4.31 Specific tasks include:

- a range of counter-terrorism roles from cordon and search operations to direct action (in support of New Zealand Police);
- search and rescue;
- disaster relief;
- support to the Antarctic programme;
- EEZ resource protection;
- maritime border security;
- evacuating New Zealand and approved foreign nationals from high risk environments;

---

<sup>2</sup> One hundred and thirty-four submissions to the public consultation process saw a significant role for the NZDF in non-military tasks.

- ensuring that NZDF information and communication networks are protected, and contributing, where appropriate, to any whole of government response to the threat of cyber attack;
- providing logistic support to events of national significance; and
- providing infrastructure for activities such as the Limited Service Volunteers Scheme.

## Whole of Government Efforts to Monitor the Strategic Environment

- 4.32 Strategic awareness helps to ensure that military capabilities remain aligned with established defence policy goals. In particular, we need to discern any serious deterioration in the strategic environment in time to adjust our posture (although this does not mean that New Zealand will be able to foresee sudden and paradigm changing events).
- 4.33 An awareness of the strategic environment also informs operational decision-making. Analysis indicating a potential security event in the region, for example, may lead the Government to bring forces to a higher state of readiness in response, or to forgo commitments beyond the region in order to be in a position to respond to the regional event.
- 4.34 The collection and assessment of intelligence are important mechanisms through which New Zealand builds its understanding of the strategic environment.
- 4.35 New Zealand's ability to assess the strategic environment is not solely, or even primarily, a role for Defence. Other agencies within the whole of government context have assessment as an important component of their activities.

## The NZDF's Military Characteristics

- 4.36 The greatest asset of our armed forces is, and will remain, the quality of our people. The NZDF is a valued partner in New Zealand and throughout the world because its personnel are honest, impartial, culturally respectful, and accountable to civil authorities. They are also disciplined, well-trained, and understand their constitutional and legal obligations. These attributes are more rare than many might think.
- 4.37 We require personnel and capabilities that can undertake a wide range of tasks. Our forces will never be large, but the range of demands we make of them will be. These demands will reflect the range of our national security interests. This versatility also enhances our ability to add strategic weight to the forces of our international partners.
- 4.38 Since the end of the Cold War, the NZDF has been continuously engaged around the world in a diverse range of operations. In recent years the number of deployed personnel has been up to 2,000 in a single year. This high demand for defence deployments is likely to continue, implying a need for depth in New Zealand's forces, and demonstrates that the NZDF is seen by others as a useful contributor in the pursuit of common goals.



- 4.39 The NZDF needs to be interoperable with our principal partners for the tasks we are likely to undertake with them. This especially means the capability to operate with Australia in support of shared security objectives in the South Pacific, but also to work with Australia and other partners in more distant theatres.
- 4.40 Operating in the South Pacific, as we often will, requires the capability to deploy over thousands of kilometres of ocean. Operations further afield also require this capability. More broadly, it is impossible to predict where the NZDF will deploy. But history suggests we may find our forces deployed as far away as West Africa, Europe, the Middle East, and Central Asia. Within operational areas any deployed force must be mobile.
- 4.41 Our deployed forces will continue to be sufficiently self-reliant so we do not need to ask partners for basic forms of operating support. The NZDF will have reliable and high quality equipment so the forces are both effective and safe, and are not a liability to our partners.

### Operations in New Zealand's Maritime Zone and the South Pacific as the Starting Point for Choosing Military Capabilities

- 4.42 The Assessment concludes that the ability to meet our security objectives in our maritime zone and the South Pacific should be the principal basis for selecting New Zealand's military capabilities. Structuring our capabilities in this way will ensure we have the resources needed to meet New Zealand's overall security requirements, to add weight to Australia where it is most likely to be required, and to support our regional and international obligations as required.
- 4.43 The challenges of deployment, operating and sustainment in the South Pacific are considerable today and could be more so within the time frame of this Assessment. The NZDF will need to be equipped for situations which potentially include armed conflict against a range of adversaries and scenarios.
- 4.44 The capabilities required for the range of possible operations in the near region will also allow us to make a credible contribution to stability in Asia, as well as further afield. Some enhancements may be needed to ensure that we retain options to contribute beyond the region. These are discussed in the next chapter.

### Capabilities and Conflict

- 4.45 Should war between states occur outside the region, New Zealand is likely to have an element of choice as to whether or how it contributes forces. The cost of the capabilities required to contribute to high-end combat between large, sophisticated military forces is increasingly beyond New Zealand's means. Even middle powers struggle to maintain such capabilities. New Zealand could devote considerable resources trying to maintain advanced warfare capabilities, and fall short. The opportunity cost would be the loss of resources for contributing meaningfully to intra-state conflicts.
- 4.46 But the possibility of inter-state war cannot be excluded. Nor can the possibility that a New Zealand government may want to contribute militarily to such a

conflict. Although all parts of the NZDF should be capable of playing some role in an inter-state war, we do have (and should retain) some particular high-end capabilities.

- 4.47 Intra-state conflict in fragile, failing or failed states will nonetheless remain the most common form of conflict in the period covered by this Assessment. Operations in Solomon Islands, Timor Leste, Afghanistan and the Gulf region are contemporary examples. Our forces should largely be optimised for the conduct of such operations.
- 4.48 But as noted in Chapter Three, this distinction between intra-state and inter-state warfare should not be exaggerated. The risks to personnel serving in intra-state operations can be high, as the war in Afghanistan illustrates. Moreover, we cannot exclude the possibility of hostile regular forces working alongside insurgents and other irregular forces in a 'hybrid' intra-state/inter-state scenario. To contribute in such environments, New Zealand requires a combat-capable force.

### Risk Mitigation and the Response to Major Shifts and Other Disjunctions

- 4.49 New Zealand's assessment of the strategic environment suggests there will be further instability in the future. As an ultimate expression of uncertainty, major shifts have been, and will continue to be, a feature of the security landscape. A paradigm-shifting event will almost certainly lead to a more dangerous security situation for which, by definition, we will not be fully prepared. The extent to which we are willing to hedge against major shifts is a cost-benefit argument. Even for some major military powers, maintaining the ability to respond to all contingencies is becoming increasingly problematic. The critical question, therefore, is how much risk mitigation is considered affordable.
- 4.50 Appropriate risk mitigation strategies for Defence include:
- participation in whole of government measures to increase the chance of early warning of major shifts;
  - ensuring existing systems are robust in their structures and flexible in their processes. This allows the systems to absorb the shock, reorient their thinking and respond to it;
  - ensuring that vital components of the defence infrastructure are protected. This means that in the immediate aftermath of any shock thought can be given to response rather than protection;
  - maintaining a commitment to combat capable forces so that if a response is required at short notice it is available; and
  - ensuring that the NZDF can be enlarged at relatively short notice if necessary.
- 4.51 Although it might be seen by some as a failure of imagination, any consideration of the NZDF's future force structure needs to be linked to the force we currently have. Not only is that a fiscal reality – we cannot afford to build a defence force from scratch – it is also a useful strategic benchmark. Recent deployments and activities suggest that the existing NZDF does provide the Government with a range of useful choices.

## Recommendations

4.52 In order of priority, and based on the strategic outlook in Chapter Three, this Assessment recommends that the principal roles and tasks of the NZDF should be:

- the protection of New Zealand, our people, land, territorial waters, natural resources and critical infrastructure;
- honouring our alliance obligations to Australia;
- contributing to peace and stability in the South Pacific, including by being able to take an independent leadership role when necessary;
- making an appropriate contribution in support of peace and security in the Asia-Pacific region;
- protecting New Zealand's global interests and core values by contributing to international peace and security, and the international rule of law; and
- being prepared to respond to sudden shifts and other disjunctions in the strategic environment.

4.53 In the protection of New Zealand, the NZDF should:

- ensure the sovereignty of New Zealand's EEZ and territorial waters;
- provide an appropriate counter-terrorist response capability;
- provide support to civil agencies in a range of tasks, including disaster relief and search and rescue;
- contribute to whole of government efforts to promote the economic, security, environmental, scientific, health, and social objectives of New Zealand;
- contribute to whole of government efforts to monitor the strategic environment; and
- provide a limited capability to protect our maritime approaches and territory in the unlikely event of a conventional military threat.

4.54 In meeting our alliance commitments with Australia, the NZDF should:

- operate with the ADF to protect Australia's territorial sovereignty;
- work with the ADF in support of a safe and secure South Pacific;
- examine options for enhancing CDR, including the formation of a Pacific-focused Ready Response Force; and
- remain interoperable with the ADF.

4.55 In contributing to peace and security in the South Pacific, the NZDF should:

- together with Australia, meet any reasonable foreseeable contingency, including by:
  - contributing to, or possibly leading, military operations;
  - responding to humanitarian and/or natural disasters;
  - assisting with maritime surveillance and search and rescue;
  - exercising regularly in the region; and

- supporting the professional development of regional defence and security forces.

4.56 In the Asia-Pacific region, the NZDF should:

- make an appropriate contribution in support of peace and security;
- support regional institutions and process, such as the ARF;
- continue to play an active role in FPDA activities;
- continue to develop good bilateral defence relationships;
- support a continuing US security presence;
- exercise and train with regional armed forces;
- support freedom of commerce;
- support regional efforts to counter terrorism, the proliferation of weapons of mass destruction, and transnational crime; and
- provide an appropriate response to humanitarian and natural disasters.

4.57 Globally, the NZDF should:

- contribute to international security operations, whether led by the United Nations, UN sanctioned, or in support of other collective security arrangements; and
- provide an appropriate response to humanitarian emergencies and natural disasters.

4.58 Ten principles should guide Defence in ensuring that the NZDF is able to perform the roles and task listed above. They are that the NZDF should:

- be equipped and trained for combat;
- be deployable (this includes having strategic projection capabilities, and being self-reliant and flexible once deployed);
- be interoperable with our principal partners, especially Australia;
- be held at appropriate levels of readiness;
- have sufficient depth to sustain force elements for long enough to achieve the Government's objectives;
- be up-to-date in doctrine and technology (this includes emphasising 'jointness' and being 'networked enabled');
- be optimised for intra-state conflict;
- retain some capabilities capable of contributing to mid- to high-intensity inter-state warfare;
- base capability decisions on what is essential to meet the Government's defence and security objectives in New Zealand's maritime zone and the South Pacific, from which military contributions in Asia and further afield can be drawn; and
- have cost-effective capabilities.

## Chapter 5

# Military Capability Choices

5.1 The previous chapters have set out the larger context for this Assessment – the global environment within which New Zealand has to make its way in the world, the challenges and uncertainties we face, and the range of tasks which accordingly will be required of the Defence Force. On the basis of that analysis we can make informed decisions as to the capabilities the Defence Force needs over the next 25 years; the correlation between those requirements and existing capabilities; and how any gaps might be bridged.

### The Value of Military Capabilities

5.2 To many observers ‘capability’ means ‘equipment’. Indeed, the two words are often used synonymously. Yet that fundamentally misrepresents the term. Capability covers the spectrum of personnel, doctrine, training, dedicated logistic support, and equipment required to create a particular result or effect.

5.3 The value of a defence force lies both in what it does and how it does it. In terms of what it does, a defence force applies disciplined lethal force in circumstances where peace and security are challenged. That capability, the combat capability, sits at one end of a spectrum of graduated responses to security events, many of which might involve the use of either a defence force or some other organisation. Within the context of national security, it is combat capability that distinguishes a defence force from other organisations. It is the essence of a defence force. It provides the ultimate expression of national sovereignty. It is also a means by which, *in extremis*, the international community collectively maintains peace in the world.

5.4 There are always uncertainties about the nature, frequency, timing and severity of security events. These uncertainties are unavoidable and there are limits to the extent to which they can be reduced by better strategic intelligence. Defence investments can therefore be regarded as a hedge against security risks. Different sets of capabilities cover different risks. Governments cannot cover every conceivable risk. Deliberate decisions must therefore be made about which risks to cover, through which agency, and what capabilities to acquire and maintain in order to do that.

5.5 When viewed as a hedge against security risks, New Zealand’s military capabilities have value only if they are available to be used when needed. Availability is determined by operational readiness. It is unnecessary and inefficient to maintain all capabilities in a state of

immediate readiness. However, it is also inefficient to hold capabilities in such a depleted state of readiness that they could not be deployed in any realistic time frame. In those circumstances, the capabilities would not be available but would still be incurring a high proportion of their full-readiness cost.

- 5.6 There is one important qualification. Many capabilities take a good deal of time to develop from scratch. If it seems unlikely that a capability might be needed in the immediate future, but likely that it might be needed at a more distant point in time, a judgement has to be made between the cost of maintaining the capability at minimal readiness and the risk of not being able to generate it in good time when needed.
- 5.7 Defence operations generally require particular capabilities to be used in combination with other capabilities. The usefulness of any individual capability must therefore be judged not only on its own merits but in the context of its impact on the usefulness of others.
- 5.8 Defence capabilities deliver best value when they are useful in as many situations as possible. There is some need for specialist capabilities (such as bomb disposal), but capabilities which are adaptable and provide broader utility will ordinarily be preferred. In New Zealand, this consideration is taken outside a strictly military context. The Government also requires that NZDF capabilities be used on non-military tasks such as border protection, the surveillance of fisheries, and disaster relief. These requirements have implications for the capability mix that will be needed.

## Tasks and Capabilities

- 5.9 New Zealand's defence circumstances are unique. No other country of comparable size and political and economic standing has at a minimum to be able to deploy defence assets and personnel from the equator to Antarctica. This is a low threat environment but a vast space. Together with our long-standing sense of obligation and responsibility to our region and the international community, it is clear that determining the optimal mix of capabilities for the Defence Force is complex.
- 5.10 The previous chapters set out the circumstances in which New Zealand governments might wish to deploy the NZDF's capabilities. In sum, they are two-fold:
  - restoring and sustaining peace and stability in our immediate region – defined as the South Pacific; and
  - contributing to operations further afield when the international rule of law is challenged.

5.11 To conduct the tasks detailed in Chapter Four, the Assessment concludes that the NZDF over the next 25 years needs:

- deployable ground forces – suitably equipped and in sufficient numbers – including supporting elements such as engineers and medics;
- strategic projection and logistic capacity to get the force to where it is needed and sustain itself once there;
- intelligence, surveillance and reconnaissance (ISR) capabilities to understand and interpret the operational environment (including maritime patrol tasks); and
- capabilities able to fulfil a credible combat role in support of Australia and in other operations as part of a coalition.

5.12 These mutually-reinforcing capabilities must be embedded in network-enabled command and control structures which support:

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

5.13 In our immediate region the critical component is to be able to deploy forces across distant shores into unstable, potentially hostile but not high-intensity environments,<sup>1</sup> and sustain them there until the task of restoring peace, security and stability has been accomplished. NZDF assets will also be used for tasks such as humanitarian assistance, disaster relief, or the evacuation of nationals. The circumstances in which New Zealand would have to lead such operations or undertake them alone will not be frequent, but our ability to do so will be at a premium when that occurs.

5.14 Many of the NZDF's capabilities are also valuable in the wider international arena, whether in Asia or further afield, where the challenges we face in the South Pacific are replicated, albeit on a much larger scale. There are two differences. First, while New Zealand governments do see themselves as under an obligation to contribute in this broader international space, there is more discretion as to how and when to do so. Second, our size means New Zealand's contributions will never be numerically significant. Rather, their operational and diplomatic value will be geared to where they sit on the scale of military credibility.

5.15 New Zealand delivers its most effective support to international partners, who in turn most greatly value that contribution, when working with them in higher-risk environments. The importance of the combat

---

<sup>1</sup> See glossary under 'intensity of conflict' for a definition of high, mid and low intensity.

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

- 5.16 New Zealand's extensive maritime domain means that we have elected to have capabilities for maritime patrol by sea and air. Those capabilities are also valued by both our international partners and by our many South Pacific neighbours with extensive EEZs. Maritime Patrol thus needs to be supported by the necessary sensors and reach.

### NZDF Contribution to Whole of Government Tasks

- 5.17 Making effective use of Defence Force resources for non-military purposes was one of the strongest themes which came through the public consultation. This is already an area of significant activity. It is characteristic of deployments that the Defence Force will very often be operating in advance of or alongside other New Zealand government agencies (and probably their international counterparts). This often means that the NZDF will undertake or support non-military tasks. This is a developing area of research, policy and doctrine.<sup>2</sup>
- 5.18 In and around New Zealand, the Defence Force regularly acts for other government agencies such as supporting the Ministry of Fisheries or the New Zealand Customs Service. At times of national or local emergencies such as a natural disaster, Defence Force personnel and assets are available to be tasked by the Government. Planning for such events takes account of that possibility.
- 5.19 The equipment which the NZDF deploys, and the skills of its personnel, are national assets and it makes sense to use them for non-Defence purposes in certain circumstances. But in doing so, it is important to keep in mind that the NZDF is a military organisation and its core functions are military. Using the NZDF for non-military purposes should not be undertaken in such a way that prevents the NZDF from discharging its military tasks and role.
- 5.20 The corollary is that decisions on the acquisition and use of defence capabilities should take into account broader national requirements. This already happens. The Project Protector vessels, as tasked by the National Maritime Coordination Centre in respect of maritime patrols, are an example. This Assessment recommends that all future major

---

<sup>2</sup> The Asia-Pacific Civil-Military Centre of Excellence in Australia, supported by New Zealand, is at the forefront of this activity regionally. Its findings, and that of other similar organisations, will be of value given the view in this assessment that this form of intervention is more likely to be the norm than not.

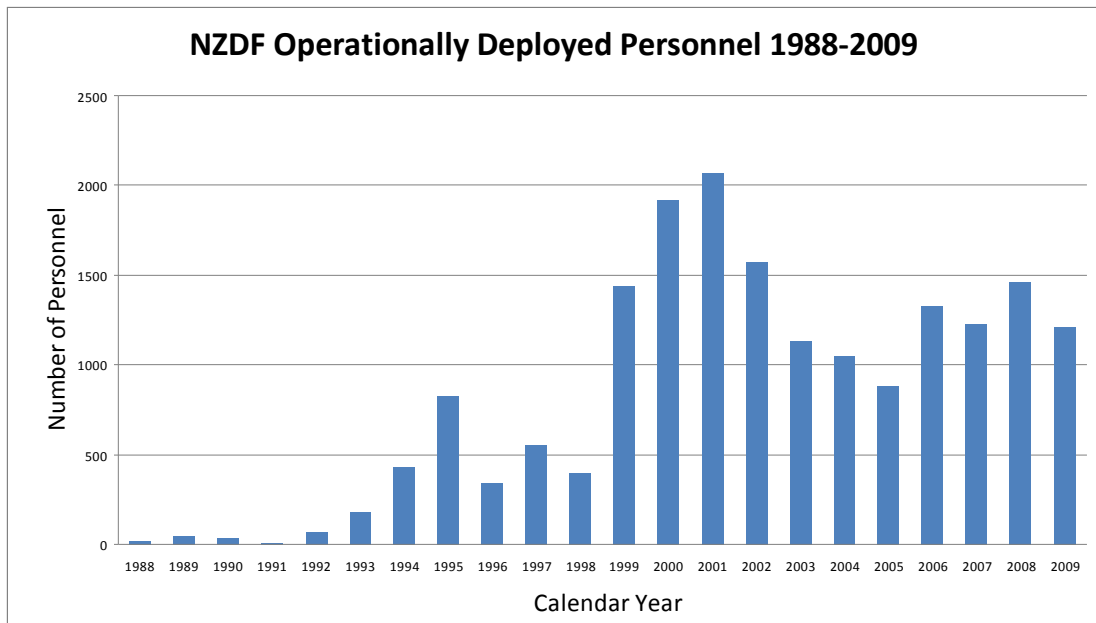


defence acquisitions take national requirements into account as a matter of course. We also recommend that whole of government use of defence assets be part of future national security arrangements.

5.21 An integrated force to undertake a range of functions (search and rescue, police, fisheries, emergency management) has been suggested as an addition or alternative to the Defence Force. We are not recommending this as a way forward for New Zealand. In the terms set out above, the Defence Force is able to undertake a range of non-military tasks. But a non-military force could not do the reverse.

### Building on Strong Foundations

5.22 With the capabilities it has at hand, the NZDF has served the Government well. Over the last 20 years, it has successfully discharged a wide range of missions both near to home and far abroad, with significant numbers of personnel deployed on operations (see below).



5.23 The NZDF has maintained its extensive operational commitments whilst simultaneously becoming leaner – over the past 20 years, there has been a reduction of over 2,000 regular Defence Force personnel and a parallel fall in its share of both national wealth and government expenditure.<sup>3</sup> Its personnel have always performed well, but at times the quality and quantity of equipment have restricted pathways for governments or have necessitated a high level of dependence on partners. Sustainability has always been a problem.

5.24 Sustaining operations is a challenge. The view set out here is that without a commitment to building the Defence Force, future New

<sup>3</sup> From 1.7% (1990) to 1% (2009) of GDP. From 4.6% (1990) to 3.4% (2009) of government expenditure

Zealand governments will find themselves with an asset which costs much but delivers little. To avoid that, governments have to be willing to invest and the Defence Force has to be prepared to work more efficiently.

## Capability Choices

- 5.25 To ensure that the capabilities recommended for the future NZDF are not simply an extrapolation from the present or past, a range of specific military tasks were examined systematically through military capability workshops. Military and civilian personnel looked at a range of potential security events that the NZDF might be expected to undertake over the period of the Assessment. Although encompassing the globe, particular emphasis was placed on the South Pacific and New Zealand's EEZ. The likely performance of different force configurations was tested in these scenarios, to help determine the most appropriate choices.
- 5.26 This chapter does not consider every capability that might be used by the NZDF to perform its roles. For example, heavy armour and offensive air support do not feature. This is because the strategic context identified by the Assessment suggests that such capabilities are unlikely to be used over the timeframe of this Assessment. Were the strategic environment to deteriorate, these decisions should be reviewed.

## Pathways for the Future NZDF

- 5.27 There are numerous potential pathways which could be presented to the Government. The Assessment takes into account the current and future strategic environment, the tasks expected of the NZDF and the capabilities of the NZDF we have today. On that basis, the Assessment has identified three pathways for the future shape of the NZDF: 'low'; 'middle'; and 'high'.
- 5.28 The three pathways provide choices for Government in how, and how quickly, to develop the existing NZDF. Indeed, the Government could choose to retain one pathway as a longer term goal, whilst accepting a more affordable choice in the interim. In that sense, the pathways do not constitute differently constructed forces, but the same force, differently geared.
- 5.29 The Low pathway retains the structure and platforms of the existing NZDF but at a declining level of effectiveness. Projects currently in the acquisition phase, such as the C130 upgrade, A109 and NH90 helicopters, and the Defence Command and Control System (DC2S) would continue to be delivered. But personnel numbers would be capped. It would see disinvestment, and a rising level of obsolescence. This force would broadly fall within historical funding

levels but would, over time, provide the Government with a less capable NZDF and fewer pathways to manage risk.

- 5.30 The Middle pathway would build on the platforms retained in the Low pathway, but progressively address some of the risks inherent in it. It would tackle key obsolescence issues and broadly enable the NZDF to sustain its current range of tasking at around the current tempo of operations.
- 5.31 The High pathway would see targeted enhancements beyond the measures in the Middle pathway, and so would maintain and improve NZDF capabilities. It would provide the Government with a greater degree of risk mitigation.

### The Three Pathways

- 5.32 This section sets out the most significant aspects of each pathway, broken down into different categories for ease of comparison. It does not seek to capture every aspect of each force, but focuses on the key points. It starts with a brief description of current capability, and then summarises the three pathways, followed by short commentary. A more detailed explication of the pathways is provided at Annex B.

#### *Land forces*

- 5.33 At present, the deployment of land forces is limited by personnel numbers,<sup>4</sup> and by some equipment shortages. Any decision to build the Army needs to focus not only on numbers but also on sustaining the large range of relatively small capital investments which are required to ensure a well-equipped and capable force.

	Summary of pathways
Low	<ul style="list-style-type: none"> <li>• Army strength 4,900, excluding Reserves</li> <li>• Special Forces retained at present strength</li> <li>• 8 NH90 and 5 A109 helicopters (mix to be reviewed at mid-life and replacement)</li> </ul>
Middle	<ul style="list-style-type: none"> <li>• Army strength 5,400, excluding Reserves</li> </ul>

<sup>4</sup> Army capability is to a large extent driven by its personnel, whereas the other Services are much more platform-dependent. For this reason, this section focuses specifically on the size of the Army. Some growth in Navy (+126) and Air Force (+500) personnel numbers is also included in the middle pathway. All of these numbers are preliminary only, pending the outcome of the value for money (VFM) work currently underway. More detail on force personnel is set out in Chapter 6.

	<ul style="list-style-type: none"> <li>• Some enhancement of Special Forces</li> <li>• 8 NH90 and 8 A109 helicopters (5 upgraded and possibly armed; mix to be reviewed at mid-life and replacement)</li> </ul>
High	<ul style="list-style-type: none"> <li>• Army strength 6,300, excluding Reserves</li> <li>• Some enhancement of Special Forces</li> <li>• 8 NH90 and 8 A109 helicopters (5 upgraded and armed; mix to be reviewed at mid-life and replacement)</li> </ul>

5.34 The Low pathway would see the Army reconfigured for a focus on lower-intensity tasks in the South Pacific. Maintaining a full-time force of 4,900 would allow a maximum land forces deployment of two rotations per year (each lasting six months) of 500-600 personnel for up to 12 months. Special Forces would remain at their existing level. Expenditure on digitisation of command, vehicle fleets (including the Light Armoured Vehicles [LAVs] – which would be reduced in number for all pathways) would be restricted. A small number of LAVs would be upgraded. New helicopters would be brought into service.

5.35 The Middle pathway would see the Army increased by up to 360 full-time personnel to around 5,400. Although still primarily configured for the South Pacific, this pathway would give the Army sufficient depth to sustain a maximum land forces deployment of 800 personnel with two rotations per year (each lasting six months) for up to three years in a mid-intensity environment. The Special Forces would be enhanced to alleviate the strain caused by current operational demands. LAV investment would be increased. Three additional commercial-off-the-shelf (cheaper than the military standard) A109 helicopters would be acquired for training; the five military standard A109s would be fitted with self-protection, and possibly armed, to enhance their operational role.

5.36 The High pathway would see the Army increased to 6,300. This would provide sufficient depth to sustain a maximum land forces deployment of 1,000 personnel of two rotations per year (each lasting six months) for up to three years. The force would be configured to conduct the lower intensity tasks in the South Pacific, but each rotation could include within it a 250-strong contingent capable of higher intensity operations. Taken together with additional investment in LAV systems and protection, this pathway would see a step change improvement in NZDF firepower and flexibility. In addition, the five military specification A109s would be armed with rockets and guns to enhance their utility in support of ground forces.

