The New Zealand Defence Force: Deployment to East Timor

Issues Papers

November 2001

Contents

	Page
Glossary of Terms	5
Glossary of Terms	
Introduction and Background	8
Our Objectives	8
East Timor: Location and Geography	
New Zealand's Military Involvement in East Timor	9
Background	
Scale of New Zealand's Military Involvement	10
Structure of the New Zealand Defence Force.	11
The Royal New Zealand Navy	11
The New Zealand Army	
The Royal New Zealand Air Force	12
Headquarters NZDF	
The Ministry of Defence	13
The Purchase Agreement	13
Our Approach	14
<u>1 – Operational Preparedness</u> .	
<u>Introduction</u>	
Expectations.	
<u>Findings</u>	
What does the Operational Preparedness Reporting System do?	20
Reporting on Joint Force Preparedness	21
Identification of Critical Item Deficiencies	
Addressing Identified Capability Deficiencies	
Analysing Preparedness Over Time	
The Army's New Performance Management System	
<u>Conclusions</u> .	28
2 – Contingency Planning.	
<u>Introduction</u>	
The Role of Intelligence in NZDF Contingency Planning	
<u>Using Intelligence for Contingency Planning – A Practical Case Study</u> .	
Expectations	
<u>Findings</u>	
Gathering Intelligence	
<u>Conclusions</u>	
The Strategic Planning Structure	
Expectations	
Findings	
<u>Conclusions</u>	
Forward Planning and Critical Path Identification	
Expectations	
Findings	
Forward Planning	44

Critical Path Planning	44
Force Element Options and Response Times	45
Reporting to the Government	46
<u>Conclusions</u>	
3 – Operational Planning	40
<u>5 – Operational Flamming</u> Introduction	
Expectations.	
<u>Expectations</u> <u>Findings</u>	
<u>Findings</u> How Operational Planning was Conducted	
The New Joint Forces Headquarters	
Conclusions.	
4. Pro deployment Training	50
4 – Pre-deployment Training	59
Expectations. Findings	
A Framework for Training	
Developing Training Programmes	
Delivery of Pre-deployment Training	
Drawing on Operational Lessons to Refine Training	
Conclusions Conclusions	
Concrusions	09
<u>5 – Contracting for Civilian Services</u> .	
<u>Introduction</u> .	
<u>Expectations</u> .	
<u>Findings</u>	
Preparedness Reporting	74
Identifying Mission-critical Equipment Deficiencies	
Funding	
Assessment of Equipment Needs	
Managing Equipment Enhancement Projects	
Moving the New Zealand Force to East Timor	
<u>Conclusions</u> .	87
6 - Public Relations, Parliamentary Reporting and Financial Management	89
Public Relations	91
Introduction and Expectations.	91
Findings.	91
Accountability Reporting.	
Introduction and Expectations.	
Findings.	95
The Annual Report	95
Forecast Report.	
Purchase Agreement	96
Financial Management	
Introduction and Expectations	99
<u>Findings</u>	
Costing and Reporting	100
Budgeting Preparations and Monitoring	100

Financial Management System	101
Management Controls	
Recovery of Deployment Costs for United Nations	
<u>Conclusions</u> .	
Public Relations	
Accountability Reporting	
Financial Management	
7 – Lessons Learned.	105
<u>Introduction</u>	
Expectations.	
Findings	
Operational and Strategic Lessons Learned	
Tactical Lessons Learned	
Potential Additional Sources of Lessons Learned Material	
What Lessons has the NZDF drawn from the East Timor Operation?	
Conclusions.	

GLOSSARY OF TERMS

Combat Viability

The ability of a force to achieve its military task or mission using allocated resources. Combat viability is a component of preparedness (see definition below).

Combined Operations

Operations conducted by forces of two or more allied nations in co-ordinated action toward common objectives. The INTERFET force was a combined operation.

Command and Control

The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, co-ordinating, and controlling forces and operations in the accomplishment of the mission.

Deployability

The capacity of a force element (see definition below) to move to an Operational Level of Capability (OLOC), complete final preparations, and assemble for deployment within a specified time.

Directed Level of Capability

The level of capability that the NZDF is funded to maintain during the financial year in order to provide the Government with options for the commitment of a military force.

Doctrine

A fundamental set of commonly understood principles that guide the use and actions of a military force or force elements in support of strategic objectives.

Employment Contexts

Descriptions of representative and illustrative security events for which there is a likelihood that the Government would expect to make a military response should they occur.

Force Element

A unit which directly contributes to the delivery of an NZDF output, e.g. a frigate or an infantry company.

Interoperability

The ability of force elements from diverse countries to work together. Interoperability is the product of shared training, exercises, standardisation of military doctrine and operating procedures, and the use of compatible equipment.

Joint Force

An operational force consisting of force elements from more than one Service. The New Zealand force sent to East Timor was a joint force, involving all three Services.

Logistics

The movement and supply of troops and equipment. In its most comprehensive sense, those aspects of military operations which deal with:

- design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of military material and equipment; and
- movement, evacuation, and hospitalisation of personnel.

Military Capability

The ability to achieve a specified military objective. The major components of military capability are force structure and preparedness. Force structure comprises the personnel and equipment assembled in force elements for military tasks. Preparedness is specified in terms of readiness, combat viability, deployability and sustainability.

Mission Critical Equipment

Major assets or pieces of equipment that are critical to mission success; the failure or loss of which would seriously jeopardise the likelihood of the mission being successfully completed.

Mission-essential Tasks

Tasks which are fundamental for the performance or accomplishment of the force element's mission within the appropriate employment context.

Operational Level of Capability

That state of preparedness where a force element is ready, combat viable, deployable and sustainable.

Orders – Warning and Operational

A Warning Order is one of a number of orders and directives issued in anticipation of an operational deployment. A Warning Order alerts force elements to the likely mission and intended outcomes, and outlines those preparatory tasks that need to be undertaken.

An Operational Order confirms or amends a Warning Order, and specifies in greater detail the range of tasks that the deploying force will be expected to perform in the course of the coming mission. Operational Orders provide guidance and direction on timelines for force preparation – including arrangements for mobilisation and the scope and focus of predeployment training.

Preparedness

Preparedness is a measure of the ability of force elements to be employed on military tasks. Force elements must be held at a level of capability from which they can be raised to an operational status within a specified time, then deployed for the conduct of a particular type of military task and be sustained for a specified period while engaged in that task. The state of preparedness for particular military tasks is specified in terms of readiness, combat viability, deployability and sustainability.

Readiness

The current proficiency and effectiveness of a force element or force to conduct a range of activities. Force element readiness comprises personnel, trained state, equipment held, and equipment condition.

Response Time

The time available, once committed by the Government, to prepare a force for deployment to a particular area of operations. The response time should give the force time to assemble and concentrate its personnel, stores and equipment; undergo additional individual and collective training; and carry out specific planning for operations.

Sustainability

The ability to support a designated force at operating tempo through the duration of an operation. Sustainability includes the availability of replacement personnel, equipment maintenance, and the ability to keep force elements supplied with the necessary stocks.

Training

Training takes place at two levels, individual and collective.

Individual training is designed to develop a person's competency in a defined skill area, such as shooting, tracking or driving. This training generally takes place in a classroom or in a controlled training environment.

Collective training involves soldiers and force units exercising within a larger group to perform defined tasks such as reconnaissance, patrolling and live firing. This might be within sections of ten, as a Platoon, or as a Company. Collective training also promotes skills in the management of command and control structures.