*Strategic Projection*

5.37 The NZDF today has only one sealift ship (CANTERBURY). As a consequence, the NZDF must rely at least in part on commercial or partner support. The NZDF will have sufficient airlift capability once the C130 upgrade is complete, although having a small air transport fleet will always require careful management.

	Summary of pathways
Low	<ul style="list-style-type: none"> <li>• ENDEAVOUR replaced with a like vessel</li> <li>• CANTERBURY replaced at end of life</li> <li>• C130s and B757s replaced at end of life</li> </ul>
Middle	<ul style="list-style-type: none"> <li>• ENDEAVOUR replaced with a more versatile vessel</li> <li>• CANTERBURY replaced at end of life</li> <li>• C130s and B757s replaced at end of life</li> </ul>
High	<ul style="list-style-type: none"> <li>• ENDEAVOUR replaced with a multi-role sealift and replenishment ship</li> <li>• CANTERBURY replaced at end of life</li> <li>• C130s and B757s replaced at end of life</li> </ul>

5.38 The Low pathway would replace the replenishment ship (ENDEAVOUR) with an equivalent. The sealift ship would be upgraded at mid-life and eventually replaced with equivalent capability. The current air transport fleet would be replaced with equivalent capability.

5.39 The Middle pathway would do much the same but would explore more versatile replacement options for ENDEAVOUR.

5.40 The High pathway would add to the Middle pathway through the acquisition of a sea-lift capable replenishment ship to replace ENDEAVOUR.

*Intelligence, Surveillance and Reconnaissance (including maritime patrol)*

5.41 Non-defence maritime patrol requirements cannot currently be met by Defence. Existing platforms are used inefficiently because of the lack

of a wide area surveillance network and because the asset mix is unbalanced.

	Summary of pathways
Low	<ul style="list-style-type: none"> <li>• P3 Orions replaced with equivalent at end of life</li> <li>• OPVs and IPVs replaced at end of life</li> </ul>
Middle	<ul style="list-style-type: none"> <li>• P3 Orions enhanced. Replaced at end of life</li> <li>• OPVs and IPVs possibly given enhanced sensors and weapons. Replaced at end of life</li> <li>• Shorter range maritime air patrol capability introduced</li> <li>• Imagery satellite capability acquired</li> </ul>
High	<ul style="list-style-type: none"> <li>• P3 Orions enhanced, possibly armed, and replaced at end of life. Additional platforms (possibly UAVs) acquired in interim</li> <li>• OPVs and IPVs possibly given enhanced sensors and weapons. Replaced at end of life</li> <li>• Enhanced (dual-role) short-range maritime air patrol and transport capability introduced</li> <li>• Imagery satellite capability acquired</li> </ul>

5.42 The Low pathway would allow for the replacement of the OPVs and IPVs at the appropriate date, and for P3 replacement with an equivalent capability – which could include Unmanned Air Systems.

5.43 The Middle pathway would do the same as low for the OPVs and IPVs, although the merits of enhancing the sensors and armaments of these vessels would be further investigated. It would provide self-protection and anti-submarine sensors on the P3 Orions. A satellite capability would be acquired (possibly leased) to provide wide-area surveillance and allow more effective tasking of the platforms. A short range maritime air patrol capability (perhaps with a secondary transport role) would also be introduced to give a more comprehensive mix of high- and low-end capabilities. Any enhancement in maritime surveillance would need a commensurate increase in the National Maritime Co-ordination Centre’s capacity to manage the material produced.

5.44 The High pathway would see further augmentation of the NZDF when compared with middle, by investigating the possibility of arming the P3 Orions with air-to-surface missiles, purchasing additional longer range surveillance platforms (either aircraft or UAVs), and introducing an enhanced dual role short-range maritime air patrol and transport capability. These enhancements would improve the NZDF's ability to support other government agencies.

*Combat Capability*

5.45 Army units, Special Forces, and ANZAC frigates currently provide effective, credible combat capabilities which the Government can deploy alongside partner forces if it so chooses. But the ANZAC frigates, without a self-defence upgrade, will rapidly lose their combat capability through obsolescence of sensors and systems. There are also other non-combat capabilities (such as P3 Orions and C130s) which the NZDF is able to deploy into combat zones.

5.46 The detailed descriptions of capability developments for many of the combat-capable elements of the NZDF are covered in previous sections. Descriptions of the planned profile of Army, Special Forces P3 Orions and C130s under the different pathways are not replicated here.

	Summary of pathways
Low	<ul style="list-style-type: none"> <li>Frigates given minimal upgrade for major obsolescence issues. Replaced at end of life with equivalent. Seasprite upgraded and replaced at end of life.</li> </ul>
Middle	<ul style="list-style-type: none"> <li>Frigates given more effective upgrade. Replaced at end of life with equivalent. Seasprite upgraded and replaced at end of life.</li> </ul>
High	<ul style="list-style-type: none"> <li>Frigates given more effective upgrade and replaced at end of life with equivalent. Seasprite helicopter replaced with more cost-effective helicopter at mid-life.</li> </ul>

5.47 Under the Low pathway, the ANZAC frigates would be given a limited self-defence upgrade to address the most pressing obsolescence issues. This naval combat capability would be replaced with an equivalent capability at end of life. The Seasprites would be upgraded and eventually replaced.

5.48 The Middle pathway would build on the Low pathway, but permit a more effective frigate upgrade including some enhancements to the

capability of the current ANZAC frigates. There would be an equivalent (i.e. more capable) naval combat replacement at end of life.

- 5.49 The High pathway would build on the middle by replacing the naval helicopter at the mid-life point. This would be instead of upgrading the Seasprites, which are expensive to operate and support.

## Assessment of Pathways

### *Low Pathway*

- 5.50 The Low pathway would retain the essential shape and capability mix of the existing NZDF. Current personnel shortfalls would remain, continuing the pressure of operations and limiting the NZDF's ability to make best use of assets. The capabilities of the NZDF would degrade over time. It would be able to do less, for shorter durations. There would be a reduction in the employability and interoperability of the force, with it being more dependent on the support of partners. This force would need to rely on support from Australia or other partners for combat and conflict operations in all environments.

- 5.51 This pathway would therefore require the Government to accept a higher level of strategic risk than it does at present. More specifically, it would see a number of the weaknesses of the existing NZDF continue:

- it would be combat-capable in the South Pacific region in foreseeable operational scenarios, but limitations in size and flexibility would mean a reliance on partners, or a focus on smaller and shorter operations, to a degree which the Assessment's strategic analysis suggests would not be desirable;
- the continued lack of wide-area surveillance and short-range maritime air patrol capability would mean the P3 Orions would still not be used in the most cost-effective manner;
- personnel caps would limit the IPV and OPV availability for Multi-Agency tasks;
- the NZDF would have no permanent deployable command and control capability;
- the partially upgraded frigates would have sensors and modest self-defence capabilities to operate in low-end contingencies with minimal risk; and
- a single sealift ship would fall short of required capacity as determined in the Assessment.

- 5.52 In this pathway, the Army would become weaker than it is at present:

- without a reduction in the scale of commitments, the strain of operational tempo would see the combat capability of the Army degrade over time; and
- the Army would not have any independent land reconnaissance



and surveillance capability.

*Middle Pathway*

- 5.53 The Middle pathway, compared to the existing NZDF, would see an increase in the sustainability of land forces and an improved depth of ISR. These would be improvements over current force contributions. Other capabilities would remain at around existing levels.
- 5.54 The NZDF would be combat-capable in the South Pacific region, to perform tasks at a level consistent with the Assessment's strategic analysis. But it would continue to rely on Australia or other partners for support in high-intensity operations at sea and on land. Time, resources, and partner support would be required should the force have to adapt to an unforeseen shift in the regional or global security environment.
- 5.55 In a number of respects, the Middle pathway would be stronger than the low:
- increasing the Army and Special Forces would alleviate the pressure of current operations and provide greater sustainability. Two rotations per year of up to 800 personnel per rotation could be sustained for up to 36 months;
  - the addition of surveillance satellite and short-range maritime air patrol would improve ISR capability;
  - the establishment of a deployable command and control capability would enhance the NZDF's operational effectiveness, especially at short notice;
  - the frigates would have upgraded sensors and self-defence capabilities to make a meaningful contribution to mid-intensity operations;
  - the anti-submarine sensors and self-protection on the P3 aircraft would increase their utility;
  - all aircraft except the B757 and the commercial A109 helicopters would have self-protection warning and counter-measures systems; and
  - the addition of short range surveillance/ transport aircraft and additional light utility helicopters would provide increased flexibility and aircraft availability, including for other government agencies.
- 5.56 But the Middle pathway would not mitigate all the weaknesses of the existing NZDF:
- the NZDF could only provide a land force for higher intensity operations of approximately 250 personnel. It would also remain dependent on partner support for higher-end capabilities such as additional offensive support (artillery and mortars), and offensive air support; and

- having only one sealift ship would continue to limit the strategic sealift capability of the NZDF.

### *High Pathway*

- 5.57 The High pathway would see a greater range of combat capabilities and increased flexibility, providing a more effective contribution in the South Pacific region for operations. Compared with the Middle pathway, a number of elements could be deployed globally and in higher-intensity conflict situations, although some support from partners for higher-end capabilities may still be needed.
- 5.58 Increased ISR capabilities would mean the NZDF could provide greater depth of maritime patrol and surveillance. A decision to arm the P3 Orions with air-to-surface missiles would increase combat capability, although this would need to be weighed against any increased combat-related risk to the aircraft and the complexity of integrating additional systems.
- 5.59 This pathway would allow for the sustainment of up to two rotations per year of up to 1,000 personnel per rotation for 36 months, and enhanced firepower would allow it to continue to rotate up to 250 personnel into higher intensity conflict. New Zealand would be able to deploy these personnel into the region by air with little or no reliance on commercial or partner support. An additional sealift ship would increase New Zealand's ability to conduct independent operations and would enable the deployment of a required land force in a single lift. The tactical transport aircraft would increase self-reliance within the region.
- 5.60 The increased utility and flexibility of the NZDF, through the maintenance and enhancement of combat capabilities, the larger land force, and the dual role surveillance/transport aircraft, would offer significant utility in the South Pacific in particular. NZDF deployments would be less reliant on partner support for mid-intensity or less demanding, operations.
- 5.61 Increased capacity in ISR, air- and sea-lift, combined with incremental improvement in land engineer and health capabilities, would increase the NZDF's utility for other government agencies.
- 5.62 The range and scale of capabilities in the High pathway would provide a range of response choices and allow the NZDF to adapt more readily to a changed threat environment.
- 5.63 It would significantly boost the whole-of-government capabilities of the NZDF, enable it to sustain a considerable operational presence in the South Pacific, and would provide greater resilience to shocks. However, if there were a sudden deterioration in the strategic environment, even the High pathway might be inadequate.

- 5.64 Without the full range of combat capabilities, the NZDF would still rely on partner support for some aspects of high-intensity operations.

## Conclusion

- 5.65 The Assessment's view of the strategic environment does not suggest that a force at the high level of capability is currently necessary. But it is important to reiterate that the difference between the three pathways is one of gradient and scale. The High pathway represents an intensification and strengthening of capabilities, not a completely differently structured defence force. As such it provides a target or objective to be kept in mind, and can be reassessed during (and if necessary between) the regular five yearly reviews of defence.
- 5.66 This Assessment recommends that the Middle pathway provides an appropriate response to the strategic circumstances set out above. It rebuilds the NZDF so that its utility nationally, regionally and globally is assured, albeit still in some respects at a restricted level of capability.
- 5.67 Nevertheless, this Assessment has been constructed in a way which allows the Government to choose different trajectories within and between the various capability pathways. That choice will necessarily be a balance between fiscal and strategic risk, taking into account the outcome of the VFM work underway. Thus:
- Government could choose the Middle pathway immediately, but keeping alive the possibility of shifting either to the Low or High pathway in the future if circumstances change;
  - Government could choose the Low pathway now, with a view to moving to Middle (or ultimately High) in the future (mindful that the NZDF could not sustain the Low pathway indefinitely without it becoming entrenched); and
  - Government could choose to migrate to the High pathway as soon as possible.
- 5.68 Whichever pathway the Government chooses, a detailed capability plan will be needed to give effect to the outcomes presented in the White Paper.
- 5.69 There are a variety of ways in which the recommended capabilities could then be provided. Alternative ownership models (such as those explored for real estate in Chapter Nine), and questions of timing, performance effective asset management, and linkages to partner capabilities (especially Australia) will need to be addressed. This Assessment does not prejudge those matters. Case-by-case analysis can only be done nearer a decision point. Business cases for different capability pathways will draw on the scientific and technological support of the Defence Technology Agency.

5.70 Chapter 7 reviews the fiscal environment in which Defence is operating and the impact of that on the capability pathways contained in this Assessment.

## Recommendations

5.71 Defence should prioritise capabilities in the following four areas:

- deployable ground forces in sufficient numbers, and including supporting elements such as engineers and medics;
- strategic projection and logistic capacity to get force elements to where they are needed, and sustain them once there;
- intelligence, surveillance and reconnaissance capabilities to understand and interpret the operational environment, including in maritime patrol tasks; and
- maintaining combat capabilities (including in the areas above) which can meaningfully contribute to coalition operations.

5.72 Within the above priorities, the corresponding personnel and equipment must be embedded in network-enabled command and control structures which support:

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

5.73 New Zealand's broader national security requirements should be taken into account in the acquisition and use of defence capabilities.

5.74 The Defence Assessment has considered a range of capability pathways. Based on the strategic context in this Assessment, three pathways for addressing the future capability mix of the NZDF have been identified:

- the Low pathway would retain the personnel, structure and platforms of the NZDF, but at declining levels of effectiveness;
- the Middle pathway would increase personnel numbers in the NZDF and tackle obsolescence issues inherent in the Low pathway; and
- the High pathway would build on Middle and allow targeted enhancements of the NZDF's capabilities.

5.75 The three pathways provide choices for Government in how, and how quickly, the existing NZDF should be developed. They represent different intensification and strengthening of capabilities, not a differently structured force. Government could choose to retain one

pathway as a longer term goal, whilst accepting a different choice in the interim.

5.76 This Assessment recommends that the Middle pathway provides an appropriate response to the strategic circumstances set out above. It rebuilds the NZDF so that its utility nationally, regionally and globally is consistent with the forecast strategic environment.

5.77 Based on the Middle pathway, this Assessment recommends that a capability plan should be developed that reflects the priority areas identified above and includes:

- Increased Army strength;
- enhanced Special Forces;
- eight NH90 and eight A109 helicopters (five upgraded and possibly armed);
- the acquisition of a new shorter range maritime air patrol capability;
- a more versatile replacement for ENDEAVOUR;
- a replacement for CANTERBURY at the end of her life;
- replacements for the C130 and B757 fleets at the end of their life;
- a P3 Orion fleet enhanced and replaced at the end of the aircrafts life;
- replacement of the IPV and OPV fleets at the end of their life;
- the acquisition of an imagery satellite capability; and
- an upgrade of the ANZAC frigates, and replacement at the end of their life with an equivalent capability.

5.78 Ministers will still have to consider and approve funding for specific business cases, consistent with Crown-wide budget and capital asset management approaches.

5.79 The High pathway should serve as a way forward for the NZDF should fiscal circumstances allow or the strategic environment deteriorate.

## Chapter 6

# The Total Defence Workforce

- 6.1 The NZDF considers output delivery from the perspective of the total defence workforce, the effectiveness of which depends on the number and quality of its personnel, both uniformed and civilian. The overarching objective of personnel management is to ensure that the NZDF has available the required number of personnel with the right skills and the right readiness state to meet policy objectives, now and in the future. Moreover, it needs to be able to do this on a sustainable basis.
- 6.2 To ensure that it has enough of the right people, the NZDF must manage its human resource requirements carefully from a strategic perspective, taking the long view. For many of the military tasks that it must undertake, the NZDF cannot readily recruit trained personnel directly from a general labour market. It must train and develop those personnel itself, often at considerable expense and over a long period. It must therefore forecast its requirements many years in advance.
- 6.3 This consideration is particularly relevant when considering possible changes to the composition of the NZDF. Chapter Five of this Assessment identified a range of pathways - Low, Middle and High - for strengthening the NZDF into the future. Implementing these capability enhancements will pose challenges for the NZDF. Other challenges will be posed by changes to the demographic profile of NZ society, such as an aging workforce, and the evolving expectations of those recruited to the NZDF, for example, generational change.
- 6.4 In this chapter, challenges associated with meeting the NZDF's personnel requirements are examined in detail. These challenges involve successfully forecasting and meeting changing requirements for both the number of personnel and the skills they will need arising from the options, in the context of a changing demographic base, and doing so in an efficient and effective manner.

## Strategic Objectives for the Defence Workforce

- 6.5 If the NZDF is to manage its workforce effectively, it must successfully pursue a number of strategic objectives, which include the following:

### *Aligning Legal Status with Current Usage*

- 6.6 The current legal classifications of personnel as Regular Force, Reserve Force or Civilian reflect historical requirements rather better than current usage. In today's environment of managing with the total workforce, the relationship between uniformed and civilian personnel, and between Regular Force and

Reserve Force, should be as integrated and seamless as possible. It is important to ensure that legislative provisions keep pace with changing requirements and do not impose undesirable rigidities. This issue will be explored further below in the section entitled *Regular Force and Reserve Forces*.

### *Classification of Skills and Tasks*

- 6.7 Delivering the capabilities and outputs required by the Government requires the use of skills that can be grouped into two general categories:
- the specifically military skills needed to generate, deploy and sustain a military force; and
  - the more generic skills needed to lead, manage and administer any large organisation.
- 6.8 These two general categories are not mutually exclusive: they overlap, often to a considerable degree. One important strategic objective therefore is the furtherance of a total workforce concept, which is to ensure that the necessary skills are available to the organisation and are brought to bear appropriately on the military and management tasks that must be undertaken.
- 6.9 The requirements for most positions are that they are primarily military or non-military, but some involve a mix of the two. It is important to achieve configurations of work processes and position descriptions that match skills to work requirements in the best mix. For example, unless a specific military requirement exists, it is not generally cost efficient for uniformed personnel to be tasked with work that can be performed equally well by lower-cost civilian personnel. Similarly, civilian personnel should not be performing work that requires military skills unless they also have those skills. There are occasions, however, where positions need to remain military to support the personnel required in uniform (PRU) who deploy. PRU is covered in more detail under the section below entitled *Determining and Managing Demand*.

### *Personal and Career Development*

- 6.10 It is a characteristic of military personnel that they may need to be placed deliberately in harm's way, and may need to perform complex tasks under very difficult conditions. This has important implications for human resource management. Personnel are developed during their careers through often substantial investments in training and experience, so that they are able to contribute to sustainable, long term capabilities. Their development has three important aspects: technical and military knowledge and skills; personal career development; and experience. The objective is not just to train, but to develop the whole person in order to deliver the military operational effect.

### *Effectiveness, Efficiency and Value for Money*

- 6.11 Achieving value for money in a defence context means developing and using a military force that is capable of effectively undertaking a range of tasks that realise policy objectives, and doing so in a cost efficient manner. Military capability is not developed rapidly. Value for money is consequently not a point in time assessment. Rather, it needs to be determined across the life of a capability. Likewise the people element of that capability is developed through the continuous investment in training and experience to ensure there is sustainable long term capability.
- 6.12 This involves some complex considerations and trade-offs.
- *Ensuring that military capabilities are effective.* People are a key component of military capability and their effectiveness is in turn an essential element of effectiveness of military capability, which is the primary and pre-emptive objective. A military force which is not effective in discharging its core functions cannot represent value for money.
  - *Ensuring that military capabilities are operational and will remain operational.* Such capabilities can only deliver the desired effect when they are capable of being used. Any down time in raising, training and sustaining capability due to the unavailability of personnel can represent a significant loss of value for money, as most costs associated with owning and maintaining the platforms, infrastructure and equipment are still being incurred.
  - *Achieving the Right Number of Personnel in Uniform.* The NZDF needs to determine and develop the right number of uniformed personnel, in the right configuration and at the appropriate trained state. It must also determine and achieve the best total workforce balance, especially between Regular Force and Reserve Force personnel. This issue will be explored further below in the section entitled *Regular Force and Reserve Forces*.
  - *Achieving relative certainty of supply.* Because of attrition or unavailability for other reasons, there is always a risk that the necessary personnel may not be available. This can be managed in part by allowing for prudential margins in personnel numbers. However, estimating the optimal number of personnel is difficult and there will be cost inefficiencies if numbers are either too few or too many.
  - *Optimising attrition.* Some attrition is inevitable (and even healthy) but most attrition represents a loss on investment in training and corporate knowledge. While the reasons for attrition are varied, remuneration and conditions of service can play an important part when out of step with market. Determining optimal remuneration and employment conditions in the context of market trends is also complex and difficult. There will be cost inefficiencies if remuneration and employment conditions are either



too restrained or too generous. The cost of retaining existing personnel must be balanced against the cost of letting these people leave the NZDF and training replacements.

- *Recruiting the right people.* Since the process of recruitment incurs costs, and since the NZDF will typically invest in the training and development of those who are recruited, it is important to ensure that selection criteria and processes are the right ones, and identify those who will be most likely to stay and succeed.
- *Maintaining the right individual training effort.* It is generally more cost efficient to recruit personnel (whether uniformed or civilian) who already have some or all of the required skills, since this reduces both the training investment and time needed to achieve functional competence. There are practical limits to the numbers of personnel who can be recruited 'laterally' to fill positions directly. The majority of personnel need to be recruited and then trained in combat skills and/or to operate military equipment, and this is likely to continue. Moreover, it should also be noted that, regardless of the level of professional skills held by a lateral civilian recruit, the NZDF must carry the training overhead required to impart the core values, resilience, and leadership qualities necessary for service in an operational environment. For strategic and supply reasons, the NZDF needs to have a sufficient training capability to ensure the supply of the trained personnel it requires. It also needs to avoid over-training, or training personnel who will not return a period of service that justifies the NZDF's investment in them.
- *Maintaining the right level of collective training effort.* The NZDF's operational effectiveness whether as a lead nation or part of a coalition is predicated on its collective training regime. As such the NZDF needs to ensure that the collective training outcomes are based on operational requirements.

## Demand

### *Classification*

6.13 NZDF personnel are legally categorised into three groups:

- *Regular Force*, who are those in full-time service in the Royal New Zealand Navy, the Regular Forces of the Army, or the Regular Air Force (Section 13 of the Defence Act 1990);
- *Reserve Forces*, who are either:
  - i *Territorials* in the Royal New Zealand Naval Reserve, the Royal New Zealand Naval Volunteer Reserve, the Territorial Force of the New Zealand Army, or the Territorial Air Force (Section 15 of the Defence Act 1990); or

- ii *Reserves* in service in the Naval Reserves, the Army Reserve, or the Air Force Reserve (Section 16 of the Defence Act 1990); and
  - *Civilians*, employees who are neither members of the Regular Force nor of the Reserve Forces.
- 6.14 Although the wording of the Act may not make it clear, there is a simple but important distinction between *territorials* and *reserves*<sup>1</sup>.
- *Territorials*, which are defined within the NZDF as “Active Reserves”, have enlisted as part-time sailors, soldiers and airmen/airwomen and undertake a certain number of days training and service each year.
  - *Reserves*, which are defined within the NZDF as “Inactive Reserves”, are former members of the Regular Force who have left the service of the NZDF but have a residual obligation to provide further service if called upon.

#### *Determining and Managing Demand*

- 6.15 Personnel are both a key component of capability and a key driver of cost. It is therefore critical that the NZDF analyses its requirements correctly. Since the primary purpose of any defence force is to undertake military tasks, the first step in determining the total number of personnel required is to establish the number of personnel required in uniform (PRU), whether Regular Force or Reserve Force, analysed by rank and trade to deliver the NZDF Mission. All other positions can then in principle be filled by civilians or contractors, analysed by skills requirements.
- 6.16 As a general principle, if non-operational tasks can be performed equally well by either uniformed personnel or civilians, it is more cost effective to have them performed by civilians (whether a civilian employee or an external contractor). Uniformed personnel are typically more expensive to recruit and train and, reflecting differences in their conditions of service, are generally remunerated differently than civilian employees or contractors. This difference recognises the flexibility that uniformed personnel provide when NZDF is directed to perform short notice unscheduled tasks.

#### *Personnel Required in Uniform*

- 6.17 The NZDF currently uses a process known as the Personnel Capability Planning Model (PCPM) in order to determine the PRU needed to meet Government outputs.
- 6.18 Informed by an analysis of the overall strategic position, decisions also include consideration of the nature and expected frequency of deployments, and the length of time that any deployment may need to be sustained. Typically, personnel are deployed for periods of not longer than six months and are then relieved. If a deployment must be sustained for an indeterminate period, the

---

<sup>1</sup> In the rest of this chapter, the terms ‘Reservists’ and ‘Reserve Force’ will refer only to Active Reserves, (e.g. Territorials) and not ‘Inactive Reserves’.

total number of personnel required is at least three times the number of personnel actually deployed at any time. Such deployments are typically managed in a cycle of three rotation groups, where the first group is actually deployed, the second group is preparing to deploy to relieve the first group, and the third group has returned from the last deployment and is being rested, trained and reconstituted. This applies to Army, Air Force, and Joint Force deployments (e.g the Provincial Reconstruction Team in Afghanistan).

- 6.19 Naval deployments are somewhat different. The time taken to build a cohesive, effective ship's company precludes a six monthly rotation cycle. Given that the nature of naval service requires that ships are continuously deployed, maintaining sufficient numbers of personnel in the Navy to sustain such a cycle across the fleet would be impractical. Ship's companies are maintained in a state as near to the authorised establishment as personnel resources permit, and people are posted in and out of ships to meet this demand, and for training and respite ashore. The ratio between sea and shore postings is stipulated for each rank level, and career managers are tasked to ensure that these ratios are observed insofar as numbers of people in each rank and trade permit. Naval personnel policy seeks to maintain sufficient numbers to allow these ratios to be observed.
- 6.20 Whilst deployment cycles and processes differ across the three Services (e.g. personnel rotate on and off ships that deploy) the base cycle of deploying, returning, training and then preparing to deploy again is common to all three.
- 6.21 The method used to determine if a position that does not involve the prospect of deployment should be uniformed rather than civilian uses an 'exception' principle. The PRU starts with the premise that any position not required to support the rotation cycle should be non-uniformed (e.g. civilian or contractor) unless it requires non-deployed uniformed personnel. Exceptions are based on the assumptions that the position:
- is needed for core military business where current military experience is essential to achieve the organisation's output, notwithstanding that the personnel do not deploy on operations (for example, roles responsible for directly supporting operations at HQJFNZ);
  - requires specialist skills not otherwise found outside the Armed Forces. (for example, bomb disposal);
  - involves a representational role that necessitates the use of military personnel (for example, a Defence Attaché);
  - relates to the higher management of the NZDF, where a background in the military assists in forming policy (for example, military operational planning);
  - involves delivering training of a kind where it is necessary to maintain a core of current military skills and knowledge within the training organisation (for example, providing pre-deployment training); or
  - provides a position into which an appropriately skilled uniformed person can be posted to meet career requirements and/or provide respite from

deployed or seagoing service in accordance with agreed personnel tempo and sea shore ration limits.

- 6.22 Determinations of the total number of military personnel also need to take account of the fact that there will be a number of personnel who are not available for operations at any point in time. Some of these personnel are not available if they are in initial or advanced training, or are unavailable for other reasons, such as being temporarily medically downgraded. In addition an allowance is made for fluctuations in attrition rates.

#### *Estimation of Future Demand*

- 6.23 Chapter Five of this Assessment outlined three options – *Low, Middle and High* - that represent alternative pathways concerning the future development of the NZDF that the Government might wish to adopt. Each of these options has different consequences for future NZDF personnel requirements over the next 25 years.
- 6.24 The increases identified in this section reflect additional personnel numbers<sup>2</sup> which are needed by each option to implement increased capabilities in the front line. These estimated increases do not reflect any reductions in personnel numbers that may result from efficiency reviews currently in train (see paragraph 6.40 and 6.41 below). Actual figures will be net of efficiency reductions.

#### *Low Pathway*

- *Navy.* There are 666 military personnel required to crew all RNZN ships. However in this option, which allows for no growth in personnel from current numbers, crew numbers would be constrained to 588. The personnel numbers in the fleet would remain reasonably static until 2026 when they would decline to 466, reflecting the introduction of anticipated smaller crews for the frigate replacements. By 2035 in this option overall RNZN personnel numbers are forecast to be 1,874 Regular Force, 326 Reserve Force and 473 civilians.
- *Army.* There would be no investment in additional personnel for Army and therefore no growth in any operationally deployable units. If selected, this option would require a comprehensive review of current Army force structures and capabilities. The impact of not investing in additional personnel would be predominantly on mission sustainment at current deployment rates, and on the ability to react to any future increase in operational demands or emerging threats. In this option overall Army personnel numbers would be capped at 4,900 Regular Force, 1,925 Reserve Forces and 650 civilians.
- *Air.* The personnel numbers in and directly supporting the squadrons' elements would slowly decline from around 1,000 down to 920 through

---

<sup>2</sup> A current personnel profile of the NZDF is provided in a Annex B.

the reduction in overall crew size as current capability is replaced over future years. There is a reduction of 2 crews and associated output levels for P-3K (down to 4 and maintained at this level for its replacement). The A109 would only be used as a training platform. By 2035 in this option overall Air personnel numbers are forecast to be 2,614 Regular Force, 133 Reserve Forces and 431 Civilians.

### Middle Pathway

- *Navy.* The military personnel numbers to crew RNZN ships would grow by 78, as personnel constraints are released, to 666 by 2013 which should allow full availability of the IPVs and OPVs. It would also ensure full Navy support for acquisition programmes. Navy personnel would remain at these levels until 2026 when they would decline to 542 as the anticipated smaller crews for the Frigate Replacements occur in 2028. In this option overall RNZN personnel numbers are forecast to peak in 2017 at 2,323 Regular Force, 326 Reserve Forces and 473 civilians.
- *Army.* Regular Force personnel numbers would grow by 524 and Reserve Forces numbers would increase by 2,475. This increase is predominantly in Combat (increasing combat numbers to form a third manoeuvre unit,), Combat Support (intelligence and engineers) and Combat Service Support (medical) The overall increase would also provide the three manoeuvre units with a fourth (Reserve Forces) manoeuvre company. This option is in line with the Army Transformation Programme study that rebalances the total Army Force towards more operationally deployable elements. It enables the achievement of current outputs with a limited addition of personnel numbers. In this option overall Army personnel numbers are forecast to reach 5,400 Regular Force, 4,400 Reserve Forces and 660 civilians.
- *Air* The increase in personnel numbers would enable new platforms to be introduced and supported, and existing vacancies to be filled so that readiness and output requirements can be met, and produced with reduced risk. Personnel numbers in and directly supporting the squadrons' elements would increase from 1,050 to 1,100 in 2020 to support the changes in capability before stabilising, and then decrease to 1,050 in 2025. Increases come from the introduction of the short range maritime patrol aircraft, although there may be the opportunity for some transfer from other squadrons to support this new platform; plus additional support for the P-3K (and its replacement) and satellite surveillance. Subsequent reductions relate to smaller crew sizes when the C130H and P-3K are replaced (which also reduces the maintenance personnel needed). The overall change on the squadron's elements following those replacements is a decrease from around 950 to 930. The Middle option allows Air to support current requirements with some level of risk. In this option overall Air personnel numbers are forecast to peak in 2020 with 3,099 Regular Force, 143 Reserve Forces and 447 civilians.

## High Pathway

- *Navy.* The military personnel numbers to crew RNZN ships would grow to 733 by 2014 to allow full availability of the IPVs and OPVs and support to acquisition programmes. The increase in personnel numbers above the Middle pathway is driven by the need to provide additional manning for the multi-role sealift and replenishment ship, once it enters service. Numbers would then remain at these levels until 2024 when they would decline to 609 as the anticipated smaller crews for the naval combat replacements occur in 2028. In this option overall RNZN personnel numbers are forecast to peak by 2017 at 2,427 Regular Force, 326 Reserve Forces and 473 civilians.
  - *Army* Under this option, Regular Force personnel numbers would grow by 464 and Reserve Forces numbers would decrease from 4,400 to 3,636. These changes would occur over a comparable time period as the Middle option. This further growth in Regular Force numbers would allow more effective mission sustainment than the Low or Middle pathways by increasing the capacity to sustain multiple missions or longer duration missions. The planned growth would be in Combat and operationally deployable elements, including a third battalion complete as well as enhanced Combat Support (Intelligence, Medical and Engineers) and Combat Service Support Forces. In this option overall Army personnel numbers are forecast to peak in 2030 at 6,300 Regular Force, 3,650 Reserve Forces and 660 civilians.
  - *Air.* The increase in personnel numbers would enable new platforms to be introduced and supported, and existing vacancies to be filled so that readiness and output requirements can be met, and produced with reduced risk. The personnel numbers in and directly supporting the squadrons' elements would increase overall from around 1,050 to 1,280 by 2020, decreasing to 1,240 by 2030. Increases are driven by the higher demand for deployment support by the new NH90 and A109 helicopters, introduction of the fully deployable dual role short range maritime patrol/utility transport aircraft as a new squadron, the introduction of the UAS, in addition to the satellite capability from the Middle option. The personnel increase would allow the full utilisation of the capabilities added. In this option overall Air personnel numbers are forecast to peak in 2024 with 3,271 Regular Force, 143 Reserve Forces and 433 civilians.
- 6.25 The personnel consequences of these capability enhancements will carry with them some new challenges for recruitment and management. It will be important that they are addressed in a timely way, since the lead times needed to train and develop personnel can be significantly longer than the lead times needed to acquire new platforms and equipment.

### *Regular Force and Reserve Forces*

- 6.26 The estimated increases set out above represent Regular Force personnel and some civilian personnel. Reserve Force personnel have not been included *per se*. It is likely, however, that in practice there would be some increase in Reserve Force numbers to complement the increases in Regular Force numbers. In addition, and reflecting current trends in the use of Reserve Forces, it is also likely that Reserve Force personnel would substitute for Regular Force personnel in some positions.
- 6.27 A key question to be addressed, as the NZDF transitions to an integrated and seamless workforce, is determining how Regular Force and Reserve Force personnel can best be employed. As noted in paragraph 6.8 above, this is an area that is undergoing change.
- 6.28 The traditional approach is based on what is known as a 'spectrum of operations', which ranges from high intensity combat at one extreme to quasi-civilian roles such as disaster relief at the other. While this approach still applies, current theatres of operations have a threat level regardless of the primary roles that personnel will undertake. Any NZDF personnel who deploy into a theatre of operations must have the same level of operational readiness regardless of that role.
- 6.29 As a general rule, it is resource-intensive to train high end combat forces to operational readiness level. Consequently it is more effective to maintain Regular Force personnel at this readiness state. Using Reserve Forces in combat roles without the same level of investment in training is therefore a comparatively higher risk than using Regular Forces. There is less risk in using Reserve Forces to provide cost-effective force protection in lower-intensity situations, and peace support roles for those missions where the threat state has declined sufficiently to no longer require the combat capabilities of Regular Forces. Indeed their civilian skill sets may add capability.
- 6.30 Training for high-intensity combat is both time-consuming and expensive. This Assessment proposes that, as a general rule, combat training for Reserve Force personnel be focussed at the level of force protection and peace support. Circumstances, however, may alter cases. It is a trend that former Regular Force personnel have been enlisting in the Reserve Force in greater numbers, with consequential implications for the kind of roles they can be called on to undertake.
- 6.31 The operational advantages that Reserve Forces provide to the NZDF come from the type, range and quality of skills that they can offer, rather than simply an increase in the numbers of deployable personnel. In *combat support* roles, Reserve Force personnel can make a valuable contribution through their civilian specialisations such as health or information technology. In *combat service support* roles Reserve Force personnel can make contributions in areas such as logistics, medical services and equipment maintenance. Recruiting personnel into the Reserve Forces who already have such specialist skills is therefore a very cost-efficient way to add considerable capacity to the

NZDF. The NZDF should continue to investigate how relevant civilian expertise can best be recruited into the Reserve Forces for specialist employment within NZDF.

- 6.32 Regardless of role, Reservists must expect to be active rather than inactive. In future, the deployment of personnel from the Reserve Forces is likely to become the norm. Reserve Force personnel will therefore need effective career management much like their Regular Force counterparts, possibly in partnership with their employers.
- 6.33 Traditional attitudes towards service in the NZDF have typically encouraged a period of unbroken service followed by a severance upon exit. The NZDF stands to benefit greatly from adopting an approach that encourages former Regular Force and civilian personnel to return to service in the future. The NZDF needs to develop new policies and systems, and also a facilitative culture, to make it easier for personnel to exit and re-engage.
- 6.34 Over recent years it has become more common for Reserve Force personnel to join the Regular Force for periods of time, due to the increase in operational tempo and some improvements in the ease with which it is possible to transfer between the Reserve Forces and the Regular Force. Further study is needed, but if the trend continues it may provide a reliable source of supply of personnel with desirable skill-sets. For certain positions, a combination of civilian professional skills and the more modest military skills of Reserve Force personnel might be a better mix than either Civilian or Regular Force skills.
- 6.35 This Assessment proposes that legislative provisions relating to Regular Force, Reserve Forces and Civilians be reviewed to reflect current usage, to ensure that they do not impose undesirable rigidities, and to facilitate the movement of personnel between different classifications.

#### *Matching Skills to Positions*

- 6.36 The current NZDF model seeks to strike a balance between two requirements:
- the need to provide opportunities for future military leaders to acquire a broad level of experience across a number of disciplines; and
  - the need to have key roles undertaken by subject matter experts.
- 6.37 Decisions about whether an individual position should be filled by uniformed or civilian personnel need to be made having regard to the requirements of that position. The overarching principle must be that all positions, especially those requiring subject matter expertise, need to be filled by persons with the requisite expertise.
- 6.38 A number of issues are relevant. As previously stated, it is a characteristic of military personnel that they may need to be placed in harm's way. The NZDF has a duty of care to mitigate such risks not only on operations but on all forms of military deployments. It must therefore make sure that personnel making operational, management and administrative decisions are sufficiently informed



and experienced to be aware of the implications of those decisions for serving personnel, especially those who are being deployed on missions where there are additional risks. Equally it must grow leaders who can provide military advice. In addition, the NZDF needs to ensure that personnel returning from deployments are constructively employed in ways that contribute to their personal and career development so as to meet the organisation's current and future needs. The NZDF, however, must also manage taxpayers' resources in an efficient and effective manner, and it is imperative that personnel have skills and experience appropriate to the tasks that they are performing.

- 6.39 The NZDF is currently classifying positions in accordance with a continuum of expertise for a military organisation in the categories of military, military/civilian, civilian/military and civilian. It is also examining options for enabling uniformed personnel to develop secondary specialties in addition to their core military skills, in areas such as human resource management and acquisition.

#### *Testing the Numbers*

- 6.40 Three reviews of personnel requirements are currently being undertaken by the NZDF: one within the Defence Transformation Programme (DTP)<sup>3</sup>, two as projects within the Defence Personnel Executive (the Right Cost Project of R5<sup>4</sup>) and the Force Structure Review. In addition, the *Cost Down Diagnostic* exercise undertaken by Deloitte for the NZDF in 2010 identified a number of areas where personnel numbers might be reduced.

- 6.41 The NZDF has commenced a Force Structure Review to complete a comprehensive, competency-based review drawing on work already undertaken within the DTP, the R5 exercise and the *Cost Down Diagnostic*, to identify:

- which positions are genuinely necessary;
- which positions or functions can be contracted out cost-efficiently;
- which positions need to be filled by a subject matter expert, whether uniformed or civilian;
- which positions need to be filled by uniformed personnel, and if so, at what rank; and
- which skills need to be developed within the NZDF and which can more appropriately be obtained from external sources.

---

<sup>3</sup> The Defence Transformation Programme will restructure large sections of the NZDF's support functions to address duplication and inefficiencies in traditional structures, the primary objective of which is to realise efficiencies and savings.

<sup>4</sup> R5 is a shorthand for the Right People in the Right Place in the Right Numbers at the Right Time at the Right Cost to meet current and future outputs.

## Supply

### *External Supply Challenges*

6.42 NZDF analyses of forecasts of New Zealand demographic trends over the next twenty-five years suggest the following implications:

- The NZDF will need to recruit from a more diverse society;
- New recruiting strategies will be necessary in order to meet the forecast demand for personnel with certain technical skills;
- Proactive plans will be needed to manage the loss of corporate knowledge from those skilled civilian positions that are currently filled by an ageing workforce; and
- New military training and leadership approaches will be needed to reflect different generational expectations and to manage current trends in fitness, health and literacy.

6.43 In relation to the supply of personnel, three aspects are particularly relevant - first, the absolute size of the population from which recruits are obtained, second, the prevalence of people within that population who have the desired personal characteristics, and third, the ability of the NZDF's personnel training and development processes to deliver the required personnel at the required trained state in the required timeframe.

6.44 By international standards, and in comparison to the size of the overall population, the NZDF is quite small, which helps make the task of meeting its requirements comparatively less demanding. The challenges set out above are real, but not intractable. In recent history, the NZDF has, with the exception of technical personnel, usually had minimal difficulty meeting recruitment quotas. Its ability to do so in the future will depend on a number of basic 'labour market' considerations including, but not confined to, the relative attractiveness of its remuneration packages and conditions of employment. The analyses undertaken by this Assessment suggest that the NZ population will be capable of furnishing enough people with the right characteristics to meet the NZDF's requirements. Given adequate inducement, appeal, remuneration and conditions of employment, the NZDF should be able to recruit the personnel it will need in the foreseeable future. It will need to further develop its strategies to attract the technical personnel it requires.

### *Civilians and Contractors*

6.45 Many roles that are met by the NZDF's civilian personnel might equally be provided by contractors. Decisions about whether a requirement should be outsourced should be based primarily on risk assessments, balancing need and certainty of supply against cost. If requirements can be met by outsourcing with an acceptable degree of risk in relation to certainty of supply, and at a lower cost, then provision of the service should be outsourced. If there are no

external providers, or if certainty of supply is at risk, or if the cost of outsourcing is higher, then the service should be delivered in-house.

- 6.46 When outsourcing any functions, it is essential to retain enough in-house expertise to manage contracts and invigilate performance. It is also prudent to avoid becoming so dependent on any one contractor that the NZDF is strategically exposed to the continuity of the provision of service thereby creating a high risk situation.

#### *Recruitment Performance*

- 6.47 Success in recruitment is measured in part<sup>5</sup> by the relationship between target numbers and the numbers actually recruited. Success in achieving target numbers has recently increased from 89.3% of target in the third quarter of FY 07/08 through to 112.8% of target in the third quarter of FY 09/10.

- 6.48 Three factors may have contributed to this:

- financial constraints have caused reductions in recruitment targets in order to balance personnel budgets (meaning that those reduced targets are easier to achieve);
- the recession has reduced demand elsewhere in the labour market; and
- higher starting salaries due to the new military remuneration system have encouraged higher than normal interest in the NZDF as an employer.

- 6.49 There is risk that, with any resurgent growth in the wider labour market, there may be a correspondingly negative impact on recruitment success. This would need to be mitigated, whether by changes to processes or through more intensive efforts.

#### *Improving Recruiting Processes*

- 6.50 A DTP initiative involves centralising the recruiting function to facilitate common approaches to recruiting practices and processes across Services. Streamlined recruiting processes are intended to funnel recruits to the areas of greatest need within NZDF and reduce or eliminate the previous tendency of single Services to compete with each other for the same pool of recruits.

- 6.51 New recruits are often attracted by the prospect of training and personal development. A survey of young people undertaken as part of the Public Consultation process of this Assessment identified educational and career opportunities as factors that should be emphasised. They also suggested that the qualifications and skills acquired while in the Defence Force should be recognised within civilian professions. This Assessment agrees that the NZDF potentially has much to gain by emphasising these benefits.

---

<sup>5</sup> Other criteria include the proportion of recruits who are retained in employment and are successful in their assigned roles.

- 6.52 In order to gain greater access to technically-skilled tertiary graduates, the NZDF should:
- pursue closer relationships with tertiary education providers;
  - do more to attract those with technical abilities through better marketing of the practical or post academic training that the NZDF can offer; and
  - ensure training delivered in the Services continues to provide industry-recognised qualifications.
- 6.53 The NZDF should also review its recruitment methods so as to attract more personnel from non-traditional areas, including graduates and candidates from ethnic groups that are typically under-represented in the current intakes. Research evidence suggests that older members of the public, as key influencers, see the NZDF as a place to develop valuable skills and complete training. Recruiting strategies should continue to make use of such research.

## Retention

- 6.54 Attrition can be very costly in both loss of experience and in financial terms. A key challenge is to keep attrition to the minimum level that still allows sufficient movement through the ranks. Rates of attrition, usually measured as 12-month rolling averages, are difficult to forecast. They vary significantly over time, and typically differ between military and civilian personnel, between Regular Force and Reserve Forces personnel, and between each of the three Services. For example, the attrition rate for the Army varied from 18% in 2004 to 10% in 2009. During the same period, the rate for the Air Force varied from 8% in 2004 to 5% in 2009. Currently the attrition rate across the three Services for Regular Force personnel is relatively low by historical standards, however Reserve Force attrition rate at 18-25% is considered moderate by the same standards.

### *Reasons for Staying and Leaving*

- 6.55 The top three reasons reported by Regular Force personnel for staying in the NZDF are very consistent across the Services. They are (1) challenging and interesting work, (2) job security and (3) job satisfaction. Civilians report the same top three reasons, although the order of importance differs. This Assessment welcomes the NZDF's initiative to start to include Reserve Forces into its ongoing Attitudinal Survey, to establish their views.
- 6.56 Both uniformed and civilian personnel stay in the NZDF because of the interesting and challenging work, job security and job satisfaction. They leave to pursue development outside the NZDF, to meet family commitments, and for their own personal wellbeing.
- 6.57 Attrition across the Regular Force is influenced by many factors. It is higher for Other Ranks than for Officers and higher for females than males. A key issue is that, notwithstanding some improvement over the last two years, attrition in the first year of service is still undesirably high, ranging from 20-30% across the

three Services. This points to the need for a better understanding of causes and improved selection criteria (see paragraphs 6.59 and 6.60 below).

### *Improving Retention*

- 6.58 Retention is enhanced if personnel find their work rewarding, are well-treated and regard themselves as adequately-remunerated, are physically and psychologically healthy, and are content in their home life and in their community. The NZDF will continue to develop its policies and programmes in these areas.
- 6.59 The NZDF has recently revised its remuneration strategy so that it can now better align remuneration with external markets that previously have attracted highly skilled and motivated people away from the Services. That said, this strategy has not been able to be fully implemented due to funding pressure and may have implications on attrition rates unless addressed.
- 6.60 The NZDF is currently undertaking research into cohorts of new recruits in order to identify the reasons for early first-year release. It is important that the research findings be reflected in enhancements to recruitment and initial training strategies.
- 6.61 The NZDF should continue to co-ordinate research on the causes of attrition and monitor the success of strategies for retention. In addition, it will need to ensure that remuneration and other conditions of service remain competitive with those provided by other employers.

## Training

### *Training Value for Money*

- 6.62 The NZDF currently spends many millions of dollars each year on education and training. This is a substantial annual investment and needs to return good value for money. Apart from providing the NZDF with the trained personnel that it needs for operational purposes, investments in training and personnel development are positive influences on recruitment and retention.
- 6.63 To ensure that value is achieved, the NZDF's overarching strategy is generally to match training with immediate workplace requirements. More substantial and developmental investments in individuals are made only when the probability of a sufficiently worthwhile return of service justifies the investment. Hence, just-in-time training is the preferred approach until personnel have reached a point in their career where it is appropriate to provide more advanced training or development.
- 6.64 The DTP is currently undertaking a critical examination of education and training processes and practices. The NZDF intends to streamline education and training and reduce overheads while increasing learning opportunities. The NZDF has established a centralised Training and Education Directorate. This Directorate will review training based on the following principles:

- all training is to be delivered on a needs-based syllabus;
  - delivery is to be provided by the lowest cost mechanism that meets NZDF needs;
  - all training outside environmentally (e.g. Navy, Army and Air) specific needs is to be analysed, designed, delivered and audited with a single accountability; and
  - in respect of education and training, there is to be one common set of doctrine, policy and practice for the NZDF.
- 6.65 The Training and Education Directorate will also assume the responsibility for assessing what training should be delivered within the NZDF, and what would be better outsourced to competitive training providers.

### *Reducing Time to Competence*

- 6.66 Training costs are a direct function of the time taken for each course or programme of instruction. Longer courses are more expensive, not only in terms of the direct cost of the course but also in terms of the loss of productivity and the need to cover the work previously undertaken by the trainee.
- 6.67 Clearly, efficiencies can be realised if it is possible to reduce the time taken to complete a course of training to a prescribed standard (known as the “time to competence”). The NZDF intends to continue to invest in, or gain access to, tools that improve training and reduce the time to competence. These include simulators for ship’s bridges, engineering, small arm weapons and flight simulators.
- 6.68 The NZDF has also introduced a Learning Management System (LMS) that will allow face to face instruction to be “blended” with e-learning so as to shift as much training as possible out of the classroom, reducing course length and time to competence. The LMS will ultimately be accessible to all NZDF personnel via the Defence Information Exchange System and the internet
- 6.69 Approaches to training and education need to meet the expectations of newly-recruited personnel and deliver on the brand promises of the NZDF as a technologically progressive and competitive education provider when compared with other tertiary institutions.

### *Career Development*

- 6.70 Past exit survey results have indicated that career management within the NZDF has been a considerable source of dissatisfaction. Steps need to be taken to ensure NZDF career management principles and practices meet expectations.
- 6.71 The NZDF believes that better results can be achieved if individuals are empowered to take a greater role in planning their career path and taking greater responsibility for their own development. In doing this, it is necessary to balance the needs and wishes of the individual with the requirements of the

NZDF to achieve a sufficient return on training investment. Nonetheless, empowering individuals to be active in their own career planning is likely to be a positive factor in retention. Proactive career management can ensure both organisational and individual needs remain aligned.

6.72 The traditional approach to developing senior military personnel for broader leadership roles has consisted primarily of attendance at military staff courses and a pedigree of postings to a range of different positions and roles. This Assessment has concluded that the traditional approach can usefully be extended in at least three ways.

- i The NZDF could promote partnerships with external organisations within both the government and private sectors. This could formalise career development pathways that include important experience outside the NZDF. It would also help ensure that the NZDF remains 'linked-in' to industry and advances in corporate practice.
- ii The NZDF could devise and promote career pathways that are focused around specialist areas. Given the often extended period required to train and develop subject matter experts, the NZDF should be very active in identifying and forecasting future requirements.
- iii The NZDF may need to invest in a wider range of non-military courses.

## Research

6.73 Good quality and relevant personnel research provide critical evidence necessary to inform operational, policy and business case decisions. The NZDF carries out some research in the area of recruitment, retention and organisational climate. The area, however, is complex and changeable and much more can be learned. This Assessment considers that it is essential that the NZDF continues to develop an improved human resource research capability to support fact-based policy development and organisational decision-making.

## Conclusion

6.74 Strategic human resource management is critical to the future ability of the NZDF to generate the capabilities and deliver the outputs required by Government. The NZDF is unable to recruit many of the skilled personnel it needs from the wider labour market and must therefore train and develop those personnel itself. This requires considerable ongoing investments in those personnel and the investments must return value for money.

6.75 It is important and will remain important for the NZDF to determine accurately the number of personnel that it requires and will require in the future – neither too many nor too few. The DTP and R5 reviews are currently testing current assumptions and identifying areas where efficiencies can be made in the logistics, personnel and training areas – in effect reducing demand in the

“middle” and “back” of the organisation to create savings that can be used to fund the frontline positions. This Assessment endorses the value of that work.

- 6.76 Given the size of the NZDF compared to the size of the general population, and provided that remuneration and conditions of service remain appropriate, this Assessment does not anticipate significant difficulties meeting future recruitment requirements. However, trained NZDF personnel are often very desirable to private sector employers. The NZDF’s ability to retain the personnel it needs in future will be absolutely critical to its ability to achieve and maintain the desired levels of capability. The NZDF needs to understand all aspects of its personnel very well including, in particular, the causes of attrition, and should continue and extend its research on those issues.
- 6.77 A number of areas have been identified where the NZDF’s ability to access the personnel it needs can be improved. These include better career development practices, changing traditional career paths and facilitating the ability of Regular Force and Reserve Force personnel who leave the NZDF to re-enlist and/or to move between different classifications. Reserve Forces are a potentially valuable source of trained personnel but only if their rate of usage is high enough to justify the investment made in them. There may be further opportunities to increase the ease with which they can be released from their civilian employment so that usage rates can be increased, and these should be explored. These approaches aim to reduce shortfalls in critical trades and branches but improve the skills and experience in key leadership areas.