Introduction and Background

Our Objectives

The New Zealand Defence Force (NZDF) has some 14,400 personnel (9,300 in uniform), assets of \$3,500 million, and an operating budget of \$1,400 million. The NZDF is funded to maintain levels of military capability agreed with the Government. Military capability has two elements:

- the personnel and equipment to carry out a variety of military tasks; and
- the ability to prepare a military force for operation within a specified period of time, deploy that force, and sustain it for a given period.

The Government's decision to send a military force to East Timor put the NZDF's military capability to the test. The East Timor operation provided a valuable opportunity to assess how the NZDF:

- planned for a possible military operation; and
- assembled and deployed a force to carry out its assigned mission, in accordance with the Government's objectives.

The processes of planning for a possible military operation, mobilising a force, and deploying that force to East Timor were all complex, and involved systems and personnel across all three Services – the Navy, Army, and the Air Force. Few military personnel were not involved in preparing for the military operation in some way. Sustaining the operation continues to consume significant NZDF resources.

We examined the NZDF's planning from February to October 1999 for the first phase of its military involvement in East Timor. Our objectives were to describe and assess the systems used by the NZDF to:

- plan for a possible military operation;
- prepare a joint force; and
- deploy that force to East Timor.

We also examined the systems by which the NZDF has reviewed its military practice and processes in the light of the East Timor experience, identifying lessons for future contingents and implementing necessary changes.

The deployment of New Zealanders to help restore and maintain peace and security in East Timor has attracted significant public interest throughout the country. We also set out to:

- describe military systems and processes in simple terms; and
- explain to Parliament and other public audiences how a military operation is planned and executed.

The East Timor deployment presented the NZDF with a unique set of military, organisational and environmental circumstances that may not be replicated in the future. We cannot assess how the NZDF might perform given a different operational context. However, we are confident that our assessment has identified system and organisational issues that will be generally applicable.

We are currently examining the roles performed by two specific components of the New Zealand force – the Air Force's Iroquois helicopters and Army's medical support elements. We plan to publish the results of this further study in the first half of 2002.

East Timor: Location and Geography

East Timor is part of the Indonesian archipelago, approximately 700km north-west of Darwin, Australia, and around 5,800km north-west of Auckland. It is slightly smaller in size than Fiji. East Timor has a basic infrastructure, with limited airfield and port facilities. It has an estimated population of 900,000 – again similar to that of Fiji.

East Timor has a tropical climate characterised by extensive and unpredictable cloudiness, high temperatures, and very clearly defined wet and dry seasons – with the southern part of the island experiencing two wet seasons. During the main wet season (December to March) rainfall is very heavy and flooding is common. Landslides and other damage to roads occur frequently.

The East Timor terrain is rugged, with the Ramelau mountain range dominating the centre of the island, reaching a height of 2,964m at the peak of Tata-Mai-Lau. While plains and plateaus exist, deep valleys cutting into the central range predominate. A number of streams flow to the sea from the mountain range.

Along the East Timor coastline, the best anchorage is to be found at its capital, Dili. This relatively sheltered bay is in contrast to the remainder of the coastline, which at best allows anchorage for low-draught vessels. Poor access for large vessels to much of East Timor's coastline, combined with poor roads that are prone to flooding in the wet season, makes air transport often the only viable means of travelling from Dili to other areas of East Timor.

New Zealand's Military Involvement in East Timor

Background

Early in September 1999, widespread violence and destruction broke out in East Timor in response to a comprehensive vote in support of autonomy from Indonesia. Villages were destroyed and large numbers of East Timorese made homeless. A state of emergency was declared and martial law imposed.

On 15 September 1999, United Nations Security Council Resolution 1264 authorised the establishment of a multinational force (known as INTERFET) to:

• restore peace and security in East Timor;

- protect and support the United Nations mission in East Timor in carrying out its tasks; and
- facilitate humanitarian assistance operations within force capabilities.

Australia was assigned responsibility for command of the multinational force. New Zealand's initial deployment took place in direct support of the Australian force, with New Zealand Special Air Service personnel, C130 Hercules aircraft, and air loading teams contributing to the evacuation of United Nations and military personnel.

Shortly afterwards – on 20 September 1999 – a Company Group (around 120 soldiers) left New Zealand, supported by three Iroquois helicopters and four Armoured Personnel Carriers (APCs). Further military personnel joined this contingent during October 1999, making up a full Battalion Group.

The first deployment of Australian and New Zealand troops took place in an uncertain security situation. The capability of the Timorese militia was not known, nor was it clear what attitude the Indonesian military forces would adopt towards the multinational force. When New Zealand troops first entered Dili, fully armed Indonesian troops were in close proximity.

Scale of New Zealand's Military Involvement

INTERFET was New Zealand's largest overseas commitment since the Korean conflict. At its peak, the NZDF had around 1,100 military personnel committed to INTERFET. Large numbers of personnel throughout the NZDF were involved in planning for the operation, mobilising units and equipment, and transporting to East Timor personnel and heavy military equipment, stores and supplies.

The military force New Zealand sent to East Timor comprised elements from all three Services:

- Up to three Royal New Zealand Navy vessels, comprising two frigates, a replenishment ship and 450 personnel. These deployed ships conducted escort, surveillance and patrolling duties, provided logistic support to the land forces, replenished Australian strategic fuel stocks, and helped to re-supply the multinational naval support force. All ships landed personnel to shore throughout the individual deployments to undertake humanitarian support tasks in and around Dili.
- An Army Battalion Group of up to 830 personnel, consisting of two infantry Companies and a reconnaissance and surveillance Company, along with support, logistics and medical elements. The Battalion Group was responsible for monitoring militia activity within New Zealand's assigned area of operation, carrying out regular patrols.
- An Air Force element of around 130 personnel including aircraft crews and mechanics, along with up to six Iroquois helicopters supporting New Zealand's infantry

soldiers. Two C130 Hercules and one Boeing aircraft transported troops and aircraft between New Zealand, Australia and East Timor.¹

A number of other nations have had forces attached to the New Zealand Battalion Group in East Timor. A Canadian Company and an Irish Platoon were incorporated as part of the INTERFET deployment. These contingents brought the Battalion Group to full strength, as New Zealand was able to contribute only two of the three rifle companies normally required to constitute a Battalion Group. With the departure of the Canadians, a Nepalese Company joined the Battalion Group. In addition, a Fiji Company was added and (more recently) a Singapore Platoon.

The area of operation assigned to the New Zealand force covers approximately 1,700 square kilometres, to the south-west of the country – including a long section of the border between East and West Timor – with the township of Suai as the base. This area is characterised by poor infrastructure, difficult supply routes, and limited communications.

Additional personnel have been stationed in Dili and Australia providing logistics and personnel support to the New Zealand force in East Timor.

The INTERFET mission helped to create a stable basis for the introduction of a peacekeeping force. In February 2000 INTERFET was replaced by a United Nations peacekeeping operation known as the United Nations Transitional Administration in East Timor (UNTAET). New Zealand was given responsibility for an Area of Operations in one of four sectors assigned to the UNTAET peacekeeping force, and has retained a Battalion Group there since that time.

Structure of the New Zealand Defence Force

New Zealand's armed forces are structured into four main groups: the Navy, Army, the Air Force, and a Defence Force Headquarters. Each of the three Services is headed by a Chief of Staff, through whom the Chief of Defence Force commands the armed forces. The Chief of Defence Force is the principal military adviser to the Minister of Defence and is responsible for the overall functions and duties of the NZDF.