## Recommendations

- 6.78 Recognising that the effectiveness of the NZDF depends on the number and quality of its personnel, both military and civilian, the Assessment recommends that:
- as a legislative opportunity arises, the definitions in the Defence Act 1990 relating to territorials and reserves, including the names of the bodies into which they are enlisted, be amended and updated to improve clarity and better reflect the roles that they now undertake;
  - the Ministry of Defence and the NZDF, in consultation with the Department of Labour, should jointly review the current legislation to determine if amendments can be made that will better facilitate the ease with which Reserve Forces can be released from their regular employment so that they can be deployed on operations; and
  - the NZDF should develop new career-transition policies and initiatives to encourage the re-engagement of Reserve Force and former Regular Force personnel;
  - in relation to positions that require subject matter expertise, including management position, the NZDF should adopt the principles that:
    - all positions should be carefully and critically examined to determine what expertise, whether military or non-military or both, is required to discharge the requirements of the position successfully;



- positions should only be filled by personnel with the necessary expertise; and
- positions should be filled by the person best fitted to do so, whether or not that person is uniformed or civilian.
- the NZDF should develop new approaches to senior military personnel for broader leadership roles; and
- the NZDF should develop partnerships with other government agencies in order to facilitate joint training;
- the NZDF should continue to develop an improved human resource research, and to research critical areas such as the causes of attrition, to support fact-based policy development and organisational decision-making.

## Chapter 7

# Financial Context And Costs Of Capability Pathways

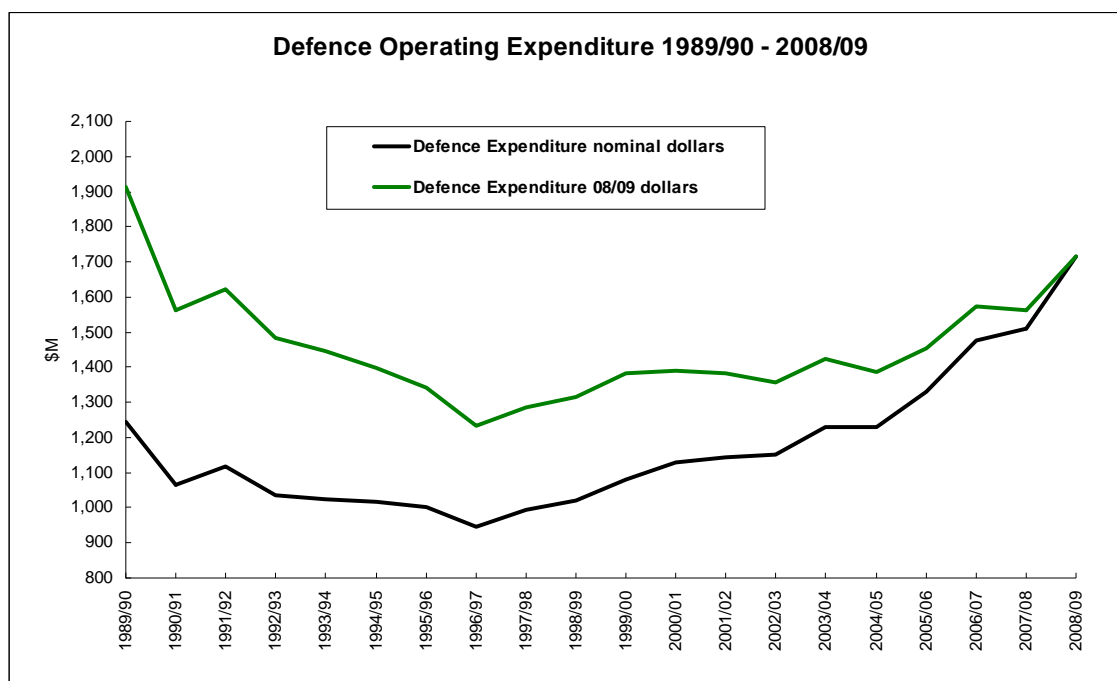
- 7.1 Chapter Five discussed three pathways for the military capabilities that could be needed between now and the year 2035. This chapter examines the likely cost implications arising from that analysis. It describes the NZDF's current funding pressures, discusses how those pressures arose, and provides estimates of the costs of each pathway over that period.
- 7.2 The current funding pressures are severe and will continue in the short- to medium-term. They must be managed carefully. They will impact not only on the actions that may be taken in the near future, but also on the way in which the Government may wish to chart its course for defence policy over the next 25 years.

## Financial Context

- 7.3 The NZDF is currently rebuilding its capability after a period of decline. Defence operating expenditure<sup>1</sup> fell during the first half of the 1990s. From a high of \$1.24 billion in 1988/89 to a low of \$947 million in 1996/97, the defence budget reduced by almost a quarter in nominal terms. This reduction was then reversed by increases from 1996/97 onwards to \$1.72 billion in 2008/09.
- 7.4 It is more relevant to make comparisons in real terms. Adjusted for CPI inflation and expressed in 2008/09 dollars, defence operating expenditure had declined by 1996/97 to 65% of the 1989/90 figure. By 2008/09, it had recovered to 90% of the 1988/89 figure.
- 7.5 These comparisons understate the impact in personnel and other operating expenditure. Specialised military equipment escalates in cost at a rate above CPI inflation, which increases capital costs and capital valuations. Both new purchases and revaluations of existing equipment therefore increase the depreciation component of operating expenditure.
- 7.6 The history of Defence operating expenditure in the 20 years from 1989/90 to 2008/09 is illustrated in the graph below.

---

<sup>1</sup> Defence operating expenditure is categorised under four labels – *personnel*, which includes human resource costs; *depreciation*, which is the amount by which the value of assets reduces each year because they are wearing out; *capital charge*, which is a fee charged from departments by the Crown for holding capital (analogous to interest on borrowed money); and *other operating*, which includes everything else. *Capital charge* in some respects is treated differently from the other categories. To simplify the exposition in this chapter, operating expenditure will be defined as including *personnel*, *other operating* and *depreciation*, but excluding *capital charge*.



7.7 An alternative perspective can be obtained by considering the level of defence operating expenditure as a percentage of New Zealand’s GDP. In 1989/90 it amounted to approximately 1.7 %. In 2003/04 it amounted to 0.87 %. It is now approximately 1 %.

7.8 The reduction in defence spending has in part reflected changes in force structure. These included:

- reductions in certain force elements, including in the number of frigates and the discontinuation of the air combat wing;
- reductions (by design) in the associated number of personnel;
- planned reductions in NZDF infrastructure, including a number of base closures; and
- reduced expenditure on operations, equipment, materiel, infrastructure and maintenance.

7.9 Between 2002/03 and 2008/09, the NZDF had been pursuing an approved programme of redevelopment. This involved the replacement and upgrading of a number of platforms and major items of equipment, and increases in personnel numbers. The programme was supported by a funding envelope that provided for new capital injections of \$1.0 billion over the 10 years from 2002/03 to 2011/12.

7.10 Under that programme of redevelopment, a number of significant equipment acquisitions and upgrades were undertaken and have been completed:

- the acquisition of a multi-role vessel, four inshore patrol craft, and two offshore patrol vessel under Project Protector;

- the acquisition and upgrading of two B 757 aircraft;
  - the acquisition of a medium-range anti-armour weapon;
  - the acquisition of 105 Light Armoured Vehicles (LAVs); and
  - the acquisition of 321 Pinzgauer light operational vehicles.
- 7.11 Further significant equipment acquisitions and upgrades which are under contract but not yet completed include:
- the acquisition of eight NH 90 medium-utility helicopters and five A109 training/light utility helicopters;
  - an upgrade of the platform systems of the ANZAC frigates;
  - an extension to the life of the C130 Hercules tactical air transport capability; and
  - an upgrade of the mission management, communications and navigation systems of the P3 Orion maritime patrol aircraft.
- 7.12 The programme of redevelopment also carried a requirement for increased personnel numbers and increased operating expenditure.
- 7.13 A funding package initiated by the previous Government in 2005 provided additional operating and capital funding. Its key elements included:
- an increase in operating funding of approximately \$4.4 billion (GST exclusive) for NZDF over the ten-year period from 2005/06 to 2014/15;
  - further capital injections of up to \$209 million over the period from 2007/08 to 2009/10; and
  - the Crown bearing the risk associated with the impact on depreciation of asset revaluations for at least the first five years of the ten-year period, (reviewable after the first five years).

## Offsetting Efficiencies

- 7.14 The funding package, although substantial, did not provide all the additional operating funding required by the NZDF to implement the redevelopment programme. The shortfall was to be met through the achievement of further efficiencies.
- 7.15 To pursue these efficiencies, the NZDF initiated the Defence Transformation Programme (DTP) to take a strategic view of the overall support functions. To date, a total of \$84 million has been saved through several 'quick win' projects.
- 7.16 In 2009, the DTP re-focused on longer-term transformational change across the NZDF, to deliver further sustainable savings. Initially, three areas were targeted: human resource management, logistics, and NZDF Headquarters. These initiatives have moved to the implementation phase, and the NZDF is putting in place:

- a new consolidated Defence Logistics Command;
- a new consolidated Human Resources Organisation;
- a new consolidated Training and Education Directorate; and
- a new way of structuring and working in Headquarters.

## Current Financial Position

- 7.17 The impact of the international financial crisis and global recession on the New Zealand economy, and on the Crown's fiscal position in particular, has significantly limited the Government's ability to engage in new spending in the short-to-medium term. As a consequence, the funding assurances provided in 2005 Defence Funding Package were withdrawn, pending the outcome of this Assessment.
- 7.18 The Crown does, however, remain contractually committed to acquisitions and upgrades, including those listed in paragraph 7.11, that have not yet fully come to charge. Significant capital expenditure will therefore be needed to meet the direct costs of those upgrades and replacements. Additional operating expenditure will also be needed to meet the increased depreciation and other operating costs associated with bringing them into service. Managing these operating expenditure pressures will be a major challenge over the next five years.
- 7.19 The Government has approved an increase of \$35 million in operating expenditure to help cover the cost of the additional depreciation in 2010/11. This, coupled with reprioritisation decisions, will enable the NZDF to remain within its appropriations for the 2010/11 fiscal year. The resource plan for 2011/12, however, forecasts an operating deficit of around \$90 million in that year. The forecast deficit increases in the out-years. This problem of a compounding forecast deficit will need to be resolved no later than Budget 2011.
- 7.20 On current forecasts, the impact of past decisions will mean that unfunded depreciation will increase by about \$100 million over the next two years. The increased costs associated with these legacy commitments are essentially unavoidable. Notwithstanding the increases in operating funding approved for 2010/11, the funding available for 'personnel' and 'other operating' expenditure will be \$45 million less in 2010/11, and \$133 million less in 2011/12, than was available in 2009/10.
- 7.21 In summary, the unfunded depreciation from capital commitments will crowd out available funding for 'personnel' and 'other operating' expenditure. The forecast position over the next five years is set out in the table below.

\$ Millions	2009/10	2010/11	2011/12	2012/13	2013/14
Personnel and Other Operating	1465.1 ↓	1447.0 ↓	1368.1 ↓	1356.6 ↓	1360.6 ↑
Depreciation	338.5 ↑	382.7 ↑	437.9 ↑	444.4 ↑	440.4 ↓

7.22 The current position of the NZDF's funding provides the starting point for positioning future development plans. In the following sections we provide forecasts of the estimated costs of the capability pathways discussed in the previous chapter, covering the period between now and 2035.

### Characteristics of Costs Estimates

7.23 While every endeavour has been made to ensure that cost estimates made by this Assessment are as robust as they can be, there are unavoidable uncertainties, and therefore limits, to the fidelity that any estimates can achieve over a 25 year period. The NZDF's costs are subject to a number of sources of variability, including CPI inflation, military cost escalation, asset revaluations and movements in foreign exchange rates. The cost estimates that follow need to be understood in the light of these uncertainties. To take one example, if CPI inflation were to be constant at a modest 3% over the 25 year period, \$1 today would be worth about 50c in 2035.

### Fiscal Strategy and Indicative Funding Parameters

7.24 The analysis undertaken by this review has been informed by the *Fiscal Strategy Report* presented as part of Budget 2009, which was reconfirmed by the *Fiscal Strategy Report* 2010. In broad summary, that strategy made provision for increases in capital expenditure of \$13 billion in total over the next 10 years and increases in operating expenditure of \$1.1 billion per annum for the next 10 years.

7.25 If the \$1.1 billion annual increases in operating expenditure were to be shared across all government agencies in the same proportions as their average historical increases, the operating expenditure component of Vote Defence Force would increase by an average of \$36 million per annum for the ten years to 2019<sup>2</sup>.

7.26 If the \$13 billion for increased capital expenditure were to be shared across all government agencies in the same proportions as their average historical capital injections, the NZDF would receive average annual injections of \$80 million.

<sup>2</sup> This would represent a real reduction in defence spending over the decade and would cause it to fall below 1% of GDP.

7.27 Future increases need not be constrained to conform with the proportions that applied in the past. Pressures for increased funding, however, can be expected from all sectors of government. To provide a general indication, the Treasury proposed that average funding increases could be considered in relation to three indicative levels – reduced (less than historic share), central (historic share) and increased (more than historic share) - as set out in the following table:

<b>Average Increments Per annum</b>	<b>Reduced</b>	<b>Central</b>	<b>Increased</b>
<b>Operating</b>	\$24 million	\$36 million	\$72 million
<b>Capital</b>	\$40 million	\$80 million	\$160 million

7.28 The cost estimates presented below are compared with these indicative levels for the next 10 years (the period covered by the 2009/10 fiscal strategy). However, it is worth making two observations. First, while it is likely that there will be funding constraints for some years, the May 2009 *Fiscal Strategy Report* reflected the considerable uncertainty which prevailed at that time as a result of the global financial crisis. The Government has maintained its 2009 stance in the May 2010 *Fiscal Strategy Report*, but there are perceptions now of a good deal less uncertainty and a more positive economic outlook than prevailed in 2009. Second, this Assessment covers a period of 25 years. While always mindful of affordability issues, the analyses of this Assessment have not been based on the unlikely assumption that the fiscal conditions which prevailed at the start of the review period would continue throughout its 25 year duration.

### Costs of Capability Pathways

7.29 The following tables provide estimates of the increases in operating and capital expenditure associated with the Low, Middle and High pathways. To facilitate comparability across the 25 year period of the Assessment, increased costs are given in \$2009 at 2009 prices.

7.30 To repeat a point made earlier, the fidelity of cost estimates declines over time because of accumulating uncertainties. In general terms, fidelity could be characterised as follows: 2010/11 – 2014/15 will be reasonably robust, 2015/16 – 2019/20 should still be a fair indication, and 2020/21 – 2034/5 will be increasingly uncertain. Accordingly we present our estimates of the additional costs of each of the three capability pathways in those time bands.

7.31 In addition, the following points should be noted:

- The estimates do not include provision for additional expenditure on the Defence estate. Actual requirements will depend on decisions not yet taken; and
- The estimates do not assume any savings arising from the VfM review or other Defence efficiency exercise already underway. The amounts and timing of such savings will be estimated once the outcome of the VfM study is received.

*Low Pathway*

Period 2010/11 – 2014/15				
\$ Million	Fiscal allocation in three indicative expenditure bands \$2009			Forecast average additional cost \$2009
	Reduced	Central	Increased	
Average Annual Increase in Operating Expenditure	24	36	72	48
Average Annual Capital Injections	40	80	160	21

Period 2015/16 – 2019/20				
\$ Million	Fiscal allocation in three indicative expenditure bands \$2009			Forecast average additional cost \$2009
	Reduced	Central	Increased	
Average Annual Increase in Operating Expenditure	24	36	72	21
Average Annual Capital Injections	40	80	160	47

7.32 For the period 2020/21 to 2034/35, the detail of forecast expenditure is much less certain. Operating expenditure other than depreciation is not expected to rise significantly. The major capital purchases in this period (in 2009 dollars) are:

- Completing the programme of replacement of the tactical air transport capability (C130 Hercules and B757 aircraft);
- Replacement of the naval combat force (frigates);



- Replacement of the MRV (Canterbury); and
- Replacement of the long-range maritime surveillance capability (P3 Orions).

7.33 The total of forecast capital expenditure in that 15 year period is \$8.4 billion in 2009 dollars, of which \$1.8 billion would be funded by capital injections.

7.34 The Low Pathway keeps additional expenditure to a minimum and is broadly consistent with the indicative expenditure bands. It is, however, the highest risk pathway and represents a decline in capability over time.

*Middle Pathway*

Period 2010/11 – 2014/15				
\$ Million	Fiscal allocation in three indicative expenditure bands \$2009			Forecast average additional cost \$2009
	Reduced	Central	Increased	
Average Annual Increase in Operating Expenditure	24	36	72	70
Average Annual Capital Injections	40	80	160	91

Period 2015/16 – 2019/20				
\$ Million	Fiscal allocation in three indicative expenditure bands \$2009			Forecast average additional cost \$2009
	Reduced	Central	Increased	
Average Annual Increase in Operating Expenditure	24	36	72	32
Average Annual Capital Injections	40	80	160	56

7.35 For the period 2020/21 to 2034/35, the detail of forecast expenditure is much less certain. Operating expenditure other than depreciation is not expected to rise significantly. The major capital purchases in this period (in 2009 dollars) are:

- completing the programme of replacement of the tactical air transport capability(C130 Hercules and B757 aircraft), with additional simulator;
- upgrading part of the LAV fleet;

- replacement of the naval combat force (ANZAC frigates);
- replacement of the naval helicopter fleet (Seasprites);
- replacement of the MRV (Canterbury); and
- replacement of the long-range maritime surveillance capability (P3 Orions).

7.36 The difference between the Low and Middle pathways, reflected in their cost, is one of gradient, rather than platforms. The total of forecast capital expenditure in that 15 year period is \$9.7 billion in \$2009, of which \$2.7 billion would be funded by capital injections.

7.37 The Middle Pathway is broadly consistent with the high end of the indicative expenditure bands. It is, however, much less risky than the Low Pathway and represents an increase in capability over time.

*High Pathway*

Period 2010/11 – 2014/15				
\$ Million	Fiscal allocation in three indicative expenditure bands \$2009			Forecast average additional cost \$2009
	Reduced	Central	Increased	
Average Annual Increase in Operating Expenditure	24	36	72	77
Average Annual Capital Injections	40	80	160	311

Period 2015/16 – 2019/20				
\$ Million	Fiscal allocation in three indicative expenditure bands \$2009			Forecast average additional cost \$2009
	Reduced	Central	Increased	
Average Annual Increase in Operating Expenditure	24	36	72	72
Average Annual Capital Injections	40	80	160	403

7.38 For the period 2020/21 to 2034/35, the detail of forecast expenditure is much less certain. Operating expenditure other than depreciation is not expected to rise significantly. The major capital purchases in this period (in \$2009) are:

- completing the programme of replacement of the tactical air transport capability (C130 Hercules and B757 aircraft), with additional simulator;
- replacement of the naval combat force (ANZAC frigates);
- replacement of the MRV (Canterbury);
- replacement of the long-range maritime surveillance capability (P3 Orions);
- acquisition of a Unmanned Aerial Vehicle (UAV) capability;
- replacement of Light Operational Vehicles (LOV);
- Inshore Patrol Vessel (IPV) replacement; and
- Offshore Patrol Vessel (OPV) replacement.

7.39 The total of forecast capital expenditure in that 15 year period is \$10.1 billion in \$2009, of which \$554 million would be funded by capital injections. In nominal dollars the total of forecast capital expenditure in that 15 year period is \$32.8 billion, of which \$2.0 billion would be funded by capital injections.

7.40 The High Pathway exceeds the indicative expenditure bands. It is, however, the lowest risk pathway and represents a material improvement in capability over time.

## How Might Costs Change?

7.41 The cost estimates provided above are given in \$2009 with items being costed at 2009 prices. It is pertinent to ask how those costs might change over time. This Assessment considered three main sources of variability:

- Domestic (CPI) inflation;
- Foreign exchange rates; and
- Military cost escalation.

### *Inflation*

7.42 Domestic inflation is partly subject to the influence of the Reserve Bank, which is charged to restrain the rate of inflation by its influence over the supply of money within the New Zealand Economy. In recent years, the Reserve Bank's targets have been around 0% – 3%. A 3% figure also roughly accords with historical average increases. It is therefore reasonable to consider the effect of a 3% rate of domestic inflation on the NZDF's future costs.

- 7.43 To counteract the effect of inflation on government expenditure, departments do not receive any automatic increases in their baselines to compensate for increased costs due to inflation. Departments are expected to absorb cost increases by achieving greater efficiency. It is therefore likely in practice that the impact of CPI inflation on NZDF costs over time will be less than the actual rate of inflation.

#### *Foreign Exchange*

- 7.44 New Zealand purchases much of its military equipment and platforms from overseas suppliers and pays for it in overseas currency. Changes in the foreign exchange rate will change the cost of those items in New Zealand dollars. Changes in foreign exchange rates are virtually impossible to predict. One indication of a long-term average future rate, however, can be inferred from long-term historic average rates of the trade-weighted index, which is one measure of the value of New Zealand currency in relation to a basket of the currencies of other countries with which New Zealand trades. In calculations using \$2009, the TWI was 9.9% higher than its historical average rate over the last 20 years. If the historical average rate were to apply over the 25 year period of this review, capital cost estimates would increase accordingly.

#### *Military Cost Escalation*

- 7.45 It is a characteristic of military platforms and equipment that they can become both more capable and more expensive over time. This issue is discussed in more detail in paragraphs 8.36 to 8.41 of the next chapter. The position is complex, because it depends on the type of equipment. Some technologies (such as computers) develop in ways that increase capabilities over time for reduced real costs. Other technologies increase capabilities over time for about the same real costs. A number of categories, however, such as combat aircraft, typically increase capabilities over time at a significantly increased cost.
- 7.46 The 2008 audit of the Australian Defence Budget<sup>3</sup> undertaken by George Pappas with the assistance of McKinsey and Company used historical data relating to average real cost increases for items of military equipment. These data emphasise the disparity of cost escalations depending on the type of equipment. They range from less than 1% for naval support vessels to over 7% for anti-submarine warfare helicopters. The increases in question are real and do not include inflation. If the historical average rate were to apply over the 25 year period of this review, capital cost estimates would increase accordingly.
- 7.47 While each of these sources of possible cost escalation are feasible, they are also far from certain. Even if they prove to be accurate, they should not be considered in isolation when assessing affordability of capability development pathways. Other information that provides context should also be taken into account to cast a more realistic light on any impact they might have.

---

<sup>3</sup> 2008 Audit of the Defence Budget, Australian Department of Defence, 3 April 2009

- 7.48 When considering affordability over the 25 years covered by this Assessment, the countervailing perspective on likely cost is likely ability to pay. New Zealand can expect improvements in its ability to pay through GDP growth (and the strengthening of the Government's fiscal position), and reductions in cost not included in the estimates that follow from efficiencies or the availability of more cost-effective technologies.
- 7.49 In relation to domestic inflation, for example, every government agency will seek to deal with CPI inflation through reducing their costs and finding efficiencies. In the same vein, and absent of any changes in tax policy, CPI inflation generally increases the level of Government revenue by more than the rate of inflation and thereby improves, rather than reduces, the relative affordability by the Crown of departmental expenditure items.
- 7.50 Although the cost of some military equipment has increased historically in real terms, future rates of increase may not necessarily match historical rates. For example, the real cost of emergent technologies such as UAVs typically increases at a high rate (6.8% for UAVs). As technologies mature, however, the rates of increase generally decline. Further, and notwithstanding increases in real costs, the NZ economy is forecast to continue to grow in real terms<sup>4</sup> and so too will the national capacity to fund defence cost increases.
- 7.51 The modelling was careful not to assume any cost reductions before they are certain. Thus, as indicated above, the figures presented above do not include estimates of the reductions in costs which are expected to come from internal reforms and the Value for Money exercise. Such estimates will be presented to Ministers when work currently underway has been finalised. In addition, the indicative funding bands (as set out following paragraph 7.27 above) were not adjusted to take account of inflation, and did not assume any future relaxation of the Government's fiscal strategy.

## Conclusion

- 7.52 Defence funding is less in real terms today than it was in 1990. At around 1% of GDP, it is also a smaller proportion today than the 1.7% it was in 1990.
- 7.53 A ten-year programme initiated in 2002 to upgrade or replace most major platforms is nearing completion and the NZDF will take delivery of a number of new platforms over the next two years. As these platforms are introduced into service, the NZDF must pay their capital cost. It will also incur additional operating expenditure thereafter by way of increased depreciation and, in some cases, higher running costs.

---

<sup>4</sup> The May 2010 *Fiscal Strategy Report* forecasts GDP growth of 3% per annum for the next three years.

- 7.54 The global financial crisis has created economic consequences for New Zealand and revenue consequences for the Crown to which the Government has responded by signalling a very tight fiscal stance for several years. The additional capital and operating expenditure, to which the Crown is now contractually committed, must be met within the parameters of that tight fiscal stance. This will create major challenges for the NZDF over the next five years.
- 7.55 Looking further into the future, this Assessment has identified opportunities for enhancing the NZDF's capabilities in ways that are encapsulated in the Middle and High capability pathways. Estimates have been provided of the likely additional cost of these development pathways, based on the best information currently available. There are numerous uncertainties, however, and the fidelity of the estimates will diminish relatively quickly over time. It is therefore very desirable to establish a long-term funding regime going forward and to implement a complementary regime of financial management. The objectives are to facilitate long-term planning and prioritisation, avoid fiscal surprises for the Government, maintain alignment between resource allocation and policy objectives, and achieve value for money in defence spending. These issues are discussed further in the next chapter.

## Chapter 8

# Funding and Financial Management

- 8.1 Given the nature of defence capabilities and the lead times needed to develop them, defence planning is a process that must necessarily address the long term. The objective of a regime of funding and financial management must therefore be to facilitate the process of resourcing the NZDF in such a way that it can provide the Government continuously over the long term with viable response options to a range of contingencies, including the ability to sustain deployments for long periods.
- 8.2 Chapters One to Five of this Assessment discussed the likely defence challenges that will confront New Zealand and the capabilities required to meet them. In essence, meeting those challenges will involve bringing into service capabilities that are currently being acquired or upgraded, and further strengthening the NZDF over time as resources allow.
- 8.3 Chapter Seven of this Assessment discussed the present financial context of the NZDF, drew attention to the funding challenges that it must meet over the short-to-medium term, and provided estimates to 2035 of the costs of options for alternative mixes of capabilities. It observed, however, that the estimates were made in the context of numerous uncertainties and their fidelity would diminish relatively quickly over time.
- 8.4 These considerations point to the desirability of implementing a regime of funding and financial management that is consistent with, and supports, the overall strategic thrust of this Assessment and can help manage the uncertainties. Ideally, such a regime would need to:
- ensure that required capabilities are available and operational outputs are delivered;
  - maintain visibility of likely future requirements as far forward as it is feasible to do so;
  - ensure the alignment of resource allocation decisions with policy requirements;
  - facilitate informed trade-offs and prioritisation between capabilities and outputs over time;
  - be consistent with the Crown's overall fiscal, budget and capital asset management requirements;
  - provide relative certainty of funding to aid long-term planning;
  - facilitate the management of uncertainty and input cost increases;

- provide incentives to achieve cost efficiencies without compromising capabilities or outputs;
- enable the Government to exercise adequate control over spending levels;
- be consistent with the general requirements of the Public Finance Act 1989 and other centrally-imposed instructions and requirements; and
- be robust and enduring.

8.5 This chapter examines key issues needed to achieve a regime that would meet those objectives and makes specific recommendations concerning its implementation.

## The Defence Decision Environment

8.6 A regime of funding and financial management must work well in the decision environment within which Defence operates. That environment has some unusual features.

8.7 It is impossible for governments to maintain military forces that are capable of responding to every conceivable security event. Further, it is both unnecessary and inefficient to maintain many military capabilities in a constant state of complete readiness. And there are competing priorities for scarce resources. Besides maintaining existing capabilities, the NZDF needs to spend money on developing new capabilities, managing domestic operational activities and managing overseas deployments.

8.8 Resource allocation decisions in a Defence context can therefore be characterised as trying to maximise the benefits that follow from spending on competing priorities in situations of high uncertainty. An added complication is that many decisions are difficult to vary or reverse and may have consequences for years or even decades to come. This combination creates characteristic challenges for Defence planning and decision-making that are shared by few other government agencies. The need to address and overcome these challenges has a direct bearing on how defence funding and financial management should be approached.

8.9 All planners must confront uncertainty. The environment in which Defence planners must frame decisions is, however, complicated by sources and degrees of uncertainty not typically found elsewhere in the public sector. These include:

- the unpredictability of security events, the nature of the responses that may be required and the associated capabilities, personnel, information and training necessary to meet those requirements;
- demand and supply of human resources, especially attrition rates;
- the rate of technical development and the incidence of technological obsolescence;



- the sporadic unavailability of some critical items of equipment and matériel, with consequential implications for the prudential levels of inventory that must be held;
- price and exchange rate volatility; and
- the impact on depreciation expenses of revaluations of assets (often in overseas currencies).

8.10 Given these uncertainties, the strategic significance of many decisions, and the need to ensure that Ministers have sufficient visibility, this Assessment considers it important that:

- high-level decisions about resource allocation are made using a process that ensures that they both meet operational requirements and are aligned with policy; and
- Cabinet annually has visibility over short-to-medium term operational requirements and financial (capex and opex) programmes.

## Capital Expenditure

8.11 Military equipment and platforms are generally expensive - often very expensive. Careful capital planning is essential. Defence is defined as a 'capital intensive agency' within the meaning of the Capital Asset Management (CAM) regime that applies to all government agencies. The objectives of CAM are to:

- ensure the provision of reliable capital projections and avoid material or fiscal surprises;
- give Ministers early consideration of options;
- demonstrate the cost effectiveness of existing assets;
- contribute to the sustainability of government's long-term fiscal position; and
- enable government and agency negotiation of sustainable service delivery and outcome performance.

8.12 Under the CAM regime, Defence is required to:

- adopt a whole of life approach to asset management, rather than focusing solely on the initial capital outlay;
- demonstrate an "advanced" standard of asset management as defined by the CAM regime;
- manage asset portfolios across a 20 year planning horizon;
- comply with a formal two stage Cabinet approval process for all new capital investment proposals above a specified threshold that require Cabinet approval (under current rules) or that are assessed as high risk by the responsible Minister based on a risk profiling methodology; and

- implement an additional layer of project management assurance, irrespective of funding source, for all new capital expenditure proposals that are assessed as being high risk.
- 8.13 This Assessment has concluded that, notwithstanding the uncertainties of the Defence decision environment and subject to an appropriate regime for business case analysis, the new CAM regime is sound and should work well for Defence. It should promote good asset planning and management practices without any additional embellishments being needed.
- 8.14 This Assessment did identify a useful change within Defence itself. In recent years, Defence capital planning has been undertaken within the constraints of a long-term capital envelope. Such planning has been undertaken at two levels: the Capital Programme Major (CP Major) for items that cost above \$7 million (requiring Ministerial or Cabinet approval) and the Capital Programme Minor (CP Minor) for items that cost less than \$7 million (falling within the delegated authority of the Chief of Defence Force).
- 8.15 Partly because capital funding for any item is drawn from the same capital funding pool, and partly because of the benefits of managing capex and opex using a common process, this Assessment considers that the CP Major v CP Minor distinction should be abandoned. The capital programme should be managed as one integrated programme using one prioritisation process.
- 8.16 The need to take a long view of capability planning and management makes it desirable to operate rolling long-term capital profile for planning purposes. This would not represent a funding envelope in the conventional sense (that is, a pre-commitment by the Government to future expenditures). It would, however, represent a set of future spending intentions for which costs had been estimated and to which the Government had agreed in principle.
- 8.17 In a Defence context, the costs of a long-term programme of capital purchases are very difficult to forecast because:
- the exact characteristics of many capital items can only be determined close to the time of purchase;
  - the future purchase price of most items is uncertain;
  - the timing of many future payments is uncertain; and
  - the forex rates that will apply to particular payments are uncertain.
- 8.18 The long-term capital planning profile would typically be estimated in NZ dollars. Variances in the cost of capital items would inevitably impact on both what could be afforded and the timing of purchases. It would be important, in managing the programme, to ensure that Ministers had good visibility of these impacts as new information became available. The programme should also provide a risk and sensitivity analysis, and indicate how the risks are best managed.

- 8.19 The management of the capital programme would also be improved by better information and analysis to inform decisions. This applies to:
- a more rigorous examination of specifications;
  - a strengthened analysis of benefits that would be realised;
  - including appropriate allowances for cost escalation;
  - improved business case analysis; and
  - improved estimation of capital and whole-of-life costs.
- 8.20 In a defence context, business case analysis using a pure cost benefit analysis methodology is complicated by the difficulty in quantifying benefits. As part of the development of the CAM regime, the Treasury is reviewing the general requirements for business cases. Defence is contributing to this process with a view to establishing a set of general requirements that are also suitable for Defence.
- 8.21 Apart from decisions to proceed with capital procurements, the system needs to manage the continuing expenditure implications of the procurement process. Such implications may include, for example, the need to vary specifications to account for technology changes, or the opex implications of delays in introducing new or upgraded platforms into service.

## Operating Expenditure

- 8.22 As indicated in Chapter Seven, Defence operating costs are usually grouped into four general categories: 'personnel', 'other operating', 'depreciation' and 'capital charge'. Depreciation, capital charge and personnel costs are usually very inflexible in the short-to-medium term, as are the majority of other operating costs. The maximum proportion of total operating costs that can be varied at short notice is only between 10 and 15 percent. To make the implications clear, a 15 percent reduction would imply almost no operating activity by the NZDF.
- 8.23 The key implication of this inflexibility is that any shocks to operating expenditure through adverse input price movements cannot easily be absorbed by any means other than by curtailing whatever expenditure can be avoided in the short term. Such reductions can be manifest, for example, as suspensions of recruitment, reductions in the level of planned manoeuvre training, or deferrals of the programmed maintenance of buildings and infrastructure. Although such short-term expenditure avoidance does constitute a credible temporary response, it cannot be sustained over the longer term without consequences that become progressively more serious. Over time, such a strategy will result in higher average long-term costs and reductions in operational readiness and efficiency.

- 8.24 The counterfactual proposition is also true. Where the NZDF has been obliged to cut back operations for fiscal reasons, relatively modest increases in opex can enable it to resume full operations and significantly increase its delivery of outputs.
- 8.25 The impact on operations of some cost increases can be mitigated if the NZDF has some flexibility and some time to adjust. However, the process of Parliamentary appropriations (which are time bound and almost always annual) can introduce inflexibilities into a funding regime. This points to the desirability of the NZDF maintaining modest contingencies against unexpected price increases which it should not lose simply by virtue of the contingency being unspent at the end of a fiscal year. It also points to the desirability of achieving some further flexibility by being able to move funding across fiscal years in certain circumstances, so long as overall average expenditure profiles are maintained.
- 8.26 Notwithstanding these conclusions, it is important for the NZDF to operate a diligent and well-informed process of risk management, and to respond to price changes when they occur. The discussion in paragraphs 8.26 above was not intended to absolve the NZDF from the need to take steps to adjust to cost changes. It was intended to identify a process which, while fiscally neutral to the Crown, would provide the NZDF with greater flexibility and more time to react to cost changes to which it was difficult to adjust at short notice without curtailing capabilities and outputs.

#### *Classification of Costs*

- 8.27 Within the NZDF, in accordance with the Public Finance Act 1989, operating expenditure is allocated across output expenses. Another way in which costs have been classified, however, is by whether costs are incurred in the “front”, the “middle” or the “back”. In general terms:
- *Front* refers to the costs that are incurred directly as part of an operational activity or deployment, including multi-agency operations and tasks, community services and the maintenance of military preparedness. For example, the direct costs associated with an exercise of maritime surveillance – the depreciation on the aircraft, the fuel, the remuneration of the aircrew – are “front” costs.
  - *Middle* refers to the costs that are incurred in activities that provide direct support to the “front”, and include logistics, military intelligence, education and training and personnel management. To return to the previous example, the costs of providing “deep” maintenance of the aircraft are “middle” costs.
  - *Back* refers to the costs of activities that provide indirect support to the “front” and “middle”. To return to the previous example again, the costs of maintaining the infrastructure needed to support the air force base are “back” costs.

- 8.28 The system of classifying costs as “front”, “middle” and “back” is a simple one, but the relationships between the cost elements associated with capability-generating and operational activities are often dynamic and complex. It is essential for management purposes to have a clear picture of both the activity relationships and the consequential cost relationships. For example, an increase in costs associated with adding additional aircraft to the current strength does not necessarily imply a pro-rated increase in maintenance costs and or infrastructure costs. There may instead be either economies or diseconomies of scale.
- 8.29 This assessment considers that there is considerable scope for Defence to improve its understanding of the relationships between its activities and their costs, and the prospect of improved efficiency and financial management by doing so.

#### *Opex/Capex Balance*

- 8.30 To achieve the desired levels of efficiency, it is essential that funding for opex should be maintained in a careful balance with the corresponding funding for capex. For the reasons outlined in Chapter Seven, the present situation is one of imbalance.
- 8.31 Avoiding opex/capex imbalances will be helped by:
- where possible, managing opex with a modest provision for contingencies; and
  - pursuant to the new CAM requirements, ensuring that submissions seeking approval for capex include best estimates of whole-of-life costs.
- 8.32 To maintain the desired opex/capex balance, any decision to make a capital injection should also ensure that there is provision for the operating expenditure associated with the use of that capital. This might or might not mean an addition to the operating expenditure baseline - the Government may prefer to fund a new capability in part or in whole by reallocating resources from other capabilities – but in every case the source of the operating funding and the consequences of any reallocations should be made explicit to, and be approved by, the Government.
- 8.33 As indicated in paragraph 8.10 above, defence expenditures are subject to considerable uncertainties. Management of these uncertainties can be facilitated by protecting funds in order to provide for unexpected contingencies. The NZDF does this already for opex through the use of an internal system known as the Reprioritisation Account, and the Ministry provides for contingencies in all its procurement contracts. However, this Assessment has identified scope for the improved management of expenditure uncertainty though well estimated and actively-managed contingency provisions for both capex and opex.

8.34 In summary, this Assessment considers it important that:

- operating and capital funding are maintained in an appropriate balance;
- opex and capex are managed jointly by means of a resource allocation process that takes account of the opex implications of capex; and
- the uncertainties affecting both opex and capex are managed using contingency funds to cover unexpected changes in costs.

## Cost Escalation

8.35 It is often asserted that defence costs rise faster than costs in the wider economy. If this were true, it would provide an additional complication to the challenges that would have to be managed by a regime of funding and financial management. This assessment examined the issue carefully and also sought external advice from the New Zealand Institute of Economic Research.

8.36 The technical literature is clear on some issues and equivocal on others. In general, defence cost increases can be categorised in two ways:

- military inflation; and
- military cost escalation.

## Military Inflation

8.37 Military inflation is defined in the same way as any other index of inflation, namely as the change in price over time for a group of the same items (a “basket”) of goods and services, with the effects of changes in quality and quantity eliminated. Just as any country’s measure of domestic inflation uses a basket of goods specific to that country, so any country that wanted to measure military inflation would need to determine a basket of defence-related goods and services that was specific to that country. Few countries, however, have attempted to develop an index of military inflation, and none appear to have been successful. The NZDF has built a model that is currently being reviewed by the New Zealand Institute of Economic Research. This will provide a basis in the future for measuring and better managing this issue.

8.38 Wages in the general NZ economy have risen at a steady rate of about 4.0% per annum since 2002. Over the same time period the unit cost of all NZDF personnel has risen by an average of 3.9% per annum. This agreement between military and general wage rises reflects a similar finding for the Australian Defence Force.

8.39 Other operating costs are also rising. Many however, such as food, fuel and services, are represented in the usual CPI basket of goods. This Assessment did not find evidence that the costs of what are essentially non-military inputs to defence outputs are rising any faster than similar costs in the wider economy. The NZDF does, however, have considerable exposure to adverse movements in some of these costs, such as fuel.

### *Military Cost Escalation*

8.40 Unlike the term “military inflation”, which relates to all the costs incurred by a defence force, the term “military cost escalation” relates only to the costs of specialised military equipment. It can be estimated by comparing the cost of a basket of typical functions or capabilities (for example, helicopters) over time and particularly over “generational” changes in platforms. The functions or capabilities in the basket remain the same, or are enhanced to match similar threat enhancements, but the equipment providing those functions changes (for example, the cost of an Iroquois from 1970 compared with an NH90 today). These costs typically increase over time, due very largely to changes in the quality of equipment. The evidence supporting military cost escalation is clear. The trend has persisted over the last 150 years, regardless of changes to the geopolitical situation, and can be expected to continue in the foreseeable future.

### Asset Revaluations

8.41 Under International Financial Reporting Standards, NZDF assets including military equipment must be re-valued at regular intervals. The effect of such revaluations is generally to increase the valuation of an asset and therefore the amount of depreciation payable. For the NZDF, this can have a noticeable impact on operating expenditure. Over the last 7 years, the cumulative impact has been to add an additional \$82m of operating costs.

8.42 In recent years the NZDF’s baseline has been adjusted to cover the impact of such revaluations, following an agreement put in place under the previous Government. This Assessment has concluded that this approach should continue. To do otherwise could provide occasional windfall gains, but would most often impose windfall costs that would add to the already severe pressure on the NZDF’s operating baseline. The better position would be to avoid either windfall gains or windfall costs.

### Conclusion

8.43 Given the nature of Defence capabilities and the lead times needed to develop them, Defence planning is, of necessity, a process that must facilitate management over the long-term. Defence planners must frame decisions in a context of sources and degrees of uncertainty not typically found elsewhere in the public sector. This points to the need for:

- a funding regime that provides Defence planners with reasonable certainty of Ministers’ intentions going forward; and
- a financial management regime that is capable of allocating resources over both the short and long term in accordance with policy, and managing the uncertainties.

- 8.44 For planning purposes, it is desirable to have long-term planning profiles for both capex and opex. Ideally, these profiles need to be rolling and reviewed annually so that they continue to look forward for a period of 10 years. They also need to reflect appropriate estimates of cost escalation. This will ensure the profiles are consistent with CAM reporting requirements. Effective management of the many fiscal uncertainties within profiles would require a sophisticated, risk-based approach. Prudential contingencies would need to be maintained in both opex and capex budgets and actively managed as a hedge against actual costs being larger than forecast. Allowing the NZDF some flexibility to move opex funding across fiscal years would help manage uncertainties and maintain the necessary balance between capex and opex.
- 8.45 The new requirements of the CAM regime should work well for Defence, subject to a satisfactory resolution of issues around business case analysis. It will oblige Defence to operate a capital programme that looks forward at least 20 years and will provide Ministers with good visibility of the costs and timing of major items of capital expenditure and the accumulated depreciation that will be available to fund them. This visibility would be reinforced through a process of obtaining annual Cabinet approval of the NZDF's expenditure proposals for each fiscal year, presented in the context of estimates of future funding requirements and the indicative planning profiles.
- 8.46 A critical feature of the funding regime is that capital expenditure and operating expenditure should be kept in balance. Thus, decisions to provide capital contribution to fund new capital items should always be accompanied by complementary decisions relating to the provision of the associated operating expenditure.
- 8.47 This Assessment has concluded that the strategic-level allocation of funding within Defence needs to be undertaken in a way that provides good visibility to Ministers and ensures that expenditure aligns with policy. A funding and financial management regime is needed that is consistent with the objectives set out in paragraph 8.5 above. This will help Defence navigate through the fiscal challenges of the next five years and make progress on the work of strengthening of the NZDF that analysis of future strategic capability and operational requirements indicates is desirable.

## Recommendations

8.48 This Assessment recommends:

- That a regime for funding and financial management be implemented that has the following characteristics:
  - Annual re-forecasts of capex requirements for the next 20 years [a current requirement of CAM];
  - Annual re-forecasts of opex requirements for the next 20 years;



- Use of rolling ten-year capex and opex planning profiles that maintain opex and capex in balance, are updated annually and are subject to full revisions at intervals of not more than five-years in the course of a Defence Assessment;
- The annual approval by Cabinet of the NZDF's expenditure proposals for the next fiscal year within the context of the rolling ten year indicative planning profiles;
- Alignment of capex and opex in any capability funding decisions, so that any decision to approve a capital injection should also address the opex implications;
- Some flexibility for moving output funding across fiscal years so long as it remains consistent with the indicative planning profiles; and
- Protection against opex increases arising from asset revaluations.

8.49 That the NZDF, the Ministry of Defence and the Treasury undertake further work on the detail of how such a regime could work in practice, and report their conclusions to the Minister of Finance and the Minister of Defence.

## Chapter 9

# Defence Real Estate And Infrastructure

## Introduction

- 9.1 The Defence estate comprises 74,833 ha of land, concentrated in nine main bases and two primary land training areas. In all it is spread across approximate 100 sites, around 25% of which are leased mainly for offices (including HQ NZDF in central Wellington) and recruiting centres. The estate includes approximately 5,000 buildings, of which 2500 are houses. These buildings occupy 1.1million m<sup>2</sup> of floor area. The estate also contains 105 sites and buildings with heritage merit.
- 9.2 In terms of valuation, two aspects are particularly material:
- the land value is approximately \$724 million and the building replacement value is approximately \$1,658 million; and
  - as at 30 June 2009, the portfolio of land and building was valued commercially at \$1.530 billion, around 28% of the NZDF's total assets.
- 9.3 The estate requires approximately \$105 million per annum (excluding depreciation) to hold, manage and maintain.
- 9.4 These are significant investments and ongoing costs. As with all other defence expenditure, it is important that expenditure on the Defence estate represents value for money. This can be achieved by ensuring that:
- the portfolio matches actual and forecast requirements (neither too much nor too little);
  - usage is efficient and economical; and
  - for any particular site, the model of ownership selected, (whether by the Crown, a commercial provider or a public-private partnership), is best suited to the purposes for which the land and buildings are needed.
- 9.5 Since the 1980s, there have been several reviews into the Defence estate and a rationalisation programme that has seen the disposal of eight major and 31 minor sites. Since 2000, these disposals have yielded approximately \$180 million. Another \$230M in disposals is presently under management. The lessons learned from the New Zealand reviews, comparable reviews in other Western defence forces, and the received wisdom from the property management industry, are all very similar:

- Consolidation can provide some opportunities to achieve better value for money, albeit that this may require significant up-front investment and, if so, typically will require a long period subsequently to achieve a positive payoff;
- Insufficient reinvestment and deferral of maintenance will inevitably impair the value and utility of the estate and, importantly, will raise overall costs in the long run;
- The management of a diverse estate achieves better value when it is both centralised and strategic in focus; and
- Commercial provision, whether through conventional renting arrangement or public-private partnerships, can often improve facilities and reduce costs.

## Current Issues

### 9.6 The Review has found that:

- The present Defence estate is ageing across the board. Unless remedial action is taken, there is a serious threat of block obsolescence and major reinvestment in years to come. This situation is the result of a long history of insufficient maintenance and reinvestment.
- After 20 years of downsizing, consolidation, and commercialisation of services, the scope for further rationalisation is now reduced. New initiatives are showing evidence of diminishing returns. Besides those items of the estate already planned for disposal, there is very little else of substance that could be made surplus in the short term.
- Nonetheless, the present management programme is implementing some innovative approaches.
  - i The disposal programme presently has several items under action including the NZDF off-base housing estate, Watts Peninsular, and several Treaty of Waitangi settlement actions.
  - ii As the result of policy changes relating to the provision of housing and accommodation assistance, regular force personnel are now better able to access the commercial market for their accommodation requirements. This is freeing up old NZDF houses for disposal and is avoiding the need for reinvestment.
  - iii The NZDF is in the process of changing the management of the estate to put it firmly on a tri-service basis with centralised policy and priority setting, regional hubs and spokes, and governance by the Executive Leadership Team.
  - iv The Defence Transformation Programme will rationalise Logistics and Human Resources Management (including education and training), which is likely to lead to a significantly more efficient utilisation of those parts of the estate.

- 9.7 The Review endorses the actions currently being taken and has treated them as “givens” in its consideration of options for the future.

## Derivation of Principles and Criteria

- 9.8 The Review has taken a “principles” approach towards defining what the future estate should be. These principles were derived from both overseas experiences and the lessons of previous NZDF reviews. The approach generated a much larger list of criteria than has been seen in the past. This was used to achieve a better-informed evaluation of the present estate and identified some less obvious issues.

- 9.9 The Review’s analysis indicated that five considerations were the most important:

- *Mode of provision* - In any circumstance, is it preferable to own, lease, or enter into partnership?
- *Rate of utilisation* – Does the rate of utilisation imply that a particular facility should be a candidate for the programme of consolidation?
- *Fitness for purpose* – Is the design of the facility appropriate for its intended purpose? Is it maintained to a sufficient standard to ensure that it can be used as intended?
- *Resource efficiency* - Is the estate being managed in the most efficient way? How does the way in which it is being managed impact upon future proofing and fitness for purpose?
- *Cost* – Are whole-of-life costs being minimised? Can the whole-of-life management of the facility (including maintenance and replacement) be achieved economically within fiscal constraints?

## Constraints and Opportunities

- 9.10 In considering what might be done about the ageing estate and the backlog of maintenance, the Review has been conscious that the Government has signalled a period of fiscal constraint over the next few years as New Zealand recovers from the global recession. It could therefore be several years before the NZDF estate can be placed on a sustainable recovery path and longer still before it will approach its desired configuration in terms of condition, age, location and utility.

- 9.11 One of the key lessons from previous reviews and estate rationalisation projects is that planning for major changes can be quite protracted. The largest changes that the NZDF has contemplated have taken between three and four years before a comprehensive business case could be put to the government. The time taken between a decision to dispose of a property and completion of that disposal varies widely from between two and fifteen years.

9.12 There appears to be more opportunity for commercial solutions in the Defence estate area. It is worth observing, however, that:

- Well-analysed business cases are required in all instances. The choice of preferred approach will depend on what the analysis discloses in each instance.
- There are constraints that may preclude commercial solutions in some cases. For example, commercial scheduled air services will not be permitted access to RNZAF operational bases.
- Apart from commercial partners, the NZDF could also enter into partnerships with other government agencies to meet common needs.
- Public-private partnerships (PPPs) can provide worthwhile opportunities. Although PPPs are most commonly entered into for the provision of new services or facilities, it not unfeasible to establish them to take over the provision of existing services or facilities. That approach, therefore, should always be among those explored.

### Public-Private Partnerships

9.13 Apart from purchase or lease, the NZDF can secure access to the land and facilities through public-private partnerships (PPPs). These are typically arrangements by which a public service or public facility is funded and operated through a contracted partnership between a government agency and a private sector provider. The private partner is often a consortium of companies which usually forms a dedicated company known as a "special purpose vehicle" (SPV). The SPV gives effect to the partnership by providing the contracted service, or building and operating the contracted facility, for the contracted period. The SPV typically assumes some financial, technical and operational risk. If the government agency is also investing in the partnership, it may reinforce its position by securing equity in the SPV.

9.14 PPPs can offer real benefits in a number of situations, but they are not a panacea for all ills. A useful body of empirical knowledge has developed over the last fifteen years from the experience of overseas governments, especially in Europe, the United Kingdom and Australia, and there is also a growing body of technical literature from which the NZDF can draw. The Review sought to identify and apply these lessons when considering issues relating to the Defence estate. In general terms, the received wisdom can be summarised as follows.

- For a PPP to be successful, care must be taken to ensure that the institutional and legal framework, including the contract itself, is robust. The partnership arrangements must be able to endure for the full period of the contract, surviving any changes in government or the structure of the consortium. In general, PPPs work best when the SPV is subject to appropriate incentives, including a significant share of the risks, and can bring greater operational and risk management expertise than could

ordinarily be obtained by the government agency through other means. For its part, the government agency must have enough expertise to negotiate a beneficial contract and invigilate performance.

- A PPP can be entered into if, on a risk-adjusted basis, it appears likely to provide better value for money than the other forms of provision or procurement that are available. Determining what constitutes a beneficial contract, however, is often far from simple and requires a good deal of complex and careful analysis. The overseas experience of using PPPs to provide capital finance, for example, has often been disappointing. The SPVs have frequently obtained a rate of return higher than the cost of sovereign debt, notwithstanding that most of the income risk was being borne by the government in question.

## Scenarios for Recovery

9.15 The Review developed four scenarios for the recovery and future development of the estate. These differ in terms of the extent to which facilities are provided by external commercial sources, and in terms of the cost of bringing the scenario into effect. They are not mutually exclusive. If resource constraints were not an issue, any one of the four could be adopted and pursued immediately. Given that resource constraints are an issue, however, the Review has concluded that the scenarios should be pursued sequentially.

The four scenarios are:

- *Conservative*: reflecting current fiscal constraints and the lead-time needed to plan change;
- *Pragmatic*: reflecting steady improvement as resources allow;
- *Progressive*: requiring significant capital investments and major, commercially-oriented change; and
- *Radical*: moving to a situation where almost all estate requirements are met through commercial solutions.

### *The Conservative Scenario*

9.16 The *Conservative* scenario, with its limited investment requirements, represents a five year holding period that will allow the key developments to be implemented. It will also allow the NZDF to gain some control of the rate of decline of its remaining estate, while further planning takes place.