The Royal New Zealand Navy

The Royal New Zealand Navy (RNZN) has 2,800 personnel, including over 800 civilian and non-regular force staff. These personnel are predominantly based at Devonport, Auckland, or are on deployment throughout the world. Naval assets include the two ANZAC class frigates HMNZS *Te Mana* and HMNZS *Te Kaha*, an older Leander class frigate HMNZS *Canterbury*, a fleet replenishment ship HMNZS *Endeavour*, and a number of other smaller vessels with a variety of hydrographic/oceanographic or maritime mine-warfare roles. The Navy's military sealift ship – HMNZS *Charles Upham* – has recently been sold.

11

RNZAF Skyhawks were withdrawn from training exercises in Malaysia to be available for air support, should it have become necessary.

The New Zealand Army

The New Zealand Army (Army) is structured around ten major operational units:

- two regular force infantry Battalions;
- an armoured Regiment (Armoured Personnel Carriers);
- an artillery Regiment;
- an engineer Regiment;
- a signals Squadron;
- two logistics Battalions;
- a medical unit; and
- a Special Operations Group.

The 4,500 regular force personnel that comprise these ten units are supplemented by 2,500 territorial force and 700 civilian personnel (7,700 in total). The regular force personnel are based in a number of locations – the major components being Headquarters Land Command at Trentham and its formations, 2nd Land Force Group at Linton, Army Training Group in Waiouru, and 3rd Land Force Group at Burnham. A Special Air Service Group (SAS) available for special operations is based in Auckland.

The Royal New Zealand Air Force

Over 3,000 personnel serve with the Royal New Zealand Air Force (RNZAF). The helicopter Squadron (No.3 Squadron) is based at Hobsonville, Auckland, and operates a total of 22 helicopters, including 14 UH-1H Iroquois which are available to support Army, and to carry out search and rescue, counter-terrorism and police-related duties. Among the other Squadrons are:

- No.40 Squadron which operates five C130 Hercules and two Boeing 727 aircraft for air transport roles; and
- No.5 Squadron which operates six P3K Orion aircraft in a maritime surveillance role.

In June 2001 the Government announced its decision to disband No.75 Squadron (Skyhawks based at Ohakea airbase), No.2 Squadron (a detachment of Skyhawks in Australia), and No.14 Squadron (jet fighter training aircraft). This removed the RNZAF's air combat capability. A decision on whether to upgrade or replace the C130 Hercules aircraft and the UH-1H Iroquois helicopters is expected to be made in the near future. The role of the P3K Orion maritime patrol aircraft is also under consideration.

Headquarters NZDF

The Headquarters of the NZDF is structured to provide advice and support to the Chief of Defence Force, enabling him to carry out his responsibilities as Commander of the armed forces, and account to the Minister of Defence. Defence Force Headquarters in Wellington houses 160 personnel from the three Services and 330 civilian staff. The Headquarters is organised into eight branches – Operations, Resources, Development, Personnel, Defence Force Services, Finance, Command and Control, and staff of the Deputy Chief of Defence Force.

The Ministry of Defence

The Ministry of Defence (MoD) is a government department and is responsible for the formulation of defence policy, major equipment procurement, and the audit and assessment of NZDF functions, duties, and projects. The MoD is headed by the Secretary of Defence who is the principal civilian adviser to the Minister of Defence. The MoD has three main roles:

- to provide high-quality advice to help the Government make well-informed judgements on the defence of New Zealand and its interests;
- to arrange the acquisition of significant items of military equipment needed to meet capability requirements; and
- to conduct evaluations of the NZDF.

The Chief of Defence Force and the Secretary of Defence meet regularly and work closely together on defence issues. An Office of the Chief Executives provides a forum to facilitate consultation and joint decision-making between the MoD and the NZDF, and to co-ordinate staff activities in support of the two Chief Executives.

The Chief of Defence Force and Secretary of Defence recently agreed to make structural changes in order to reduce duplication and create a closer working relationship between the two organisations. Two examples of such changes have been the merging of the policy and public relations functions of the MoD and the NZDF.

The Purchase Agreement

The NZDF's outputs provide the Government with a range of force components to protect and advance the security interests of New Zealand. These outputs represent those force elements that the Government expects the NZDF to have ready for deployment in support of the Government's National Security Outcomes. The Government purchases a range of force elements from the NZDF in order to ensure that it has available to it a number of options for deployment in those circumstances in which it may choose to use military force.

The Purchase Agreement records the levels of capability and preparedness at which the Government expects the Chief of Defence Force to hold the different components of the NZDF. The terms of the Purchase Agreement represented a key benchmark against which we could measure the ability of the NZDF to respond to the Government's decision to deploy a military force to East Timor.

It is too expensive to constantly maintain a broad range of force elements at an operational level. Accordingly, the NZDF is funded to keep units at a directed level of capability (DLOC) from which they can be raised to an operational level of capability (OLOC) within a specified time. This specified amount of time is known as the response time, and gives the NZDF time to:

- assemble and concentrate its personnel, stores and equipment;
- undergo additional individual and collective training; and
- carry out specific planning for a given military operation.

In short, the Government funds the NZDF primarily for specified levels of capability and preparedness.

The Purchase Agreement records the outputs purchased by the Minister of Defence. The Chief of Defence Force is responsible for delivering the specified outputs to the standards and expectations outlined in the Agreement. Schedule 4 of the Agreement is a classified component and has a restricted circulation. It defines the level of preparedness at which each force element should be held, specifying:

- the standards to which specific force elements will be kept ready;
- the length of time required to bring each force element to the point where it can be deployed;
- those tasks (such as installation of equipment or training of additional personnel) which need to be carried out before a given force element is ready to be deployed; and
- any factors limiting the NZDF's ability to deliver its required outputs.

Preparedness standards are also based on assumptions about the expected length of time for which a given force element could be expected to be deployed. This is an important factor when considering long-term engagements and the impact this has on NZDF personnel and infrastructure. For the majority of force elements deployed to East Timor, the expected period of time for them to remain deployed was 12 months.

Our Approach

The scale and complexity of the East Timor deployment made it necessary to limit the scope of our study to selected aspects of the operation. We confined our examination largely to the period leading up to and including New Zealand's deployment of a military force to participate in the INTERFET phase of the multinational East Timor operation – early 1999 to February 2000.

Planning and deployment of a military force required the NZDF to manage a variety of risks associated with uncertainty and critical paths. From a risk perspective we selected for examination systems or processes which had a direct and critical impact on the:

- NZDF's ability to respond effectively to the Government's directive to send a military force to East Timor;
- preparedness of the New Zealand force; and
- mobilisation and deployment of the New Zealand force.

We examined the following aspects of New Zealand's involvement in INTERFET:

- the NZDF's systems for monitoring and reporting the preparedness status of military personnel and equipment;
- consideration of contingencies for a possible New Zealand military involvement;
- planning the East Timor military operation;
- pre-deployment training;
- preparing critical equipment, and chartering civilian transport vessels and aircraft;

- public accountability and financial management; and NZDF systems for reviewing the East Timor experience, and the main lessons learned.

Issue One Operational Preparedness

Contents

	Page
1 – Operational Preparedness.	17
<u>Introduction</u>	
Expectations.	19
<u>Findings</u>	20
What does the Operational Preparedness Reporting System do?	20
Reporting on Joint Force Preparedness.	21
Identification of Critical Item Deficiencies	23
Addressing Identified Capability Deficiencies	24
Analysing Preparedness Over Time.	26
The Army's New Performance Management System	26
<u>Conclusions</u> .	28

Introduction

The NZDF trains and maintains its force in accordance with requirements specified in the Chief of Defence Force's Purchase Agreement with the Minister of Defence. Those requirements define the standards to which the NZDF must maintain its personnel and equipment so as to respond to any one or more situations in which the Government may decide to deploy a military force.