9.17 The *Conservative* scenario requires an average annual increase in operating funding over the next five year period of \$7 million over the amount spent in 2009/10, together with average capital funding of approximately \$65 million per annum.

### *Pragmatic Scenario*

9.18 The *Pragmatic* scenario builds on and extends the *Conservative* scenario. The *Pragmatic* scenario would offer additional benefits through improvements in overall fitness for purpose, support for personnel, utilisation and resource efficiency. It could be pursued in the ten years that follow the five-year period of the *Conservative* scenario, (i.e. from 20015/16 to 2025/25). It would require an average increase in operating funding of \$24M per annum through that ten-year period, together with average capital funding of approximately \$78 million per annum.

### *Progressive Scenario*

9.19 The *Progressive* scenario is characterised by:

- The NZDF being consolidated into its core estate configuration;
- Significant capital injection and investment in long-term change;
- Long-term payback periods;
- A range of commercial solutions being explored;
- Increased opex requirements due to more leases and partnerships but better estate performance, together with some increased risk; and
- Whole-of-government/shared solutions.

9.20 This scenario takes a much longer-term view because it would not be possible to implement it in the present fiscal environment. Such large changes take years to consider, plan and prioritise, and no individual proposal would proceed unless the analysis supported it. In each case, the business case would need to cover a full range of procurement strategies, from build-to-own to PPPs. Until such an analysis was completed, it would not be possible to determine whether any particular proposal would proceed, what procurement strategy would be preferred if it did, or what the proposal would cost.

### *Radical Scenario*

9.21 The *Radical* scenario would move the NZDF into a position where most services and facilities were provided through commercial relationships. The provisions of the necessary estate and facilities would be but one of the services being purchased. The aim would be to free up capital and leverage off the efficiencies available in the commercial market. Only NZDF-specific sites such as weapons ranges would be retained in NZDF ownership.

## The Way Ahead

9.22 Paragraph 9.7 identified the need for remedial action on the ageing estate. Chapter 7 drew attention to the fiscal pressures on the NZDF and the need to achieve value for money. Taken together, these considerations point to the need for a vigorous programme of rationalisation and remediation. The rate at

which such a programme can proceed will depend in part on the Government's assessment of the relative priority it should afford this aspect of defence spending in relation to other spending priorities.

9.23 This Assessment proposes that the Government accept the need for the NZDF to pursue at least the *Pragmatic* and preferably the *Progressive* scenario as soon as possible. Either approach will need to allow time to complete changes and initiatives currently underway and to undertake the necessary planning and business case analyses. As a consequence, new spending on the estate would be necessarily restrained in the short term.

9.24 Irrespective of the pace of activity chosen by the Government, a number of relatively immediate initiatives are recommended. These are to:

- Introduce tri-service estate management with centralised asset management, allocation, utilisation and investment priorities;
- Implement a "hubs and spokes" concept, with the hubs being: Auckland, the Manawatu, Wellington and Canterbury;
- Continue to dispose of housing and other "off-base" properties;
- Invest in shared services and third party partnerships, particularly with other government departments;
- Expedite Treaty of Waitangi solutions;
- Be more ruthless in disposing of facilities that are beyond economic repair; and
- Complete a Defence Estate Strategic Plan and align hub plans and infrastructure development plans with each other and the overall Strategic Plan.

## Flexibility for Future Changes

9.25 This analysis has been prepared on the basis of what is presently known about the estate, operational requirements, military capabilities, and what changes are planned over the short-to-medium term. Current efficiency initiatives are likely to increase the need for general purpose office accommodation outside the Wellington central business district. There are also likely to be significant opportunities arising from rationalised repair and maintenance practices; from combining education, training and administration functions; and from extended outsourcing. The way in which these opportunities will be realised has yet to be determined. Again, there seem to be a number of candidates for commercial solutions.

9.26 There are other issues (for example Treaty of Waitangi settlements not yet concluded) that have the potential to alter the detail of this analysis. They are very unlikely, however, to alter its substance. Most such issues will be resolved over the next year and the outcomes will be incorporated into the planning phase that lies ahead.



## Conclusion

- 9.27 The current approach to estate management is unsustainable, given its current condition and functionality. There may be a number of opportunities for improvement that could be taken in the short-to-medium term depending on the outcome of business case analyses and the availability of any investment funding needed. At a minimum, some modest extra spending on the estate seems essential if policy failure is to be avoided.
- 9.28 On present indications, the way ahead will take many years and will require significant investment. The benefits, however, will be worthwhile. Beginning to implement the *Progressive* scenario within the next few years seems entirely achievable and should be pursued.
- 9.29 The conclusions of this Review should be incorporated into a Defence Estate Plan. An early objective of that Plan should be to implement the reforms to present estate management described in paragraph 9.29 above that will be necessary to achieve the desired outcomes.

## Recommendations

- 9.30 That the NZDF adopt the progressive scenario as its strategic objective for the Defence Estate, and move to implement that scenario as quickly as the available funding allows.

## Chapter 10

# Procurement And Organisational Reform

## Introduction

- 10.1 The structure and functions of New Zealand's two defence organisations (the Ministry of Defence and the Defence Force) were established in 1990 by the Defence Act of that year. Further reforms were recommended in a review by Don Hunn in 2002, only some of which were implemented. Subsequent reviews, such as the Defence Capability and Resourcing Review of 2005, suggested that aspects of the restructuring had not stood the test of time and that some reforms remained to be implemented.
- 10.2 Recent reports have highlighted issues concerning major defence acquisition projects. In June 2008 the Office of the Auditor-General reported to the Foreign Affairs, Defence and Trade Select Committee on time and cost issues with defence projects. This was followed in September 2008 by the Coles Report on Project Protector that led to mediation and a financial settlement.
- 10.3 This chapter discusses issues related to the organisational structures of the Ministry and NZDF, including the arrangements for the management of procurement.

## Scope and Background

- 10.4 To assess the effectiveness of the two Defence organisations, and benchmark Defence's performance in relation to procurement, the Secretary commissioned two reviews from external, independent experts:
  - Michael Wintringham, formerly the State Services Commissioner, who examined broad structural, governance and management issues; and
  - Aurecon Ltd (an international firm of engineers and project experts with extensive defence experience), which was tasked with looking at procurement, project management and overall defence capability management from a 'best practice' perspective.
- 10.5 Broadly, both reviews conclude that there are real issues that need to be addressed. They recommend reform of structure, governance, accountability and project processes to deliver better outcomes and improved effectiveness in defence capability management and procurement.

## The Wintringham Report

10.6 Michael Wintringham undertook a ‘first principles’ analysis of the concepts that underlie the defence structural reforms embodied in the Defence Act 1990. He traced the changes that have occurred to these principles following successive reviews, concluding that the 1990 principles and structure were, and remain, sound. Subsequent modifications however, have diverged from these principles, in some cases radically, and have been the cause of many (but not all) of the perceived difficulties and frustrations of the present working arrangements.

10.7 The principles identified by Michael Wintringham are:

- i Chief executive sole accountability for performance: The State Sector and Public Finance Acts clearly place accountability and authority for the management of *all* the costs and resources for the delivery of outputs on the chief executive, based on full financial information and conventional management practices. For all state sector chief executives, this encompasses resource management including the acquisition of capital equipment (i.e. expenditure of appropriated funds to purchase and maintain assets).
- ii Provision of policy advice: Michael Wintringham is clear that policy advice is predicated on the principles of *transparency* and *independence*. He is also clear that *contestability*, in the sense of streams of advice ‘competing’ for primacy was not an initial design consideration, especially for Defence. He notes that contestability, if it is a relevant concept at all, is part of the process of developing robust and ‘tested’ or well considered advice.
- iii Transparency: Transparency of policy advice implies bringing different perspectives before the Government. If there are differences of view, driven by differing perspectives of an issue, these should be exposed for Ministers’ consideration and decision, and not resolved through compromise among officials.
- iv Independence: Policy advice by any one party is intended to be part of a continuum. In the defence context, the Government requires advice on defence policy that is independent of, for example, military preferences for particular platforms (existing or prospective), and of military views on their role in New Zealand’s foreign and national security policy frameworks. The Government also requires advice from a professional military perspective.
- v Audit and evaluation: Michael Wintringham addresses what he sees as a confusion that has developed over purpose and role.
  - First, he proposes that the evaluation of the performance of the CDF, as with the great majority of other State sector chief executives, should be the responsibility of the State Services Commissioner.

- Second, he defines output and policy evaluation. The principal question is: Have the decisions on force structure, equipment and funding, derived from the policy and funding decisions for the Defence Force, delivered the anticipated capability? The findings are about achievement of policy goals (rather than audit against a standard).
- Third, he defines audit, against a standard, for the efficiency of production. The principal question is: How cost effectively is the available funding being applied to produce the desired result, and is the result itself, to an adequate standard, actually being delivered?
- Fourth, he proposes that it is not appropriate that the Audit and Assessment function report to the Minister. Some assessments may be made of the policy and outputs set by Government and at times these may find issue with those settings.

## The Aurecon Report

10.8 The Aurecon consultants focussed solely on procurement, from concept to disposal. They have not based their analysis explicitly on a set of stated principles. Rather they have drawn on observation, experience and the received wisdom of best-practice, and have commented directly on issues and possible solutions.

10.9 Aurecon found problems in defence acquisition with relationships, processes and conflicting accountabilities. They traced these problems to present management structures, some of which derive from clauses in the Defence Act 1990. These conclusions were evidenced by:

- a fragmented and chronically under-resourced procurement system;
- a poor project management culture across both organisations;
- a noticeable lack of authority and accountability;
- a culture of management by committee;
- a pervasive approval process involving numerous organisations and committees;
- a silo mentality between MOD Acquisitions and the Single Services;
- a poor level of communication between organisations;
- no formal risk management process;
- an environment and structures where personalities had dominated to the detriment of both organisations; and
- a lack of trust created by and reflective of the division between the organisations.

10.10 Aurecon concluded that capability development, procurement and the responsibility for through-life support are fragmented and dispersed through the two organisations. To deliver the 'right capability at the right price at the right time' they recommend that all these functions need to be merged into a new 'matériel division'. The two organisations should remain separate in terms of the State Sector Act, but work together with common goals, outputs and success factors so that they are one organisation in form and in practice. Aurecon recommend that the management of this relationship should take the form a 'diarchy' at the functional level.

10.11 Aurecon's higher level structural recommendations include:

- that the roles of the Secretary and the CDF be clarified;
- that a new 'capability board' with external membership be constituted, with consideration of delegated powers to 'approve' capital acquisitions;
- that capability procurement and responsibility for through life support should be merged into a new 'matériel division'.

10.12 Aurecon also make a number of detailed recommendations relating to the governance and management of what they call the 'capability system life-cycle'. They also consider project management processes, risk assessment and mitigation, the consolidation of fragmented acquisition functions and the level of skill and training required of a restructured organisation.

## Procurement as a Continuous, Joined-up Process

10.13 Both consultants noted that the management of capabilities (especially defence hardware, weapons and platforms) is a continuous cycle from policy and capability definition, acquisition, through life operation to disposal. The consultants agreed that the Defence Act currently imposes discontinuities, in particular by separating out the acquisition phase. They conclude that this is a major cause of inefficiencies and disconnects in the current Defence structure.

10.14 To remove these inefficiencies requires a solution that preserves the continuity of the defence capability life-cycle intact, yet maintains clear lines of accountability. Aurecon in particular recommended a defence capability group that was 'joined-up' and with a whole-of-life capability focus.

10.15 As with organisational change in general, it is important to bear in mind that not all the challenges which face defence procurement in New Zealand can be resolved through altering functions and responsibilities. Michael Wintringham usefully sets out some of these challenges. In sum New Zealand is largely a price taker in a global market, its requirements are both small in quantity and specialised in quality (because of the need to multi-task platforms) and the timing of replacement is often disproportionately significant because of the limited number of assets available at any one time. These elements will not change. They place an even higher premium on good and timely decision making.

- 10.16 Despite these systemic challenges, both Michael Wintringham and Aurecon comment favourably on the manner in which this function has been discharged. Michael Wintringham observed that New Zealand has, for the most part, bought useable equipment at a good price, even if at times the transaction costs, for the Government, officials and the Defence Force, have been high.
- 10.17 This Assessment accepts the observations made by Aurecon on the need to strengthen the procurement function, to improve its management and governance, and to extend its scope to include whole of the life of a capability. The way in which this might best be done will need to align with other aspects of organisational reform. It will also involve some detailed implementation work, since the processes involved are both important and complex. These issues are discussed further below.

### Setting the Guidelines for Reform

- 10.18 Based on the consultants' recommendations, acceptable options for Defence reform will need to satisfy these factors.
- i Retention of two organisations (the Ministry and the NZDF) as recommended by Michael Wintringham.
  - ii Retention of the sole authority and accountability of each chief executive.
  - iii Retention of independent streams of advice to Government.
  - iv Retention of the safeguards of Cabinet authority for all major capability and fiscal decisions, as well as scrutiny of the capability process (from central agencies and within Defence), together with ex and post ante audit and evaluation.
  - v Establishment of some form of joined up capability group, jointly staffed and managed, with shared outputs and outcomes as recommended by the consultants and discussed above.
  - vi Ensuring the Ministry and the NZDF have access to the information necessary to enable them to discharge their roles efficiently. Both Michael Wintringham and Aurecon discussed the requirement for the Secretary to provide policy advice to Government, including financial advice, but observed that the Secretary had no statutory access to the required information held by the NZDF. The NZDF needs similar access to information held by the Ministry.
  - vii Establishment of a decision-making environment (especially for defence capabilities) that requires the membership of independent expert advisers from outside of defence (such as non-executive board members as recommended by the Wintringham, Aurecon and Coles reports).
  - viii Retention of the existing line of accountability from the Secretary of Defence to the Minister, without imposing an intervening board. Notwithstanding this, Ministers may at any time establish boards to advise them.

## Options for Structural Reform

10.19 Five options for reform can be considered from a range of possibilities.

- i Retain the status quo – This option would retain the present structure and processes. Both consultant reports are clear that this is not a viable choice.
- ii Minimal change – The reviews conclude that insufficient resources are being committed to defence capability development and acquisition. A minimalist option for reform is to address this resource shortage and the mismatch of skills to requirements. This option will increase acquisition project costs but these are likely to be offset by improved acquisition outcomes. It does not address the underlying structural problems and accountability disconnects that demand reform.
- iii Match functions to accountability – Michael Wintringham concludes that the CDF is in an untenable situation. The CDF is held accountable under the Defence and State Sector Acts for the capital and operating expenditure of the Defence Force and for the resources required to deliver the outputs expected by Government. But the CDF, unlike other State Sector chief executives, is not responsible for the acquisition of major capital items, this being a function of the Secretary under the Defence Act. This sets up a climate of tension and conflict. Michael Wintringham suggests this mismatch could be resolved by aligning function to accountability. The Secretary, as principal civilian policy adviser, should be responsible for defence policy, broadly defined. This would include the analysis of the future strategic environment, the range of future capabilities required by that environment, the likely quantum of funding and the submission to Government of business cases for defence capabilities. The CDF, as the principal military adviser and the commander of the armed forces, should be responsible for acquiring and operating the capability approved by Government. In effect, Michael Wintringham suggests that capability development would move from the NZDF to the Ministry, with a parallel move of the acquisition function from the Ministry to the NZDF.
- iv A joint management board – To reconcile the apparent contradiction of retaining two organisations but operating certain functions as a joint activity, the Aurecon review recommended that certain functions be undertaken and managed under a ‘diarchy’ arrangement. This Assessment proposes the joint discharge of some aspects of policy with capability development, acquisition and through life support. The challenge is to create a new body within the defence organisations, with appropriate authority and accountability for joint tasks, but retaining the singular accountability of each of the defence Chief Executives for all other matters.
- v Merge the two organisations – Both Michael Wintringham and Aurecon considered the option of returning to a single Defence entity. There might possibly be some minor cost savings, but Michael Wintringham in particular concludes that such a merger would be at the expense of independent and transparent streams of advice to Government. He is also concerned about the issues that such a unified body would create in

the New Zealand Public Sector context: should it be headed by a civilian, a uniformed commander or both? This Assessment concurs with Michael Wintringham that the costs of a merger, in financial, policy constraints and constitutional safeguard terms, outweigh the minor cost savings that might be realised.

10.20 Options (iii) and (iv) both appear to provide feasible solutions suited to the present circumstances. Option (iii) is not recommended because it perpetuates the current break in process between the two defence organisations and is therefore unlikely to overcome the fundamental problem identified by the consultants. Option (iv) is the preferred way forward. It does offer a feasible solution, although it also poses challenges in developing authority and accountability mechanisms that deliver the outcomes sought by the Government.

### Proposal to Establish a Joint Management Board (JMB)

10.21 This Assessment proposes the establishment of a joint management board. This new decision-making body would be constituted under an amended Defence Act for the purpose of exercising joint management over a specified range of tasks that need to be undertaken jointly by personnel from both the Ministry and the NZDF. Principally, these joint tasks are the development of policy advice, the procurement of military equipment and the development and management of major defence capabilities. The JMB would comprise the Secretary and the CDF acting together as single body. This structure would provide for joint legal authority and joint accountability over particular areas specified in the legislation, whilst retaining the individual authority and individual accountability currently exercised by each chief executive for all other matters pertaining to their organisations.

10.22 This Assessment further proposes that the JMB would have at least two external advisers or non-executive directors. They would be selected for their expertise and appointed jointly by the two chief executives. The JMB would have the power to co-opt other non-executive advisers for specific purposes. It could also seek specific advice and input to particular decisions as required by circumstances.

10.23 Although an institution that provides for joint authority and accountability differs from the approach used elsewhere in the New Zealand public sector, it would appear to be a workable and pragmatic solution to an otherwise intractable problem. Officials confirm that it would provide the legal authority needed to perform the required functions, as well as giving the chief executives the freedom to control their resources in order to deliver the outputs required by the Government.

### Revised Sole and Joint Functions in the Context of a Joint Management Board

10.24 The following tables describe the functions that would be exercised solely by each chief executive and the functions that would be exercised jointly by the JMB.



10.25 The sole functions would include:

	<b>Secretary Sole Functions</b>	<b>CDF Sole Functions</b>
Usual CE functions	Chief Executive of the Ministry of Defence	Chief Executive of the Defence Force and Commander of the Armed Forces
	Responsible for preparing the budget, performance criteria, Statement of Intent and Output Plan for the Ministry	Responsible for preparing the budget, performance criteria, Statement of Intent and Output Plan for the NZDF
	Deliver standard outputs: <ul style="list-style-type: none"> <li>• Account for MOD financial expenditure and non-financial performance results;</li> <li>• Evaluate MOD output performance and management efficiency;</li> </ul>	Deliver standard outputs: <ul style="list-style-type: none"> <li>• Account for NZDF financial expenditure and non-financial performance results;</li> <li>• Evaluate NZDF output performance and management efficiency;</li> </ul>
Defence-related functions specific to organisation	Deliver defence policy outputs, including: <ul style="list-style-type: none"> <li>• Provide defence policy advice to Government;</li> <li>• Provide defence policy advice for responses to security crises;</li> <li>• Undertake defence assessments;</li> <li>• Conduct statutory audits of defence functions, duties and projects;</li> <li>• Evaluate defence contributions to national security outcomes.</li> </ul>	Deliver Defence Force outputs, including: <ul style="list-style-type: none"> <li>• Conduct military operations in accordance with Government direction;</li> <li>• Provide military policy advice to Government;</li> <li>• Recommend to Government options for military responses to security crises;</li> <li>• Introduce into service, operate and maintain new and upgraded equipment and capabilities;</li> </ul>

10.26 The following functions would be exercised jointly by the JMB.

#### **Secretary and CDF Joint Functions**

- Conduct reviews and analysis of the future strategic environment.
- Develop future security scenarios and guidelines.
- Formulate and update organisational strategies to implement defence policy.
- Analyse and recommend to Government future military capability requirements.
- Analyse capability gaps and develop broad capability and military output options.
- Analyse and advise Government on the policy effectiveness of capability and military options.
- Develop for Government consideration a rolling costed future capability (equipment, personnel and training) development and procurement plan.
- Provide advice to Government on the likely future costs of Defence – opex and capex.
- Develop and submit for Government consideration acquisition proposals (business cases) according to the approved capability development plan.
- Prepare and maintain whole of life capability management plans.
- Acquire equipment and capabilities within the specifications and budget approved by Government and commission into service.
- Formulate and deliver international defence relations policy and strategies at Government and military levels.

10.27 The broad implications of the JMB for the Ministry and the NZDF would be as follows:

- The full life cycles of defence capabilities could be managed as a continuous process, avoiding the discontinuity that currently occurs in the acquisition phase. This change is important for improved performance, and is fully in accord with industry best practice. It would enable the CDF to manage more effectively the NZDF's considerable holding of capital assets.
- Co-location of people who are working to the same tasks, outputs and outcomes would improve efficiencies and outcomes, especially given that they would report, directly or indirectly, to the JMB.
- The joint functions would continue to be funded by separate appropriations to output expenses in Vote Defence and Vote Defence Force. However, the descriptions and performance measures of the output expenses for joint activities would be aligned between the two Votes. Both chief executives (as the JMB) would be held accountable jointly and separately for the performance of joint functions.

- There are likely to be some costs associated with the consequential restructuring and co-location, although these costs should be minor. Some new skill sets are likely to be necessary but, according to the consultant reviews, these should lead to efficiency gains and improved outcomes.

## Audit and Evaluation

10.28 It is important from the perspectives of both policy and value-for-money that outcomes are achieved, outputs are delivered and capabilities are maintained as required by the Government. It follows that processes need to be put in place to assess the following things:

- i whether the operational activities of the NZDF are contributing appropriately to the Government's outcomes and objectives;
- ii whether the NZDF has produced the capability and operational outputs required by the Government to the standards specified by the Government; and
- iii whether the capability and operational outputs of the NZDF are being produced in an efficient and effective manner.

### Outcomes

10.29 Michael Wintringham's recommendations included the need to make explicit the Secretary of Defence's role in leading output evaluations and policy evaluations. He elaborated his recommendation by observing that:

*'Policy reviews or evaluations are the corollary of the policy and funding advisory roles of the Secretary. They complete the circle by testing whether the policy intent was achieved for the funding provided.'*

10.30 The terminology relating to audit and evaluation is often confusing, since labels are sometimes used interchangeably. The first of the three aspects listed in paragraph 10.28 above (generally known as 'outcome' or 'impact' evaluation) is the process of testing whether policy interventions achieved the intended outcome. In other departments, the function is often undertaken by a small unit of professional evaluators that may form part of that department's policy division. The Ministry of Defence has not previously undertaken work of this nature and would need to develop the capability to do so. However, the history of the last decade has shown that military deployments and interventions can continue for many years, and at considerable cost. There is a strong case for undertaking evaluations that assess whether the Government's objectives are being realised.

### Outputs

10.31 The second aspect, described by Michael Wintringham as 'evaluation', is intended to establish whether the outputs and capabilities directed by the Government have actually been produced as required. Some work on evaluating outputs has been undertaken by the Evaluation Division of the Ministry of Defence. Pursuant to a 'Memorandum of Arrangements' reached in

1991 between the Secretary of Defence and the Chief of Defence Force, the Evaluation Division has not generally undertaken work in the area of operational preparedness (the readiness of units to be deployed). This work has been undertaken instead by the NZDF's Inspector-General. If the Evaluation Division is to undertake more work on the delivery of required capabilities, it will mean some enlargement of the usual scope of their work and recruitment of personnel with the relevant military expertise. New boundaries may need to be worked out to avoid unnecessary overlap between the work of the Evaluation Division and the work of the Inspector-General.

### *Efficiency and Effectiveness*

10.32 The third aspect, described by Michael Wintringham as 'audit', is intended to establish whether the outputs and capabilities are being produced in an efficient and effective manner. The Evaluation Division has undertaken work in these areas since the Ministry was first formed. To improve overall value-for-money, there is a good case for strengthening the Evaluation Division and extending the range and depth of the work undertaken.

### *Performance of the CDF*

10.33 Michael Wintringham recommended that the performance of the CDF should be regularly evaluated, as it is with other State Sector chief executives, that the evaluation should become the responsibility of the State Services Commissioner, and that the Defence Act 1990 should be amended accordingly. In his view, having the Secretary of Defence undertake the performance evaluation of the CDF would be inconsistent with the effective operation of their respective but cooperative responsibilities to deliver effective military capability for deployment by the Government of the day.

10.34 The performance of most State sector chief executives (including the Secretary of Defence) is subject to review by the State Services Commissioner. Some chief executives, however, are 'office holders' by virtue of being appointed pursuant to specific legislation. The CDF, who is appointed by the Governor-General in Executive Council, falls into this category. The State Services Commissioner is currently looking at this general issue and Michael Wintringham's recommendation should be considered in that context.

## **Defence Science and Technology**

10.35 A significant proportion the NZDF's requirements for science and technology advice, research and other services are provided by the Defence Technology Agency (DTA). This is not (as the name might be taken to imply) an independent agency but a unit of the NZDF, and all its personnel are NZDF employees.

10.36 Advice and research relating to science and technology issues is an important input to military capability development and management, particularly in the early 'policy' stages when the specifications for new or enhanced platforms and equipment are being developed. It is also important for the development of wider strategic policy that Defence keep abreast of relevant trends and developments in science and technology. This Assessment has identified

scope for establishing a closer relationship between the work of policy and capability development and the work of the DTA.

- 10.37 Aurecon observed that its discussions with stakeholders had indicated that the majority of the work currently undertaken by the DTA was centred on resolving technical issues that arose during procurement process. In Aurecon's view, this was not a cost effective use of the technical resources and was a cause of considerable frustration, particularly as some of the issues could either have been avoided or resolved much more effectively had the DTA been involved at an earlier stage. In addition, it also diverted resources from research activities which would otherwise increase the DTA's knowledge and appreciation of emerging technologies.
- 10.38 Aurecon also considered that analysis and management of technological risk was a critically important function in capability development process, given that technology half-life is now typically quite short. In the situation where a major project may span many years between concept and implementation, and platforms and equipment may be in service for several decades, it is important to ensure that technologies which are about to be superseded are not specified and that emerging technologies, which may soon become affordable and mainstream, are not prematurely rejected.
- 10.39 This Assessment concurs with those views. It did not, however, examine issues relating to the organisational form or optimal size of the DTA. Other organisational forms are possible – for example, as a stand-alone Crown entity, company or research institute. In such forms, the DTA could adopt a business model in which it would earn revenue by undertaking research and providing advice to a range of customers. Recent fiscal pressures have restrained plans to extend the size of the DTA and other sources of revenue could create more scope for development. There is a case for examining these issues in more detail as part of the detailed organisational restructuring proposed in this section.