1.2 In this paper we:

- describe the requirements of the NZDF to keep its force elements ready for deployment in a variety of possible operations;
- describe and assess the NZDF's system for monitoring and reporting its preparedness; and
- comment on the usefulness of NZDF's operational preparedness system in the light of NZDF planning for East Timor.

Expectations

- Our objective was to assess whether the NZDF had a comprehensive capability and preparedness monitoring and reporting system that could fulfil two main roles. First, we expected that the system would support the NZDF's accountability to the Government. We expected that it would do this by:
 - providing the means for assuring the Minister and the Government about force capability (including any shortfalls);
 - demonstrating compliance with the Purchase Agreement; and
 - making transparent the resource implications of existing preparedness states.
- 1.4 Secondly, we expected that the system would serve as a planning and management tool. We looked to assess whether information on force preparedness and capability was also used to enable the NZDF to:
 - allocate resources for the efficient delivery of outputs;
 - maintain and improve force structure components of military capability;
 and
 - plan for, and respond effectively to, any Government decision to deploy a military force.

Findings

What does the Operational Preparedness Reporting System do?

1.5 For the NZDF to effectively report on output delivery and to efficiently respond to the Government's decision to deploy force elements it must know.

The OPRES system measures NZDF levels of capability

- the state of preparedness for each force element;
- what tasks (if any) need to be undertaken to bring each element to the standard required for deployment; and
- how long those tasks would take.
- 1.6 This information is also required to assist the allocation of resources for the efficient delivery of outputs and for force planners to maintain and improve force structure components of military capability.
- 1.7 The mechanism the NZDF uses to assess the operational preparedness of force elements at assigned levels of capability is called the Operational Preparedness Reporting System (OPRES). This system takes into account factors such as manpower levels, trained state of personnel, equipment availability, and equipment condition. When these factors are put in the context of deployability, combat viability, readiness, and sustainability, a full picture of a unit's state of preparedness is obtained.
- 1.8 OPRES presents the NZDF with a detailed, regular picture of the preparedness status of individual units, against a number of key performance indicators (KPIs) and a common system of rating. The KPIs are designed to reflect the tasks of each force

OPRES presents a useful picture of NZDF preparedness

element, while providing a valid means of comparing preparedness across output classes.

- OPRES includes a combination of subjective and quantifiable measures. Some measures (such as the number of personnel and weapons) can be easily quantified. Other important measures such as morale or trained state require the judgement of the unit's commanding officer.
- OPRES is reported at a number of levels, from single units up to formation level. The Chiefs of Staff are ultimately responsible for reporting operational OPRES reporting

preparedness of force elements, with a

number of levels within the single

Services contributing to create the final report.

OPRES reporting takes place at a number of levels

- 1.11 Identified problems are addressed at each level within the authority of the respective commanding officer. If the commanding officer does not have appropriate authority to remedy the situation, the problem will be raised in the next level OPRES report for consideration. Issues that need substantial capital injection or require a political decision will be addressed in OPRES reports at the highest level.
- Force elements engaged in actual operations do not report against OPRES. Once an element has reached OLOC it is considered beyond the scope of preparedness reporting. Responsibility for maintaining the preparedness of elements at an appropriate level during deployment rests with the force commander
- 1.13 The NZDF produces OPRES reports every six months (at the end of June and December) and provides update reviews to these twice a year. Together, these reports form the basis for Quarterly Reports to the Minister of Defence, providing a force-wide picture of preparedness in relation to the outputs specified in the Purchase Agreement. We examined the reports of the single Services for the period June 1998 through to March 2000, and the Quarterly Reports to the Minister for the June 1999 to March 2000 period.
- OPRES also highlights the impacts of operational commitments on force capability, and on the ability of the NZDF to meet the requirements of its Purchase Agreement and deliver its outputs. As an illustration, security duties in association with the Asia Pacific Economic Co-operation (APEC) Forum and state visits in 1999 placed demands on NZDF resources. OPRES reports over that period identified the impacts of the APEC commitment on (for example) opportunities for collective training and the availability of helicopters.
- 1.15 We noted four areas where there was potential to improve the usefulness of OPRES for accountability reporting and as a management tool. Improvements could be achieved through:
 - a capacity to report on the NZDF's ability to assemble a joint force;
 - extending the coverage of OPRES reporting;
 - integrating the OPRES system with those processes by which command levels are held to account for addressing identified critical item deficiencies; and
 - analysing trends in preparedness ratings.

There is potential to enhance OPRES reporting

Reporting on Joint Force Preparedness

1.16 The East Timor operation involved all three Services – the Navy, Army, and the Air Force. It is likely that future operations of this nature will also require

The East Timor deployment was a joint force operation

the deployment of a joint force. The decision to establish a permanent Joint Forces Headquarters² reflects recognition on the part of the NZDF that military operations are likely to be planned and conducted jointly in the future.

- 1.17 The East Timor operation clearly illustrated the ways in which the Services are dependent on one another. For example:
 - Army ground troops relied on Air Force helicopters to move from one patrolling area to another.
 - Navy vessels provided deterrence, monitored sea and air traffic, and provided protection and logistic support to the land forces.
- 1.18 If analysed across reporting units, OPRES has the potential to provide a valuable picture of the NZDF's preparedness to conduct joint operations. In

its present form, however, its usefulness as a tool for illustrating the preparedness of a joint force is limited.

OPRES could report joint force preparedness

1.19 In addition, Quarterly Reports to the Minister were structured around individual Output Classes that focus on single Service

force elements. Consequently, these reports lacked comment on the NZDF's preparedness to conduct a joint force operation. We see value in adding this type of comment to the reports.

- 1.20 It is our understanding that one key responsibility of the Commander Joint Forces New Zealand (Joint Forces Commander) at the new Joint Forces Headquarters will be to prepare a joint preparedness statement. We suggest that:
 - this responsibility be formalised;
 - the Joint Forces Commander be required to analyse the single Service reports and include a statement in the Quarterly Reports on the ability of the NZDF to conduct joint operations; and
 - the Joint Forces Commander's analysis would be aided by clearer reporting within single Service OPRES reports of the capability to work with other Services.
- While OPRES provides a valuable picture of preparedness for individual units, it does not always show how the preparedness of those units will be affected by deficiencies in other units within the same Service; nor how preparedness

Inter-unit dependencies both within and between Services are not always shown

deficiencies in one Service will affect the preparedness of units in the other two Services. We were told that these impacts are considered at higher command levels, in reporting by Chiefs of Staff. However, summarised

_

The Joint Forces Headquarters was established at Trentham from 1 July 2001.

OPRES reports from Chiefs of Staff contained limited reference to key interunit dependencies, and little attention was given to inter-Service impacts.

- 1.22 Army has noted that (in the past) OPRES reporting covered only 65% of its establishment. Important command and support elements (such as training groups and movements operators) were excluded. As a consequence, OPRES provided a limited picture of readiness across all the force elements that contributed to NZDF capability.
- 1.23 The East Timor operation demonstrated the collective contribution made by a variety of supporting, headquarters, and operational force components. The development of a Joint Forces Headquarters reflects the importance of recognising these relationships. We believe that there would be benefits in including comment on inter-unit dependencies as part of OPRES reporting. Analysis of how a lowered preparedness status in one unit within a Service adversely affects the preparedness of other units in the same Service can give a clearer picture of overall preparedness. This fuller picture would also facilitate the development of joint preparedness across all three Services.
- 1.24 The Government's Defence Statement of 8 May 2001 noted that as in the past, any overseas deployment [of a New Zealand force] will be part of an international contingent. In particular, the NZDF is expected to be able to operate effectively alongside the Australian Defence Force.
- OPRES currently reports on exercises conducted with other forces, including the Australian Defence Force. Interoperability is also considered when assessing measures of combat viability, a component of preparedness. It is not, however, directly reflected in the overall ratings of preparedness. The NZDF should consider measuring and reporting on the ability of individual units to deploy, operate, and sustain themselves alongside likely coalition partners in a multinational force.

Identification of Critical Item Deficiencies

- 1.26 OPRES reports clearly identified any critical item deficiencies both in terms of equipment and a lack of ability to sustain a specific force.
- In its June 1999 OPRES report, Army reported that the M113 Armoured Personnel Carriers (APCs) required a substantial upgrade. The same observation had been made in previous OPRES reports. This deficiency resulted in the force element being reported as partially ready

OPRES reports clearly identified capability shortfalls

for the majority of relevant employment contexts. However, the report did not detail what work was needed to upgrade the APCs to operational status. While the NZDF knew rough costs and time estimates for the upgrade, these were not reported.

1.28 The major deficiency issue for the Air Force was the requirement for selfprotection equipment on the Iroquois helicopters. It was reported that without this equipment, the Iroquois would still be able to perform across the majority of the employment contexts, but would not be able to undertake tasks involving high threat levels. As with the APC upgrade, cost and time estimates for the Iroquois self-protection equipment were known but not reported.

1.29 The OPRES reports contained clear statements about Army's inability to fully sustain its force elements for a twelve-month period across the range of

employment contexts. Only a handful of force elements were considered to possess enough depth to enable them to meet the Purchase Agreement sustainability standard. The Field

Sustainability was a risk that needed to be accepted

Surgical Team was noted as not being sustainable in any employment context, while other units were sustainable only for those employment contexts that required a limited military commitment. The reports contained clear comments concerning sustainability beyond the 12 month period and the necessity of accepting associated risk.

- 1.30 Air Force OPRES reports noted that low numbers of ground crew would affect the sustainability of any helicopter operations for the 12 months. Air Staff considered it feasible to overcome this deficiency and a commitment was made to take the necessary remedial action. However, again there was no indication of when this could be done or clarity over what actions would be taken.
- In addition, the Air Force noted the impact that concurrent operations (APEC in particular) would have on its ability to supply the required helicopters and crews for East Timor. It was stated that six helicopters would be available in September 1999 for operations in East Timor, but that aircrew numbers would be low. In the event, only four helicopters needed to be deployed to support the Company Group.

Addressing Identified Capability Deficiencies

- We found that all major deficiencies had been reported through OPRES. Some reports identified the likely impact of the deficiency on a unit's ability to operate across the range of employment contexts. However, as noted above, OPRES reports did not identify the cost and likely time required to rectify the deficiencies.
- OPRES reports noted deficiencies in preparedness and gave reasons for these. Some reports also recorded the forecast preparedness status for the following period, showing the progress expected in

Poor preparedness ratings can recur over reporting periods

preparedness ratings from one period to the next. In addition, issues critical to the preparedness rating for the unit concerned were identified. The main factors affecting preparedness were:

- manning levels;
- the state of training; and
- the availability or serviceability of equipment.
- Our examination of preparedness ratings indicated that (in some instances) poor ratings can recur over successive reporting periods, and that achievement of significant improvements can be slow. In many instances, units reported little change in ratings since the previous report and expected little improvement for the following period. Long lead times for addressing many such preparedness deficiencies (such as recruiting and training personnel or purchasing new equipment) make tracking progress with remedial action plans a vital component of capability management.
- No direct, explicit link exists between the reporting of preparedness ratings for individual units on the one hand, and development plans or projects on the other. As a result, neither the resource implications of preparedness deficiencies nor the accountability for remedying deficiencies are clearly stated in terms of:
 - what formal plans are in place to address all identified deficiencies;
 - how long it will take to implement such plans; and
 - the likely costs.
- OPRES reports highlight a variety of resource requirements that need to be considered and assigned priorities. In the case of Army force elements, this role is performed by Army Headquarters. For example, the force development and human resources HQ branches commented on equipment and manpower issues raised by Army units in their June 1999 preparedness reports, relating deficiencies to projects under way or planned. This is one way in which the three Services are able to oversee the integration of current needs into future capability.
- 1.37 The single Service reports clearly noted deficiencies and problems, but the solutions to these problems were again often not clearly stated or did not fully convey the resource implications of rectifying problems. In our view,

preparedness reporting and force development procedures need to be better linked and reported. This would allow resource implications to be reported with the identified problem, giving a fuller picture of the requirements to meet full preparedness.

OPRES and NZDF development processes should be more closely aligned

- 1.38 In the second half of 1999, Army General Staff sought to formalise the system for addressing identified preparedness deficiencies by seeking feedback from individual units on issues arising from the June 1999 OPRES report. Units were required to identify remedial action necessary to address preparedness deficiencies as at June 1999, and to report on progress by a specified date.
- 1.39 We consider this approach to have been a useful means of ensuring that:

- preparedness deficiencies were being addressed;
- there was clear accountability within command structures for taking the necessary remedial action; and
- there was a defined time for completing such action.
- However, this formal process for obtaining feedback was not repeated. We understand that the NZDF feels that its usefulness was limited because problems were already well known and under remedial action. Despite this, we believe that there would be value in routinely seeking formal feedback on issues identified in OPRES reports.

Analysing Preparedness Over Time

- OPRES reports are largely static, providing a snapshot of preparedness at a particular time. The NZDF does not analyse trends in preparedness over time. The potential benefits in doing so would include:
 - revealing recurring deficiencies within individual units;
 - revealing common deficiencies among force elements;
 - identifying key obstacles to improved preparedness force-wide; and
 - assisting in monitoring the time required to remedy identified deficiencies.
- Force-wide summary reports compiled for presentation to the Chief of Defence Force identify ongoing problems in capability such as manpower shortages and equipment deficiencies. However, no systematic analysis is undertaken of trends in preparedness at the level of individual units, or across units. As a result, no objective measure of changes in preparedness over time is available.

Army's New Performance Management System

During 2000, Army progressively introduced a new performance management system that built on the existing OPRES framework. We established the purpose of Army's Performance Management System

APMS has potential to improve preparedness reporting

(APMS) and its key features in comparison to the NZDF's existing preparedness reporting system.

- 1.44 The APMS was designed to address a number of identified shortcomings with the existing OPRES reporting system. The shortcomings included:
 - incomplete coverage of Army units;
 - inadequate transparency of preparedness measures;
 - insufficient accountability for preparedness reporting at all levels;
 - inefficient data entry; and

- unclear responsibility for analysing OPRES results.
- 1.45 The APMS positions OPRES reporting within a wider, more integrated management system. This should bring significant benefits including:
 - an enhanced ability to analyse and assess preparedness trends, through more frequent (monthly) reporting of preparedness status;
 - more efficient data capture and entry through automated entry of OPRES data and integrated sharing of data between NZDF information systems (such as those for health records and equipment condition), reducing the amount of time taken to compile OPRES reports; and
 - more visible reporting of preparedness status.
- The APMS will continue to allow opportunity for command levels to exercise professional judgement in reviewing unit assessments of preparedness. However, objective measures of preparedness will be visible to users ensuring that subjective judgements are transparent, and able to be assessed against the underlying objective data. The degree of subjectivity in the application of key performance indicators at unit level remains problematic. This area has been subject to recent review, and should be continually reviewed for improvement.
- 1.47 The APMS will also report more comprehensively on Army preparedness including, for example, the preparedness of headquarters units. Support and other non-combat units make a significant contribution to overall

APMS should give a fuller picture of preparedness

Army combat preparedness, and more comprehensive reporting under APMS should therefore give a more complete picture of Army preparedness.