## Independent Advice to the Minister of Defence

- 10.40 One consequence of undertaking many policy and development tasks jointly is that advice provided to the Minister of Defence by the Ministry and the NZDF may be perceived as more closely aligned. The proposals in this Assessment are intended to preserve the ability of each organisation to provide independent streams of advice to the Government (see paragraph 10.19 (iii) above). However, the Minister may wish to supplement the advice received from Defence officials with other independent advice and counsel.
- 10.41 There is a range of options for establishing ministerial advisory bodies. For example, it can be done:
- By statute, which provides the advisory body with a legal persona and, if so desired, the status of a body corporate. The statute may also specify the number and type of members and the process by which those members are appointed, may prescribe the functions and powers of the

advisory body, and may provide for the engagement and funding of an independent secretariat.

- By Cabinet decision, in which the nature, functions and membership (whether in general or in particular) of the advisory body are specified in the decision. One consequence of establishing an advisory body pursuant to a Cabinet decision may be (depending on the specific terms of the decision) that it could also require another Cabinet decision to change or disestablish it.
- By Ministerial decision, which enables the Minister to exercise considerable flexibility about who is appointed to the advisory body and what advice is sought.

10.42 Bodies that are established pursuant to a Cabinet or Ministerial decision cannot acquire or exercise legal powers other than those that can be lawfully conferred by delegation pursuant to existing legislation.

10.43 This Assessment has concluded that the extant accountability relationships of the Secretary of Defence and Chief of Defence Force to the Minister under the existing legislation<sup>1</sup> should continue intact. They should not be confused or diluted by interposing a body that has decision rights or other executive powers over the resources or management of either organisation. This implies that the function of such a body should be confined to the provision of advice. In turn, this implies that it would be unnecessary to establish the body by statute. It would be sufficient if it were simply established pursuant to a Ministerial decision.

10.44 Should the Minister wish to establish an independent advisory body, there is a range of options relating to its membership. It is likely that the Minister would wish at least some members to have an in-depth knowledge of defence issues. In addition, and as Michael Wintringham observed, *'Ministers require advice on our defence capabilities which fits into a national security as well as a foreign policy framework'*. This highlights the need for members who have wider foreign affairs and security sector expertise. Finally, valuable advice relating to management and organisational performance can be obtained from appointees with substantial private sector experience. The membership could therefore include:

- Minister(s) in the defence portfolio;
- A chairperson (who may also be someone in the following categories);
- Two members with substantial private sector experience;
- One or two members with substantial policy experience;
- One or two members who are former senior military officers;
- One or two members drawn from relevant academic specialties;

10.45 To provide up-to-date information and to help the ministerial advisory body maintain links with current management intentions, it would generally be

---

<sup>1</sup> Most notably, the State Sector Act 1988, the Public Finance Act 1989 and the Defence Act 1990.

essential that the Secretary and Chief of Defence Force attend meetings, although they would not be members.

10.46 To avoid any possible confusion, the proposed JMB referred to in paragraph 10.22 is not a ministerial advisory body in the sense that the expression is used in this section. Unlike the advisory body, the JMB *would* exercise executive functions. Similarly, the external appointees referred to in paragraph 10.23 would provide advice to the Secretary and Chief of Defence Force and should not therefore be appointees to the ministerial advisory body (since that would create a potential conflict of interest).

## Next Steps

10.47 Further work will be needed to determine the exact form and function of the JMB and the consequential administrative arrangements. Much of the structure below the JMB can be determined by the two chief executives, but Ministers and Cabinet will need to be assured that whatever structure is proposed is likely to deliver the expected results. Further work is also needed to identify and draft any necessary changes to legislation, and to develop a detailed implementation plan.

## Recommendations

### *Organisational Structure*

10.48 That the Ministry of Defence and the NZDF be reorganised on the following basis:

- retention of two separate organisations;
- retention of the sole authority and accountability of each chief executive for those functions not specifically designated in legislation as 'joint';
- retention of the right of each chief executive to provide independent advice to Government;
- the establishment of a Joint Management Board to exercise joint authority and accountability of those functions specifically designated in the legislation as 'joint', supplemented by the expertise of independent members from outside Defence;
- implementation of appropriate administrative arrangements within the Ministry and NZDF for the joint discharge of joint functions;
- retention of the safeguards of Cabinet authority for all major capability and fiscal decisions, as well as scrutiny of the capability process (from central agencies and within defence), together with concurrent and post procurement project audit and evaluation; and
- amendment of the Defence Act 1990 to provide both the Ministry and the NZDF with statutory rights of prompt access to relevant information held by the other organisation.

10.49 That the Secretary of Defence and Chief of Defence Force, in consultation with central agencies, should undertake additional work on the implementation of a

Joint Management Board, including identifying the necessary legislative and organisational changes, and report their conclusions to the Minister of Defence.

- 10.50 That in undertaking the detailed work on the implementation of the Joint Management Board, the Secretary and Chief of Defence Force should examine the role of the DTA in the revised structure, and in particular to the organisational form and size that would best enable it to discharge that role, and report their conclusions to the Minister of Defence.

### *Procurement*

- 10.51 That, as an integral part of the work relating to the implementation of a Joint Management Board, the Secretary of Defence and Chief of Defence should determine how they will strengthen the procurement function, as recommend by Aurecon, by establishing a defence capability group that is drawn from both organisations and has with a whole-of-life focus, and report their intentions to the Minister of Defence.

### *Evaluation*

- 10.52 That the evaluation of the performance of the CDF should become the responsibility of the State Services Commissioner, and that the Defence Act be amended accordingly;
- 10.53 That the evaluation functions of the Ministry of Defence should include the following aspects:
- i determining whether the operational activities of the NZDF are contributing appropriately to the outcomes specified by the Government;
  - ii determining whether the NZDF has produced the capability and operational outputs required by the Government to the standards required by the Government; and
  - iii determining whether the capability and operational outputs of the NZDF are being produced in an efficient and effective manner.
- 10.54 That the Secretary of Defence, in consultation with the Chief of Defence Force, should develop proposals for how the current evaluation capabilities of the Ministry of Defence should be strengthened to discharge these functions and report accordingly to the Minister of Defence.
- 10.55 That the Defence Act 1990 be amended to provide for the right of the Secretary of Defence and Chief of Defence Force to access all information held by the NZDF and Ministry of Defence respectively to enable the effective discharge of their responsibilities.
- 10.56 That the working of the proposed new organisational arrangements be reviewed after three years following their implementation.



*Ministerial Advisory Body*

- 10.57 That the Minister of Defence consider whether there is merit in establishing a (non-executive) advisory committee to provide the Minister with additional independent advice on defence policy and management issues.

## Chapter 11

# Summary Of Recommendations

11.1 The Government has reaffirmed the need for a responsive, versatile, balanced and professional NZDF that is able to conduct a range of tasks, particularly in the South Pacific, but also alongside friends and partners further afield, and which is financially sustainable. In addressing the alignment between New Zealand's strategic outlook, military capabilities and funding, the recommendations in this Assessment, copied below, provide a pathway for doing this.

11.2 The Assessment recommends:

### Regular Reviews

11.3 That a Defence Assessment be undertaken at regular intervals of least every five years which:

- tests current policy settings;
- updates New Zealand's international strategic context and outlook;
- establishes a clear logic linking New Zealand's strategic environment with the roles and tasks of the NZDF and the capabilities required to undertake them; and
- provides government with advice on any funding and operational implications.

### Defence within a National Security Framework

11.4 That an overarching national security strategy for protecting New Zealand, our people, and our interests be developed which:

- reflects New Zealand's core values;
- responds to the major security challenges and drivers of instability; and
- brings together the objectives of all ministries, agencies, and forces involved in protecting our national security.

### New Zealand's Strategic Context and Outlook to 2035

11.5 The Assessment recommends that future decisions around defence capability should be guided by the following judgements:

- New Zealand continues to face no direct military threat;
- the international strategic outlook is for more instability, including in the South Pacific;

- the strategic balance in Asia is shifting;
- international military operations will continue to be more common than unilateral action;
- conflict within states is more probable than war between states;
- inter-state warfare will remain a feature of the international security environment; and
- New Zealand's security interests are best served by strong partnerships with friendly countries, and an international environment in which the rules and norms of international behaviour align with those of New Zealand and are widely accepted.

## Principal Tasks for the New Zealand Defence

11.6 In order of priority, and based on the assessment of the strategic environment in Chapter 3, the Assessment recommends that the principal roles and tasks of the NZDF should be:

- the protection of New Zealand, our people, land, territorial waters, natural resources and critical infrastructure;
- honouring our alliance obligations to Australia;
- contributing to peace and stability in the South Pacific, including by being able to take an independent leadership role when necessary;
- making an appropriate contribution in support of peace and security in the Asia-Pacific region;
- protecting New Zealand's global interests and core values by contributing to international peace and security, and the international rule of law; and
- being prepared to respond to sudden shifts and other disjunctions in the strategic environment.

11.7 In the protection of New Zealand, the NZDF should:

- ensure the sovereignty of New Zealand's EEZ and territorial waters;
- provide an appropriate counter-terrorist response capability;
- provide support to civil agencies in a range of tasks, including disaster relief and search and rescue;
- contribute to whole of government efforts to promote the economic, security, environmental, scientific, health, and social objectives of New Zealand;
- contribute to whole of government efforts to monitor the strategic environment; and
- provide a limited capability to protect our maritime approaches and territory in the unlikely event of a conventional military threat.

- 11.8 In meeting our alliance commitments with Australia, the NZDF should:
- operate with the Australian Defence Force (ADF) to protect Australia's territorial sovereignty;
  - work with the ADF in support of a safe and secure South Pacific;
  - examine options for enhancing CDR, including the formation of a Pacific-focused Ready Response Force; and
  - remain interoperable with the ADF.
- 11.9 In contributing to peace and security in the South Pacific, the NZDF should:
- together with Australia, meet any reasonable foreseeable contingency, including by:
    - contributing to, or possibly leading, military operations;
    - responding to humanitarian and/or natural disasters;
    - assisting with maritime surveillance and search and rescue;
    - exercising regularly in the region; and
    - supporting the professional development of regional defence and security forces.
- 11.10 In the Asia-Pacific region, the NZDF should:
- make an appropriate contribution in support of peace and security;
  - support regional institutions and process, such as the ARF;
  - continue to play an active role in FPDA activities;
  - continue to develop good bilateral defence relationships;
  - support a continuing US security presence;
  - exercise and train with regional armed forces;
  - support freedom of commerce;
  - support regional efforts to counter terrorism, the proliferation of weapons of mass destruction, and transnational crime; and
  - provide an appropriate response to humanitarian and natural disasters.
- 11.11 Globally, the NZDF should:
- contribute to international security operations, whether led by the United Nations, UN sanctioned, or in support of other collective security arrangements; and
  - provide an appropriate response to humanitarian emergencies and natural disasters.
- 11.12 Ten principles will guide Defence in ensuring that the NZDF is able to perform the roles and task listed above. They are that the NZDF will:

- be equipped and trained for combat;
- be deployable (this includes having strategic projection capabilities, and being self-reliant and flexible once deployed);
- be interoperable with our principal partners, especially Australia;
- be held at appropriate levels of readiness;
- have sufficient depth to sustain force elements for long enough to achieve the Government's objectives;
- be up to date in doctrine and technology (this includes emphasising 'jointness' and being 'networked enabled');
- be optimised for intra-state conflict;
- Retain some capabilities capable of contributing to mid to high intensity inter-state warfare;
- base capability decisions on what is essential to meet the Government's defence and security objectives in New Zealand's maritime zone and the South Pacific, from which military contributions in Asia and further afield can be drawn; and
- have cost-effective capabilities.

## Military Choices

11.13 Defence will prioritise capabilities in the following areas:

- deployable ground forces in sufficient numbers, and including supporting elements such as engineers and medics.
- strategic projection and logistic capacity to get force elements to where they are needed, and sustain them once there.
- intelligence, surveillance and reconnaissance capabilities to understand and interpret the operational environment, including maritime patrol tasks; and
- maintaining combat capabilities (including in the areas above) which can meaningfully contribute to coalition operations.

11.14 Within the above priorities, the corresponding personnel and equipment must be embedded in network-enabled command and communication structures which support:

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

11.15 New Zealand's broader national security requirements should be taken into account in the acquisition and use of defence capabilities.

11.16 Based on the strategic context in recommendation 11.5, three pathways for addressing the future personnel and capability mix of the NZDF have been identified:

- the Low pathway would retain the personnel, structure and platforms of the NZDF, but at declining levels of effectiveness;
- the Middle pathway would increase personnel numbers in the NZDF and tackle obsolescence issues inherent in the low option; and
- the High pathway would build on the middle option and allow targeted enhancements of the NZDF's capabilities.

11.17 The three pathways provide choices for the Government in how, and how quickly, the existing NZDF should be developed. They represent different intensification and strengthening of capabilities, not a differently structured force. Indeed, the Government could choose to retain one option as a longer term goal, while accepting a more affordable choice in the interim.

11.18 This Assessment recommends that the Middle pathway provides an appropriate response to the strategic circumstances set out above. It rebuilds the NZDF so that its utility nationally, regionally and globally is consistent with the forecast strategic environment.

11.19 Based on the Middle pathway, this Assessment recommends that a capability plan should be developed that reflects the priority areas identified above and includes:

- increased Army strength;
- enhanced Special Forces;
- eight NH90 and eight A109 helicopters (five upgraded and possibly armed);
- the acquisition of a new shorter range maritime air patrol capability;
- a more versatile replacement for HMNZS *Endeavour* in 2013/14;
- a replacement for HMNZS *Canterbury* at the end of her life;
- replacements for the C130 and B757 fleets at the end of their life;
- P3 Orion fleet enhanced and replaced at the end of the aircrafts life;
- replacement of the in-shore and off-shore patrol vessels at the end of their life;
- the acquisition of an imagery satellite capability; and
- upgrade of the ANZAC frigates, and replacement at the end of their life with an equivalent capability.

11.20 Ministers will still have to consider and approve funding for specific business cases, consistent with Crown-wide budget and capital asset management approaches.

- 11.21 The High pathway should serve as a possible pathway for the NZDF should the fiscal environment allow or the strategic environment deteriorate.

## The Total Defence Workforce

- 11.22 Recognising that the effectiveness of the NZDF depends on the number and quality of its personnel, both military and civilian, the Assessment recommends that:
- as a legislative opportunity arises, the definitions in the Defence Act 1990 relating to territorials and reserves, including the names of the bodies into which they are enlisted, be amended and updated to improve clarity and better reflect the roles that they now undertake;
  - the Ministry of Defence and the NZDF, in consultation with the Department of Labour, should jointly review the current legislation to determine if amendments can be made that will better facilitate the ease with which Reserve Forces can be released from their regular employment so that they can be deployed on operations; and
  - the NZDF should develop new career-transition policies and initiatives to encourage the re-engagement of Reserve Force and former Regular Force personnel;
  - in relation to positions that require subject matter expertise, including management position, the NZDF should adopt the principles that:
    - all positions should be carefully and critically examined to determine what expertise, whether military or non-military or both, is required to discharge the requirements of the position successfully;
    - positions should only be filled by personnel with the necessary expertise; and
    - positions should be filled by the person best fitted to do so, whether or not that person is uniformed or civilian.
  - the NZDF should develop new approaches to senior military personnel for broader leadership roles; and
  - the NZDF should develop partnerships with other government agencies in order to facilitate joint training;
  - the NZDF should continue to develop an improved human resource research, and to research critical areas such as the causes of attrition, to support fact-based policy development and organisational decision-making.

## Financial Context And Costs Of Capability Pathways

11.23 The Assessment recommends that a regime for funding and financial management be implemented that has the following characteristics:

- annual re-forecasts of capex requirements for the next 20 years [a current requirement of CAM];
- annual re-forecasts of opex requirements for the next 20 years;
- use of rolling ten-year capex and opex planning profiles that maintain opex and capex in balance, are updated annually and are subject to full revisions at intervals of not more than five years in the course of a Defence Assessment;
- the annual approval by Cabinet of the NZDF's expenditure proposals for the next fiscal year within the context of the rolling ten year planning profiles;
- alignment of capex and opex in any capability funding decisions, so that any decision to approve a capital injection should also address the opex implications;
- some flexibility for moving output funding across fiscal years so long as it remains consistent with the indicative planning profiles; and
- protection against opex increases arising from asset revaluations.

11.24 That the NZDF, the Ministry of Defence and the Treasury undertake further work on the detail of how such a regime could work in practice, and report their conclusions to the Minister of Finance and the Minister of Defence.

## Defence Estate and Infrastructure

11.25 That the NZDF adopt the 'progressive' scenario as its strategic objective for the recovery and future development of the Defence estate, and move to implement that scenario as quickly as the available funding allows.

## Procurement and Organisational Reform

11.26 That the Ministry of Defence and the NZDF be reorganised on the following basis:

- retention of two separate organisations;
- retention of the sole authority and accountability of each chief executive for those functions not specifically designated in legislation as 'joint';
- retention of the right of each executive to provide independent streams of advice to the Government;



- retention of the right of each chief executive to provide independent advice to Government;
- the establishment of a Joint Management Board to exercise joint authority and accountability of those functions specifically designated in the legislation as “joint”, supplemented by the expertise of independent members from outside Defence;
- implementation of appropriate administrative arrangements within the Ministry and NZDF for the joint discharge of joint functions;
- retention of the safeguards of Cabinet authority for all major capability and fiscal decisions, as well as scrutiny of the capability process (from central agencies and within defence), together with concurrent and post procurement project audit and evaluation; and
- amendment of the Defence Act 1990 to provide both the Ministry and the NZDF with statutory rights of prompt access to relevant information held by the other organisation.

11.27 That the Secretary of Defence and Chief of Defence Force, in consultation with central agencies, should undertake additional work on the implementation of a Joint Management Board, including identifying the necessary legislative and organisational changes, and report their conclusions to the Minister of Defence.

11.28 That in undertaking the detailed work on the implementation of the Joint Management Board, the Secretary and Chief of Defence Force should examine the role of the DTA in the revised structure, and in particular to the organisational form and size that would best enable it to discharge that role, and report their conclusions to the Minister of Defence.

11.29 That, as an integral part of the work relating to the implementation of a Joint Management Board, the Secretary of Defence and Chief of Defence determine how they will strengthen the procurement function, as recommend by Aurecon, by establishing a defence capability group that is drawn from both organisations and has with a whole-of-life focus, and report their intentions to the Minister of Defence.

11.30 That the evaluation of the performance of the CDF should become the responsibility of the State Services Commissioner, and that the Defence Act be amended accordingly;

11.31 That the evaluation functions of the Ministry of Defence should include the following aspects:

- i Determining whether the operational activities of the NZDF are contributing appropriately to the outcomes specified by the Government;
- ii Determining whether the NZDF has produced the capability and operational outputs required by the Government to the standards required by the Government; and

- iii Determining whether the capability and operational outputs of the NZDF are being produced in an efficient and effective manner.
- 11.32 That the Secretary of Defence, in consultation with the Chief of Defence Force, should develop proposals for how the current evaluation capabilities of the Ministry of Defence should be strengthened to discharge these functions and report accordingly to the Minister of Defence.
- 11.33 That the Defence Act 1990 be amended to provide for the right of the Secretary of Defence and Chief of Defence Force to access all information held by the NZDF and Ministry of Defence respectively to enable the effective discharge of their responsibilities.
- 11.34 That the working of the proposed new organisational arrangements be reviewed after three years following their implementation;
- 11.35 That the Minister of Defence consider whether there is merit in establishing a (non-executive) advisory committee to provide the Minister with additional independent advice on defence policy and management issues.

# Glossary

- *Airlift (Strategic and Tactical)*: the capability to transport and deliver forces and matériel through air in support of strategic and/or tactical objectives.
- *Attrition*: the loss of personnel and/or matériel.
- *Baseline*: the level of funding approved for any given area (i.e. Defence). All amounts within baselines are included in the forecasts.
- *Capability*: refers to the personnel, equipment, platforms and/or other matériel that affect the capacity to undertake military operations.
- *Capability Life Cycle*: refers to the 'life cycle' that begins with the identification of the need to address a capability gap. This need is progressively translated into a working capability system that is operated and supported until it reaches the end of its life and is ultimately withdrawn from service. The management of a specific capability life cycle implies a **whole-of-life capability** focus.
- *Capital expenditure*: refers to capital used to acquire or upgrade physical assets such as military equipment, infrastructure and other capital items. Also called capex.
- *Coalition*: a force composed of military elements of more than one nation that have formed a temporary alliance for some specific purpose.
- *Collective security*: where a group of sovereign states form a general system of organisation designed to maintain peace and security as an indivisible entity.
- *Combat*: military operations where the use or threatened use of force, including lethal force, is essential to impose will on an opponent or to accomplish a mission.
- *Combat service support*: the support supplied to combat forces, primarily in the fields of administration and logistics (supply, maintenance, transportation, health services, and other services).
- *Combat support*: the provision of fire support and operational assistance to combat elements, including intelligence and communications.
- *Command and Control*: the exercise of authority and direction by a properly designated commander over assigned and attached forces. Command and control functions are performed through an arrangement of personnel, equipment, communications, and procedures employed by a commander in planning, directing, coordinating and controlling forces

in the accomplishment of a mission. A command and control capability facilitates this. Also called C2.

- *Commercial off-the-shelf*: refers to technology and/or equipment which is ready-made and available for sale.
- *Counter-proliferation*: refers to activities to combat proliferation, including diplomacy, arms control, export controls, intelligence collection and interdiction.
- *Defence Attaché*: refers to a military officer based in some New Zealand High Commissions and Embassies overseas whose role is to provide liaison between New Zealand defence and security interests and those of the nation in which they reside in a way that enhances New Zealand's broader interests.
- *Deployability*: refers to the extent to which someone or something is operationally deployable.
- *Depreciation*: refers to the amount by which the value of an asset reduces each year over its life due to usage, the passage of time, wear and tear, and/or other such factors. Depreciation is allocated as an operating expense.
- *Diarchy*: an organisational arrangement in which the Chief of Defence Force and the Secretary of Defence jointly manage a single Defence organisation, reporting jointly to the Minister of Defence.
- *Doctrine*: the fundamental principles by which military forces or elements guide their actions in support of national objectives.
- *Ex ante and post ante audit*: a process for assessing the quality of a programme or institution before (*ex ante*) and after (*ex post*) it has been in operation in order to establish strengths and weaknesses.
- *Force element*: units which directly contribute to the delivery of defence force outputs, and which may form part of an operational force.
- *Force protection*: actions taken to prevent or mitigate hostile actions against NZDF personnel, resources, platforms and critical information. Can be defensive or offensive, and passive or active.
- *Independent and Contracted Reviewer*: Both reviews informing the procurement and organisational reform component of this Defence Assessment were independent. The 'Independent Reviewer' (Aurecon), however, was selected independently of Defence.
- *Intelligence, surveillance and reconnaissance*: refers to the capability to collect, process, exploit and disseminate accurate and timely information

that provides force elements with the situational awareness necessary to successfully plan and conduct operations. Also called ISR.

- *Intensity of conflict (high, medium, low):* refers to the overall tempo, degree of violence and technological sophistication of the violence employed and/or encountered. The rate of consumption of resources can also be a measure of intensity. The intensity of a conflict is **high** when the violence is continuous or when encounters between combatants are particularly violent; **medium** when violence is frequent; and **low** when violence is occasional. The intensity may vary during the course of a particular conflict and across parts of an operational theatre. It will also vary for individual participants, depending on their particular role or function.
- *Interoperability:* the ability of systems, units, or forces to provide services to, and accept services from, other systems, units, or forces and to use the services exchanged to enable them to operate effectively together.
- *Inter-state conflict:* refers to conflict or warfare between states, and involving opposing regular armed forces.
- *Intra-state conflict:* refers to conflict or warfare between organised groups within the same nation state. Intra-state conflict can be high-intensity, and often involves both regular and irregular armed forces. It can result in large numbers of casualties and/or the mass displacement of civilians within the area of conflict.
- *Joint activity:* refers to activities, operations and/or organisations, in which elements of more one Service – a joint force – from the same nation participate.
- *Jointness/Joint effect:* an integrated approach which allows more than one force element to become more than merely the sum value of its components.
- *Networked enabled capability:* refers to the ability to link sensors, decision-makers and weapons systems so that information can better deliver a military outcome.
- *Non-combat operations:* military operations where weapons may be present, but their use or threatened use is for self-protection purposes and not essential to the accomplishment of the mission.
- *Operating expenditure:* Defence operating expenditure is categorised under four labels – *personnel*, which includes human resource costs; *depreciation* (see above); *capital charge*, which is a fee charged from departments by the Crown for holding capital (analogous to interest on borrowed money); and *other operating*, which includes everything else. Also call opex.

- *Operational tempo*: the rate or rhythm of military operations. Can be low, medium, or high.
- *Peace support operations*: a generic term describing operations that make use of diplomatic, civil and military means to restore or maintain peace. Such operations may include conflict prevention, peace making, peace-enforcement, peace keeping, and peace building.
- *Platform*: any vessel, vehicle, aircraft, and/or other delivery system from which weapons, personnel, and/or matériel can be deployed.
- *Public Private Partnerships*: usually involve a contract between a public sector authority and a private party, in which the private party provides a service or project and assumes the financial, technical and operational risk for it.
- *Regional security architecture*: refers to a regional format for preventive diplomacy. It is a means of getting nation states together, including at a senior political level, on a routine basis to discuss defence and security, and to encourage familiarity and transparency.
- *Sealift*: the capability to transport and deliver forces and matériel by sea in support of strategic and/or tactical objectives.

# Terms of Reference Defence Review 2009

1. The Secretary of Defence, in consultation with the Chief of Defence Force and other stakeholders, will undertake a defence assessment as prescribed by Section 24(2)(c) of the Defence Act 1990 and will also review and report on the other matters specified in these Terms of Reference. This exercise will be known as the *Defence Review 09* (the Review).
2. The Review will report to the Government its analysis and conclusions and the outcome of the consultation processes required in these Terms of Reference. Upon receipt of the Review report, the Government will finalise its defence policy. That policy will be published in the form of a Defence White Paper early in 2010.
3. These Terms of Reference have been approved by Cabinet.

## Scope

4. The purpose of these Terms of Reference is to provide guidance for the Review in respect of its context, scope, method, deliverables, and timeframe.
5. The Review is required to allow major issues currently facing Defence to be addressed via a process that seeks wide input and provides options that will contribute to Government policy. The major issues are:
  - How does the present and potential future strategic environment impact on the security of New Zealand?
  - How does Defence contribute, and may in future contribute, to the security of New Zealand, Australia, the South Pacific, the Asia-Pacific region and globally.
  - How does Defence advance New Zealand's foreign policy and the relationship between Defence and other Government agencies to enhance a 'whole of Government' approach?
  - How well do the current Defence outputs meet the actual needs now and in the near future, and how are the actual capabilities including those under consideration or development, aligned to those outputs?