- 1.48 The APMS will include a *suspense list* assigning responsibility and accountability for undertaking action to remedy identified preparedness deficiencies. This monthly list will allow transparent assignment of remedial action to the relevant branch and will record estimates of time and costs for completion.
- We were told that the APMS reporting system was being implemented by the other two Services [with Army being the first to roll out]. But across the three Services we noted the potential for inconsistency in preparedness reporting. The performance management system used by the Air Force and the Navy follow a similar framework to that of Army, but are not as fully developed. There are plans for all three systems to be linked to a corporate management system yet to be introduced across the NZDF.
- 1.50 The NZDF could usefully consider the merits and disadvantages of consistent reporting among the three single Services in the light of relevant factors such as:
 - structural differences between the Services;

- the need for flexibility;
- the ability to compare preparedness; and
- the ability to form a view of force-wide preparedness.
- We suggest that the NZDF review its preparedness reporting systems once APMS has been in place for two to three years. This review should assess the benefits from the new system, and provide assurance that they are being utilised effectively and in a consistent manner.

Conclusions

- OPRES measures the preparedness of individual force units at regular intervals. OPRES enables the Chief of Defence Force to report against the requirements of his Purchase Agreement with the Minister of Defence, and to keep the Minister and the Government informed of the status of force capability (including any shortfalls).
- 1.53 While OPRES enabled the NZDF to give the Government a basic picture of force preparedness and capability before the East Timor deployment, we believe the system could be enhanced by addressing current system limitations, including:
 - lack of comprehensiveness OPRES does not report on the preparedness of all NZDF units; and
 - a focus on the capability of individual force elements rather than on the NZDF's ability to conduct joint operations OPRES does not report the preparedness of force elements in relation to other force elements within the NZDF.
- 1.54 Consideration should also be given to reporting more fully on the ability of the NZDF to operate effectively alongside the military forces of likely coalition partners.
- OPRES reports for the period immediately preceding the East Timor operation recorded key capability and preparedness shortfalls that subsequently needed to be addressed in planning for a possible deployment to East Timor. These reports did not clearly state the resource implications of existing preparedness states.
- 1.56 We understand from our examination that this information is often already widely known by NZDF personnel and conveyed through other processes. We believe that there would be benefit in linking the capability development processes with the OPRES system. In this way, resource implications could be reported with the identified problem giving a fuller picture of the requirements to meet full preparedness.
- 1.57 The NZDF was able to utilise OPRES in planning for East Timor. Capability deficiencies were known by planners facilitating informed and timely

military planning. In our view, the use of OPRES as a planning and management tool could be enhanced through developing:

- a clear relationship between the functions of preparedness reporting and capability maintenance; and
- a facility to analyse trends in preparedness ratings over time.
- 1.58 Two recent changes to NZDF structure and systems have the potential to enhance its preparedness reporting:
 - an updated performance management system; and
 - the formation of a permanent Joint Forces Headquarters.
- 1.59 Army's new performance management system (APMS) is designed to improve the efficiency and transparency of OPRES reporting. The APMS should also provide a more comprehensive picture of unit preparedness. In addition, it has the potential to provide a closer accountability link between the reporting of identified preparedness deficiencies, and action plans to provide solutions and overcome capability shortfalls.
- 1.60 In turn, more frequent and transparent recording of preparedness status should enable the NZDF to analyse preparedness trends over time providing a means of monitoring capability and identifying recurring problems.
- 1.61 The formation of a Joint Forces Headquarters should help to overcome the current focus of preparedness reporting on individual units and facilitate the preparation of joint preparedness reporting, drawing on OPRES.

Issue Two Contingency Planning

Contents

	Page
2 – Contingency Planning	31
Introduction.	33
The Role of Intelligence in NZDF Contingency Planning	33
Using Intelligence for Contingency Planning – A Practical Case Study	34
Expectations	35
Findings	36
Gathering Intelligence	36
<u>Conclusions</u>	40
The Strategic Planning Structure	41
Expectations	41
Findings	41
<u>Conclusions</u>	43
Forward Planning and Critical Path Identification	43
Expectations	43
Findings	44
Forward Planning.	44
Critical Path Planning.	44
Force Element Options and Response Times	45
Reporting to the Government	46
Conclusions	47

Introduction

- 2.1 This paper considers three key aspects of contingency planning:
 - the role intelligence played;
 - the strategic planning structure adopted by the NZDF; and
 - forward planning and identification of critical paths.
- 2.2 The situation in East Timor provided both the Government and the NZDF with the opportunity to conduct a considerable amount of contingency planning. While the situation was continually changing and developments throughout 1999 altered some planning assumptions the contingency planning process was able to operate with a degree of freedom from time constraint.
- Future crises may not allow the same amount of time for contingency planning. The experience of planning for East Timor points to a number of factors vital to the NZDF's ability to respond effectively and in a timely way to a Government decision to commit a military force overseas.

The Role of Intelligence in NZDF Contingency Planning

2.4 Intelligence is a vital part of defence planning. Understanding the environment within which personnel and equipment will be deployed increases the likelihood that military tasks will be successful. Intelligence is also a key tool for managing risks to personnel and military assets. A case study illustrating the use of intelligence for contingency planning – in this case on Japanese encephalitis – is provided on page 30.

Using Intelligence for Contingency Planning - A Practical Case Study

Planning for Japanese Encephalitis

A high number of casualties in military conflicts and exercises are due to disease and environmental influences. As a result, it is important to define hazards and risks as the basis for putting in place an effective medicine strategy.

In deploying to East Timor, the New Zealand force faced significant health and hygiene risks. The presence of a number of tropical diseases, highly poisonous animals, and other environmental hazards (such as dehydration from the intense heat) presented force planners with a hazardous medical environment.

One of the key medical threats was the suspected presence of the Japanese Encephalitis Virus (JEV), a mosquito-borne viral infection. JEV is potentially fatal, with a case-fatality rate of 30% for those developing clinical illness. Nearly a third of those who survive a serious infection are left with serious brain damage including paralysis. There is no effective treatment available for the virus, and care of patients centres on treatment of symptoms and complications.

Initial intelligence was gathered on the broad range of health risks that NZDF troops would face. This information was obtained from a variety of sources – including freely available sources (such as the Internet and health publications), through to more specific sources (such as medical detachments of other armed forces). A Health Intelligence Officer (HIO) was given responsibility for gathering this information.

By the time the Military Strategic Estimate was developed, the NZDF had an understanding of what health risks it was facing. It concluded that JEV was the single significant health risk from which NZDF personnel did not have current protection. By carrying out a risk analysis with the information to hand, the HIO determined that environmental precautions would not be enough to guard against the risk of infection, and that inoculation would be necessary.

An inoculation programme was drawn up at this stage. It became clear not only that the NZDF did not possess enough JEV vaccine to inoculate all personnel who were likely to be deployed, but also that insufficient stocks were held in New Zealand. The need to source and purchase sufficient stocks of the vaccine was the first timeline impact upon contingency plans.

Moreover, JEV inoculations require 38 days from the first injection before they become fully effective – three injections are required, on the first, 14th and 28th days. The vaccination timetable placed a restriction on the possible times for deployment. Personnel may be deployed immediately following the third injection, but must remain near a hospital for ten days, due to the severe side-effects for a small percentage of recipients.

The need for the NZDF to plan and conduct an extensive JEV inoculation programme highlights the links between strategic intelligence and operational planning for deployment. The time needed to inoculate personnel was a key consideration when options and time scales for deployment were being formulated. Without the inoculation, the risk to New Zealand personnel of contracting JEV would have been high. Sound intelligence, leading into careful contingency planning, ensured that this risk was greatly minimised.

- We looked at two main types of intelligence: strategic and operational. Strategic intelligence can be defined as information required by strategic commanders and policy makers for the formulation of strategy, policy, and military plans and operations at the national level. Operational intelligence is information required for planning and execution of specific operations. Some strategic intelligence is useful at the operational level, where commanders are focussed on planning and conducting campaigns and operations within defined areas of operation.
- With early strategic intelligence, the NZDF can place itself in a better position to respond to the Government's expected deployment times which may involve a military response at short notice. Relevant and timely intelligence also ensures that the NZDF is able to refine the force deployment options available to the Government.
- 2.7 Effective intelligence networks provide valuable information about the environment in which personnel and equipment will be deployed, as a result of which:
 - it is more likely that the optimal mix of force elements will be chosen;
 - equipment needs can be estimated with more accuracy;
 - personnel can be trained for those conditions in which it is known that they will deployed; and
 - personnel and equipment can be moved in the most efficient and effective manner, drawing on knowledge about the condition of the infrastructure within the area to which they are being transported.

Expectations

- Our expectations in relation to the collection and use of strategic intelligence were that the NZDF:
 - had appropriate access to intelligence networks from which to gather current and relevant information about the military situation in East Timor, and about the conditions in which NZDF personnel would be required to operate;
 - used this information for contingency planning;
 - distributed strategic intelligence, where appropriate, to inform operational planning; and
 - continued to use strategic intelligence structures to ensure that the NZDF was aware of recent developments.
- We examined records and correspondence relating to the period beginning early in 1999 in order to establish the range of sources from which the NZDF was able to draw in making contingency plans. We also talked to the Ministry of Defence (MoD), Ministry of Foreign Affairs and Trade (MFAT), and Department of the Prime Minister and Cabinet (DPMC) to understand the way in which departments shared and co-ordinated intelligence-related information.

Findings

Gathering Intelligence

- As early as February/March 1999, the Government was aware that New Zealand might, at some time, be approached by the United Nations to participate in a multinational force. Seven months later, the Government made a formal decision to send a force to East Timor. This length of time gave the NZDF the opportunity to gather a variety of information on the basis of which to plan for the possibility of an East Timor operation.
- 2.11 In planning for a possible deployment, the NZDF had a variety of strategic and operational intelligence needs. We identified those needs as including information about:
 - political developments;
 - the military threat;
 - the composition of coalition forces;
 - the likely duration of the operation;
 - the environment and topography;
 - health and hygiene;
 - infrastructure such as the state of airfields and port facilities;
 - UN arrangements and intentions;
 - South-East Asian nations' attitudes and likely responses towards the situation itself and towards the possible deployment of a multinational force; and
 - the characteristics of the area of operation to be assigned to the NZDF.
- At the strategic level, the group given the task of gathering intelligence on most of these issues is the Directorate of Defence Intelligence and Security (DDIS). The primary role of DDIS is to provide direction and a central focus for the intelligence staff in the armed Services. In the context of planning for the East Timor operation, DDIS provided intelligence and security advice to the Chief of Defence Force, operations staff, and planners at Defence Force Headquarters. It performed a number of roles in respect of the East Timor deployment including:
 - briefing the Chief of Defence Force and Chiefs of Staff Committee;
 - preparing regular (at times daily) intelligence summaries and reports;
 - producing information for use in Cabinet papers;
 - producing a military strategic intelligence estimate;
 - preparing briefs for departing military personnel;
 - maintaining contact with intelligence sources and departments;
 - responding to ongoing requests for intelligence information; and
 - preparing an environmental support package for use by personnel to be posted to East Timor.

- DDIS also fed information directly into operational planning. Tasks it completed (such as preparing briefs for departing personnel and developing environmental support packages) were beyond its role of strategic intelligence provider. DDIS performed these tasks because there was no separate group assigned responsibility for collating operational and tactical level intelligence. We understand that, in future, this will be part of the role of the new Joint Forces Headquarters.
- 2.14 Intelligence gathered from a range of sources was brought together in two key products comprehensive military threat assessments, and a Military Strategic Intelligence Estimate. Information contained in these assessments and estimates was incorporated in reports to Ministers and the Cabinet providing a valuable summary of risks and the implications for military planning. The assessments and estimates also provided valuable sources of intelligence for the preparation of military planning documents the most significant of which was the Military Strategic Estimate (MSE).
- 2.15 The NZDF prepared a draft MSE for East Timor in May 1999. Its purpose was to identify the preferred strategy to conduct military operations as part of a UN Multinational Force. The MSE:

A Military Strategic Estimate identified the preferred strategy

- considered a range of political issues;
- identified a national strategy and a possible set of national interests and objectives; and
- considered the NZDF's strategic options to achieve the potential national objectives.

Overseas Sources of Intelligence

- The NZDF had access to a variety of intelligence sources, both within and outside New Zealand. Both the NZDF and MFAT overseas posts supplied valuable information about the situation in East Timor, monitored UN deliberations, and facilitated consultation with the Australian Defence Force over the indicative force composition and the timing of any deployment. From these reports, the NZDF was able to establish the likely range of tasks its military force might be called on to perform, and the mix of force elements required to complement those supplied by its coalition partners.
- As planning progressed, the NZDF was able to draw on intelligence from its military personnel posted to Australia and East Timor. In June 1999, the Government agreed to send a small number of Military Liaison Officers to East Timor. Initially, because the United Nations employed these officers as observers, they could not be used to gather military intelligence. Once the INTERFET operation had been mandated, however, the officers were able to provide intelligence about the situation in East Timor.

- 2.18 The NZDF was also successful in securing posts within the UN command structure, giving it a valuable role in combined planning. This knowledge of how the coalition force was to be structured played a large role in shaping New Zealand's contribution.
- In September 1999, the NZDF sent a Forward Planning Group (FPG) to Australia. The FPG provided a vital channel of communication by which to convey intelligence gained from ongoing discussions with the Australian Defence Force and UN personnel. As at 14 September 1999, there were nine NZDF liaison officers and planning staff deployed in Australia.
- 2.20 In consulting with the Australian Defence Force, the FPG played an important role in keeping the NZDF informed on the sequencing of deployment to meet UN requirements.

The Forward Planning Group facilitated access to intelligence

Such a link was important, as the UN (through a Force Deployment Plan) dictated the timing of the deployment. This link was complemented by planning information received from New Zealand's mission at the UN headquarters in New York.

- 2.21 The FPG also reported on the conditions under which New Zealand personnel would have to operate on the ground thus providing the NZDF with access to additional ongoing operational intelligence such as the:
 - political situation;
 - nature of the terrain;
 - military threats posed by armed forces;
 - infrastructure (including water and sanitation); and
 - environment (climate, diseases, etc.)
- 2.22 The NZDF's planning was well advanced by the time the UN Security Council adopted (on 15 September 1999) its resolution authorising the establishment of a multinational force. Intelligence played an important part in enabling the NZDF to plan for different contingencies.
- 2.23 The decision to enter East Timor under either a UN Chapter Six or Chapter Seven mandate had implications for force structure. A Chapter Seven mandate focuses more on peace enforcement, whereas a Chapter Six mandate is directed towards a peace-keeping and monitoring role.
- East Timor was a peace enforcement operation meaning that the military force had to be able to both defend itself and possess an offensive capability if required. By maintaining contact with coalition force planners and UN decision-makers throughout the preceding months, NZDF planners were able to design a force that matched the required mandate.