- Looking to the medium and longer term, what are the capabilities needed against requirements in the future and what are the implications arising from that analysis?
  - What are the key issues around Defence personnel, including training, retention, recruitment and the role of Reserves?
  - What is the best organisational structure for the Ministry of Defence and the New Zealand Defence Force?
  - When and how should military capabilities be used for non-military purposes to support the work of other (civilian) government agencies?
  - How best can procurement, defence infrastructure and real estate be managed?
  - What are the best financial management procedures to meet the long term defence funding requirements?
6. The Review period is characterized by two differing imperatives. Due to the long service life of major acquisitions, the Review will consider the period from 2009 until at least 2035. However, the next decade will require the Government to address the fact that some Defence platforms and systems are reaching the end of service life and therefore, the Review is to focus in more detail on the immediate period from 2009 to 2016.
7. The overall objective of the Review is to provide advice that will enable the Government to meet its commitment to publish a White Paper in its first year of Government.
8. The White Paper will set out a framework for the defence of New Zealand through addressing New Zealand's vital strategic interests including the security of its sovereign territory and exclusive economic zone, its special relationship with Australia, the need to build security in the South Pacific, its relationships in the wider Asia-Pacific region and its contribution to the global community.
9. Further overarching objectives will be to maintain a broad base of support within New Zealand, show how New Zealand will continue to make a useful and credible contribution to our security partnerships and set out a practical, achievable and sustainable plan and planning processes that address the major issues identified in these Terms of Reference.
10. During the period of the Review itself, the Associate Minister of Defence will lead concurrent companion studies into:
- New Zealand's Defence Industry, examining options for economic improvement in the sector;
  - The role of the NZ Defence Force in Youth Programmes and the NZ Cadet Force; and



- Voluntary National Service, including examining future options for a whole of Government strategy.

## Context

11. The last comprehensive defence assessment undertaken in accordance with the Act, *The Shape of New Zealand's Defence*, was published in 1997. Defence policy since that time has been informed by The Foreign Affairs, Defence and Trade Committee of Parliament Inquiry into Defence Beyond 2000. and the May 2001 Government Defence Statement: A Modern, Sustainable Defence Force Matched to New Zealand's Needs.
12. Both the National Party and the ACT Party had pre-election commitments to produce a defence White Paper within one year of taking office.
13. Over the last decade there has been a growing acceptance of the need for a multi-party approach to defence policy development. This has been coupled with a similar acknowledgement of where New Zealand's strategic interests lie. Beyond our shores, our first priority is regional security. New Zealand, in partnership with Australia, needs to be able to deal with any reasonably foreseeable contingency within the region. The second priority is a broader engagement outside our region. In this case, New Zealand's capability is limited and is drawn largely from the capabilities acquired for our regional role.
14. The Government acknowledges that the necessity for a review is confirmed by the changes in the global security environment over the last decade, the significant challenges facing Defence (including operational tempo, personnel and capital procurement) and the increased role of Defence in supporting whole of government goals.
15. The review process will take account of wider policy and economic imperatives, including fiscal sustainability. The current relative level of defence spending will be used as the baseline scenario.

## Procedure

16. In accordance with Section 24(2)(c) of the Defence Act 1990, the Secretary will undertake a defence assessment in consultation with the Chief of Defence Force.
17. Recognising the desirability of maintaining both a political and public consensus on New Zealand's broad security interests, the Secretary will draw on input from independent experts and public consultation with key stakeholders including the Royal New Zealand Returned and Services Association and other ex-service groups, the New Zealand Defence Industry and New Zealanders and New Zealand-based groups with an interest in

Defence. This consultation will involve producing a Discussion Document based on the current status of Defence to inform public consultation. The public consultation will be completed in time to inform the development of the options contained in the review.

18. The leadership and initiation of the public consultation process will be undertaken by both Ministers. The Associate Minister will be responsible for the ongoing organisation, communication and management of the public consultation process, although both Ministers will be actively involved in public discussion forums.
19. In undertaking his assessment, the Secretary will be supported by a panel of three independent advisers (the Panel) to be appointed by the Minister of Defence. These advisers have been selected for their experience in international relations at the political level, military matters, commercial affairs, management and organisational change. The Panel comprises:
  - Mr Simon Murdoch                      Secretary of Foreign Affairs
  - Mr Martyn Dunne                      Comptroller, New Zealand Customs Service
  - Mr Robert McLeod                      Managing Partner, Ernst and Young.
20. The Panels mandate will cover the entire Terms of Reference including strategic context, structures, organisation, capabilities and procurement
21. The Secretary will consult with and invite input from the Panel throughout the conduct of his assessment. The Panel will also communicate its views on any matter directly to the Minister of Defence, and will consider issues put to it by the Minister.
22. The Panel will be supported by staff provided by the Ministry of Defence and/or the New Zealand Defence Force. Subject to the agreement of the Minister of Defence, the Panel may also engage expert or consultancy assistance, as it considers necessary, to inform its deliberations.
23. The Secretary of Defence and the Chief of the Defence Force will ensure the Panel has the full cooperation of the Ministry and the New Zealand Defence Force. The Minister of Defence will decide on matters of process that arise during the review.
24. The Government places a particular priority on ensuring that the procurement and budget procedures within the Ministry of Defence and the NZDF are cost effective, efficient and meet best international and commercial practice. The Secretary shall engage independent expert advice with recognised competencies in these areas to analyse and review existing capabilities and procedures and make recommendations on how best to implement reform.

25. Throughout the review, the Secretary will consult as required with other departments that may be affected including, in particular, those represented on ODESC, and will brief ODESC on the progress of the review at least monthly.
26. The Secretary may consult as necessary with New Zealand's security allies, partners and friends to address the issues within the scope of the Review, with particular reference to New Zealand's defence relationship with Australia.
27. Before concluding the Review, the Secretary will brief and confer with the Foreign Affairs, Defence and Trade Committee of Parliament.
28. In undertaking his review, the Secretary must seek to clarify and resolve differences of view. Where unresolved differences remain that materially affect either the policy direction or capability mix, these must be made explicit and alternative recommendations must be developed for Ministers' consideration and resolution.
29. All costs of the Review will be a charge against Vote: Defence.

### Deliverables

30. The Review will provide a report to the Minister of Defence that includes advice, options and supporting background material
31. Throughout the review process, the Secretary of Defence will update the Minister of Defence on the progress of the work as part of normal officials' meetings.

### Timeline and Completion

32. The Review will report to the Minister according to the following timeline:

Date	Review Process
30 <sup>th</sup> April	Overall plan for Review including all consultation phases submitted to Ministers
29 <sup>th</sup> May	Release of public Discussion Document and launch of public consultation process
30 <sup>th</sup> July	Completion of analysis of New Zealand's Defence objectives including military capabilities and statement of those objectives for approval by Ministers. Submission to the Cabinet Strategy Committee.
30 <sup>th</sup> September	Completion of public consultation

30 <sup>th</sup> November	Analysis (including financial implications) of the options for structure, organisation and capabilities that might meet New Zealand's Defence objectives. Submission to the Cabinet Strategy Committee.
29 <sup>th</sup> January	Review Complete
26 <sup>th</sup> February	White Paper Submission to the Cabinet Strategy Committee.
30 <sup>th</sup> March	White Paper Released

# The Three Capability Pathways

B.1 This Annex sets out in more detail the military capability pathways set out in Chapter 5.

## Low Pathway

*Land Forces (including Helicopter support and Special Forces)*

B.2 **Combined Arms Task Groups built around Manoeuvre Companies.** The Army would have a ceiling of 4,900 personnel. This size would allow the deployment of a combined arms task group (500-600 personnel) on operations up to mid-intensity for 12 months, after which it would have to draw down to a smaller force (up to 250 personnel). An additional reserve infantry company could be deployed for low intensity operations, although legislative changes to permit compulsory call-up, and protect their existing jobs would be needed to secure the numbers necessary. The reorganisation of the Army deployment structure would better reflect the varying nature of deployments and the physical ability to only meet smaller outputs without an increase in size (known as the Army Transformation Programme).

B.3 One of the Companies would be trained with a wider range of skills to enhance its combat effectiveness (known as Tier Two, equivalent to the US Rangers). The **Tier Two Company** would be able to operate as a regular infantry company, undertake some more demanding tasks, and support Special Forces operations.

B.4 **Land Combat.** LAV numbers reduced, and the fleet would be reconfigured to provide different variants, such as battlefield ambulances and protected command and control vehicles. A fleet of up to 90 LAVs would enable a deployment of up to 30 to be rotated (with crews), whilst maintaining training in NZ. Under this pathway, a small number of LAVs would receive a single upgrade of their running systems, missions systems and protection levels to maintain a deployable capability. Their effectiveness in a higher-intensity environment would, however, degrade over time due to the lack of further upgrade investment.

B.5 The new **helicopter fleet** will represent a step change in the rotary air support to land forces. The NH90 will be the primary tactical troop transport aircraft, with A109 conducting lighter roles. The NH90 will be fitted with self-protection systems but the A109 will not; this will restrict operational use of the A109. The personnel ceiling would dictate that the Air Force reorganise in order to generate operational crews for the A109.

### *Naval Combat*

- B.6 A partial self-defence upgrade of the **ANZAC frigates** would remedy obsolescence issues.
- B.7 The ANZAC frigates would be replaced with two combat-capable vessels in the late 2020s. Potentially more affordable war-fighting vessels with the necessary range, endurance and sea-keeping qualities might be available by that time, as various navies respond to cost pressures.
- B.8 The **Seasprite helicopter** would be upgraded to improve serviceability and maintain effectiveness, and then eventually replaced with a naval helicopter with similar sensor, weapon and self-protection capabilities. Naval helicopters will continue to provide the extended reach surveillance and air delivered weapon capabilities (air-to-surface missile and anti-submarine torpedo) for the frigates.

### *Maritime Patrol*

- B.9 The capability provided by the six current **P3K2 Orion** aircraft would be replaced with an equivalent level of capability, manned or unmanned, in about 2025. Studies closer to this date will determine the types of replacement platform. The **Offshore Patrol Vessels and Inshore Patrol Vessels** would be maintained, although their availability would be limited by the reduced number of crews imposed by the personnel ceiling.

### *Strategic Projection: Air and Sea Lift*

- B.10 The capability provided by the current **C130H Hercules** aircraft would be replaced at end of life (approx 2020) with an equivalent or better capability. The **B757** fleet would be replaced by 2025. Studies closer to replacement time will determine the most appropriate airlift fleet mix and ownership models.
- B.11 The **sealift ship** (CANTERBURY) would receive remedial work. The ship would later be given a midlife upgrade, and be replaced with a similar capability at end of life.

### *Command and Control (C2)*

- B.12 An ad-hoc only deployable C2 capability is maintained.

### *Intelligence, Surveillance and Reconnaissance (ISR)*

- B.13 A new ship would combine the capabilities of the two ships which are currently used for **diving, mine counter measures and military hydrographic operations**. The new ship will enable the NZDF to conduct a rapid assessment of a littoral area of operations prior to the arrival of the main force.

### *Joint Logistics*

- B.14 The current **Fleet Replenishment Ship** (ENDEAVOUR) would be replaced after 2013 with a similar capability to supply fuel, water and stores to NZDF frigates, OPVs and the naval vessels of coalition partners, so that they can remain on task for a sustained period. The current ship is a single hull tanker which will not be compliant after 2013 with international maritime regulations requiring the carriage of bulk fuel in double hull tankers.
- B.15 The current **Land Combat Service Support Groups** would be re-balanced within the existing personnel ceiling to provide tailored support to the reorganised land force. The re-balancing would increase efficiency of support elements and improve 'teeth to tail' ratio and reduce costs.

### *Joint Health*

- B.16 Although there would be no change to the structure of the NZDF medical services, new measures would be put in place to secure the services of civilian health specialists (e.g. surgeons and anaesthetists) to improve stabilisation surgical capability, and to conduct evacuation to out-of-theatre medical facilities. A Life and Limb saving capability is essential to safeguard and preserve capability of NZDF deployed personnel.

## Middle Pathway

### *Land Forces (including Special Forces)*

- B.17 The **Army** would increase in size to boost the sustainability and scale of deployments. There would be sufficient depth to sustain a maximum output of an 800-person strong land force on deployment for up to three years – a level the Assessment considered was the minimum required. This would also allow the Army to adopt a three grouping organisational structure across most functions, to best facilitate ongoing operational rotation. The LAV fleet would be progressively upgraded to ensure that a small number remain effective in a higher-end environment.
- B.18 Three additional **A109 helicopters** would be acquired, but as Commercial-Off-the-Shelf (cheaper than the military standard). These would be used for training, freeing up the military A109s for greater use on operations. The military A109s would be fitted with self protection to enhance their operational role, and possibly armed. A growth in Air Force personnel would enable the generation of the requisite number of A109 crews.

- B.19 Further development of the **Special Forces** capability is anticipated in this pathway. This should improve sustainability of Special Force contributions.

#### *Naval Combat*

- B.20 The ANZAC **frigates** would receive a more effective self-defence upgrade which would allow them to make a meaningful contribution in mid-intensity operations.
- B.21 A review would determine whether upgrading or replacing the Seasprite helicopters offers a more cost-effective choice.

#### *Maritime Patrol*

- B.22 The **wide-area surveillance** gap requires additional capability. A partially-owned or leased ISR Satellite capability would be introduced. This would provide a sustained and longer-range wide-area surveillance capability, enhancing New Zealand's overall ISR picture. This would allow existing maritime patrol assets to be more effectively targeted on areas of interest.
- B.23 **P3 Orions** would be fitted with self-protection and anti-submarine sensors, improving their combat capability, and utility for robust global contributions.
- B.24 A number of regional operational tasks, both for defence and other agencies, could be performed more efficiently in a **smaller surveillance aircraft** with short takeoff and landing capability, and sufficient range. A new lower-cost aircraft capability would therefore be acquired. This would increase both EEZ and South Pacific surveillance capacity. Depending on the system chosen, this could also offer some tactical transport capacity.
- B.25 **OPV and IPV** availability would be improved through the growth in Navy personnel allowing all vessels to be crewed.

#### *Strategic Projection: Air and Sea Lift*

- B.26 No change.

#### *Command and Control (C2)*

- B.27 A shadow-posted, trained and equipped **deployable headquarters capability** would be created to provide a ready response command and control capability.

#### *Intelligence, Surveillance and Reconnaissance (ISR)*

- B.28 No change.

#### *Joint Logistics*



- B.29 As part of restructuring the land force an **additional Land Combat Service Support Group** would be established to mirror the land combat organisation.

#### *Joint Health*

- B.30 Steps would be taken to increase the use of civilian health specialists (e.g. surgeons and anaesthetists) to produce a more sustainable stabilising surgical capability and to improve evacuation to out-of-theatre surgical assistance for severe and chronic cases. Additional equipment would also be procured.

### High Pathway

#### *Land Forces (including Special Forces)*

- B.31 The **Army** would increase to 6,300. This would allow a step-change in the use of LAVs, with one manoeuvre unit primarily focused on LAV-mounted combat. The LAVs would receive an upgrade of their running systems, fire control systems and protection levels to remain effective in a higher-end environment. The other two manoeuvre units would each be increased, to a total of four regular infantry companies, reducing reliance on **Reserves** for sustained operations. This would provide much greater flexibility in the land deployment pathways available to Government.
- B.32 The **engineer** capability would be increased, and reorganised into three composite engineer squadrons. This would reflect operational experience: a wide range of engineering skills is required to support security and stability operations. A deployable **Explosive Hazard Clearance Team** would be formed rather than being generated from existing positions.
- B.33 Depending on further analysis, the five military specification **A109s** would be armed with demountable rockets and guns. Although not designed for an attack role, this would enhance their utility in support of both conventional and special force operations, especially until ground-based fires are available.

#### *Naval Combat*

- B.34 A replacement **naval helicopter** would be purchased.

#### *Maritime Patrol*

- B.35 **Maritime patrol** capabilities would be further enhanced to better ensure all EEZ contingencies are insured against, especially multiple incidents. The appropriate mix of unmanned and manned platforms would need to be determined. Depending on confirmation after further analysis, the P3 Orions would be armed with air-to-surface missiles and precision guided munitions to further improve their combat

capability, and utility for robust global contributions.

#### *Strategic Projection: Air and Sea Lift*

- B.36 The B757s would be fitted with self protection to operate in a threat environment.
- B.37 An additional **sealift ship** with under-way replenishment capabilities would be purchased to replace the ENDEAVOUR and supplement the capability provided by CANTERBURY. The additional capability would both support the deployment and sustainment of land forces and the frigates and Offshore Patrol Vessels. Two sealift ships would enable the deployment of the required combined arms task group in a single voyage, and provide a constant supporting presence to land forces ashore (known as seabasing). It would mitigate the risk attached to unavailability of only a single sealift ship.

#### *Joint Logistics*

- B.38 The Land Combat Service Support Groups would be re-balanced to provide more tailored support to the deployed land force, especially for LAV-mounted operations.

#### *Joint Health*

- B.39 A sustainable medical capacity would be generated, ensuring NZDF could provide consistent 'level two' support for the full duration of its operations.

# Personnel Characteristics and Trends

## Personnel Numbers

C.1 The numbers employed by the NZDF as at 31 March 2010 are shown in the table below. Regular Force and Reserve Force personnel who are posted to NZDF Headquarters or Joint Force Headquarters are included in the total of their respective Services. The total for Reserve Forces includes only Active Reserves. The Civilian figures primarily comprise those employed in the Services, the corporate element of the Headquarters New Zealand Defence Force and the Shared Services<sup>1</sup> function. The Shared Services functionality has personnel throughout the NZDF providing support to all of NZDF across the country. In addition, as at 31 March 2010, 287 civilians were filling Military designated posts across the NZDF allowing Regular Force personnel to be used in front end outputs.

REGULAR FORCE	31/03/2006	31/03/2010	CHANGE
NAVY	1976	2197	221
ARMY	4541	5040	499
AIR FORCE	2362	2599	237
TOTAL	8879	9836	957

**Table 1. NZDF Regular Force headcount as at 31 Mar 2006 and 2010**

RESERVE FORCE	31/03/2006	31/03/2010	CHANGE
NAVY	305	335	30
ARMY	1920	1803	-117
AIR FORCE	205	194	-11
TOTAL	2430	2332	-98

**Table 2. NZDF Reserve Force headcount as at 31 Mar 2006 and 2010**

CIVILIANS <sup>2</sup>	31/03/2006	31/03/2010	CHANGE
NAVY	465	397	-68

<sup>1</sup> Shared Services include Communications and Information Systems, Defence Technology Agency, and the Joint Logistic Support Organisation.

<sup>2</sup> Civilians - Shared Services - A number of these areas were populated as a result of transfers out of the Single Services, hence their reduction in numbers. Civilians – Other is comprised of Headquarters Joint Force New Zealand, VANZ and Youth Development Unit. Growth in VANZ has come primarily from the legislated transfer of personnel from the Ministry of Social Development.

ARMY	790	716	-74
AIR FORCE	408	417	9
Civilians – HQNZDF	315	403	88
Civilians – Shared	211	619	408
Civilians - Other	30	123	93
<b>TOTAL</b>	<b>2219</b>	<b>2675</b>	<b>456</b>

**Table 3. NZDF Civilian numbers as at 31 Mar 2006 and 2010**

TOTAL NZDF	31/03/2006	31/03/2010	CHANGE
<b>TOTAL</b>	<b>13528</b>	<b>14843</b>	<b>1315</b>

**Table 4. Total NZDF numbers as at 31 Mar 2006 and 2010**

- C.2 Since 2006 the Regular Force has increased by 958 personnel (10.8%). Conversely, Reserve Forces have experienced a decline over the period, down by 98 personnel (4.0%). The total civilian headcount increased by 456 (20.5%) across the NZDF mainly in the now centralised Shared Services. Overall, funding increases have enabled the NZDF headcount to grow modestly by 1315 (9.7%) over the period 2005/06 to 2009/10.
- C.3 As at 31 March 2010, of the total number of specified positions within the NZDF (the “establishment”), 83% were filled.

### Key Demographic Characteristics

- C.4 In the Regular Force, as at 31 March 2010, officers comprise 21% and other ranks 79% of total personnel numbers. The proportions have remained approximately the same for the last 5 years.
- C.5 In terms of age, the averages have increased generally by a year over the last five years and currently are:

<b>Category</b>	<b>Average Age</b>
Regular Force	31 years
Reserve Forces	35 years
Civilian	47 years

- C.6 The age characteristics reflect differences in employment patterns. For example, Regular Force personnel are typically recruited at a young age and their employment is subject to a term contract, whereas the employment civilian employees may continue without a fixed term.

- C.7 In terms of gender ratios, the NZDF is still predominantly male. Proportions have remained approximately the same for the last 5 years. The breakdown is:

<b>Category</b>	<b>% Male</b>	<b>% Female</b>
Regular Force	83	17
Reserve Forces	83	17
Civilian	52	48

- C.8 In terms of ethnicity, the percentage breakdown is:

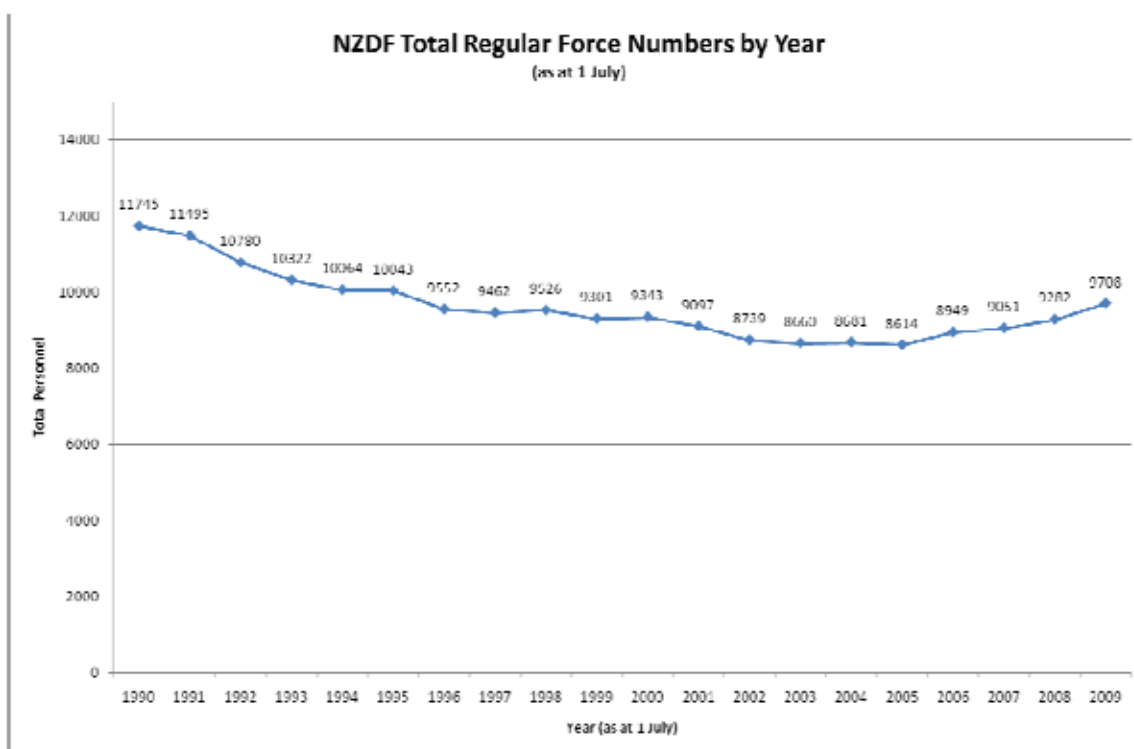
<b>Category</b>	<b>European</b>	<b>Maori</b>	<b>Pacific</b>	<b>Asian</b>	<b>Other<sup>3</sup></b>
Regular Force	46	18	3	1	28
Reserve Forces	40	11	3	2	34
Civilian	52	7	2	4	29

Excluding the classification change that altered the proportion of “European” and “Other”, these proportions have remained approximately constant over the last 5 years.

## Trends in Regular Force Personnel Numbers

- C.9 As a result of a changed emphasis in the policies of successive governments, the overall Regular Force personnel numbers declined significantly from 1990 until 2004. Between 2005 and 2008, increased funding was provided to enable numbers to grow again. The numbers of personnel deployed operationally over the period remained the same or was greater (during early East Timor deployments from 1999 to 2002). This means that the same deployment capability has been achieved with fewer personnel, albeit with attendant pressures on the NZDF.

<sup>3</sup> Of note is the high percentage of personnel reporting as ‘Other’. In 2006, Statistics New Zealand changed its classification rules so that those who reported themselves as ‘New Zealander’ or ‘Kiwi’ were classified as ‘Other’. This classification change accounts for the high incidence of the ‘Other’ ethnicity.



**Figure 2. NZDF Total Regular Force Headcount Numbers Since 1990**

C.10 As at 31 March 10 there were 9779 Regular Force personnel<sup>4</sup>. Of these:

- 7905 RF personnel were trained, available, ‘effective’ and contributing to Outputs;
- 1057 personnel were conducting initial induction or initial-trade training;
- 422 personnel were undertaking advanced training; and
- 395 were administratively unavailable on leave without pay, were sick, were overseas on projects, or were on secondment.

C.11 For Regular Forces over the last five years, there has been an increase in the number of personnel with 1- 4 years of service (now comprising over 35% of the NZDF) and those over 20 years (now comprising 12%, up a full percent on last year). The loss of experience over the last five years in personnel with the 9-20 years of service has been substantial and reduces the experience level of personnel in a number of important mid-level command and trade positions. This situation will be corrected, however, if the currently reduced rates of attrition continue.

<sup>4</sup> This figure excludes 57 Reserve Force personnel who were deployed as Regular Force.

## Trends in Reserve Force Personnel Numbers

### Composition

C.12 As at 31 March 2010, the numbers of active Reserve Force personnel were as follows:

Service	Number
Navy	335
Army	1803
Air Force	194
<b>Total NZDF</b>	<b>2332</b>

C.13 As shown in the graph below, and reflecting the same changed policy emphasis that affected Regular Force numbers, there has been a steady decline in the number of active Reserve Force personnel since 1990.



## Trends in Civilian Personnel Numbers

C.14 Reflecting the same policy changes that resulted in a Regular Force numbers, there was a decline in the number of Civilian personnel between 1990 and 2000. This trend has reversed in the period from 2000 to 2010, reflecting two influences: first, the need to rebuild some corporate capabilities of the NZDF and, second, a move to 'civilianise' a number of positions previously undertaken by uniformed personnel.