Interdepartmental Intelligence Networks

- 2.25 The NZDF was represented on interdepartmental working groups charged with collating intelligence about the developing political situation and the environment in East Timor. This representation gave the NZDF the opportunity to obtain specific intelligence on the East Timor conflict and to discuss ongoing requirements.
- The collection of foreign intelligence is directed and co-ordinated through the Officials' Directorate for External Security Co-ordination (ODESC), a standing committee of officials from relevant government agencies, chaired by the Department of the Prime Minister and Cabinet (DPMC). NZDF representation on ODESC enabled it to contribute to the formulation of New Zealand's wider foreign intelligence requirements with regard to the East Timor situation.
- 2.27 Watch Groups under the umbrella of ODESC provide a means for officials to share intelligence, develop policy, and monitor developments on a regional basis. An East Timor Watch Group was established in April 1999. It served as a forum for the exchange of intelligence among relevant departments at times meeting daily. Membership of the Watch Group included MFAT, MoD, NZDF, DPMC, and the External Assessments Bureau (EAB).
- 2.28 The NZDF's representation on the East Timor Watch Group throughout this period provided the Group with an NZDF intelligence perspective on the East Timor situation, and a channel for communicating the NZDF's military threat assessment.
- 2.29 The East Timor Watch Group acted as a 'clearing-house', ensuring that all participants were fully informed and working from the same information. Both DDIS and the EAB provided briefings to the meetings, with other participants providing input where relevant. The Group also reported regularly to Ministers on political developments and other intelligence matters. These reports were a short summary of recent events from both a foreign policy and defence perspective. In this way, the Watch Group reports also provided the NZDF with an additional channel through which to report its activities to Ministers.
- 2.30 In addition to these formal groups, ongoing communication took place between the NZDF, MFAT, and MoD. The NZDF and MFAT each set up

crisis rooms, which were designated points of contact where all information concerning the East Timor situation was collated. Relevant information was shared between the two crisis rooms. Weekly meetings between the MoD,

There was ongoing communication between NZDF, MFAT and MoD

NZDF and MFAT were held in addition to the East Timor Watch Group meetings. As well as acting as information-sharing opportunities, these meetings facilitated the preparation of joint Cabinet papers.

Ongoing Intelligence Gathering

- 2.31 Intelligence gathering continued beyond the deployment of the first New Zealand Battalion Group. The political situation affecting East Timor was still changing over the period of the first Battalion's deployment. The East Timor Watch Group remained a key source of this political situation intelligence. In addition, Military Threat Assessments continued to be produced at regular intervals often in response to changes in militia activity in West Timor.
- The ongoing intelligence proved useful for planning later Battalion Group involvement. The transition from INTERFET to UNTAET in March 2000 presented a political and security situation entirely different from that which planners faced for the first deployment. Intelligence gathered over the INTERFET period was used to plan the force structure of the second New Zealand Battalion Group and to formulate training programmes that would suit the existing and predicted environment.

Conclusions

- 2.33 Intelligence gathered by the NZDF from as early as February 1999 met a wide range of planning needs. Access to a variety of intelligence sources gave the NZDF useful information about:
 - the environment into which it might be directed to send a military force;
 - the likely tasks that a New Zealand force might be called upon to perform; and
 - the likely composition of that force.
- 2.34 Direct participation in planning for the combined coalition force provided the NZDF with a range of information, which was helpful for shaping its own contribution.
- 2.35 Standing and temporary groups of officials facilitated the sharing of strategic intelligence and the preparation of reports by the MoD, NZDF and MFAT keeping the Government informed and seeking decisions as necessary. The NZDF was represented on these interdepartmental groups which enabled it to modify military planning as circumstances changed, and assisted it in shaping contingency planning for a possible deployment.
- 2.36 Constant communications between officials over the planning period helped to ensure that the Government received advice based on a common set of information and assumptions. Intelligence reports have continued to provide the NZDF with information on which to base its ongoing planning and training for subsequent involvement beyond INTERFET.

The Strategic Planning Structure

Expectations

- Jointness is a term used to describe the art of combining capabilities from different military Services to create an effect that is greater than the sum of the individual constituent units. Jointness allows military commanders to tailor a mix of force elements to the particular mission, and apply military capabilities precisely where and when they are needed. Wherever it is likely that a deployment will be joint in nature, it is important that all three Services adopt a joint approach from the start of the planning process.
- 2.38 All three Services of the NZDF played a part in planning for East Timor. We expected the NZDF to have set up an effective structure for this purpose, having the following characteristics:
 - a well-defined mandate and framework for decision-making;
 - representation from all three Services and an appropriate mix of skills and experience;
 - clear accountability links to CDF; and
 - clear lines of authority and ability to delegate tasks.

Findings

2.39 Strategic contingency planning was undertaken by a Joint Planning Group (JPG) located within the NZDF operations group at Defence Force

Headquarters [in Wellington]. The job of a group such as the JPG is to assess and evaluate the situation and produce a range of possible responses that are consistent with both political and military goals.

The JPG's task was to produce a range of possible responses

These goals then form the basis for development of the preferred option at an operational level, while the JPG continues to monitor and assess strategic-level issues.

- 2.40 We identified a number of key roles performed by the JPG, including:
 - preparing a succession of key milestones, timelines, and critical paths;
 - developing a range of force options;
 - considering the command and control structures within which an NZDF military force would operate;
 - preparing the Military Strategic Estimate;
 - handling organisation-wide policy issues associated with the deployment

 such as development of a media policy, and integration of coalition
 force elements into the Battalion Group;
 - co-ordinating strategic planning across the three Services;
 - distributing intelligence within the NZDF;

- translating Defence Force Headquarters decisions into directives to operational areas of the NZDF Headquarters and overseas;
- maintaining links with other coalition forces; and
- preparing reports to the Minister and the Government.
- The JPG comprised 15-20 members, including Defence Force Headquarters operations and planning staff as well as appropriate single Service personnel. It included representatives with legal, human resources, or other skills where necessary. Representation from the operationally focused Joint Operational Planning Group (JOPG) ensured ongoing liaison between the strategic and operational levels. Strategic planning staff were in turn represented at operational planning forums.
- 2.42 The NZDF sought the attendance of representatives from the MoD and MFAT at some JPG meetings to provide transparency to the planning process. However, we could not find any evidence to verify that this occurred.
- 2.43 Contingency planning relied heavily on accurate and current intelligence. The JPG had a close relationship with NZDF intelligence personnel, ensuring that planning drew on available intelligence at the appropriate time. The Military Strategic Estimate (the JPG's primary product) both complemented and drew from the Military Strategic Intelligence Estimate. This was facilitated by the JPG being represented on intelligence forums such as the East Timor Watch Group.
- We found no terms of reference or list of responsibilities and tasks for the JPG. Discussions with NZDF planning personnel confirmed that the JPG operated

within an informal structure and with wideranging responsibilities. In our view, the absence of a formal mandate and brief created the potential for differing interpretations of roles and responsibilities

The JPG had no formal mandate or brief

that the JPG was to fulfil. Given its vital function in the strategic planning phase, we believe this constituted a weakness in the planning system.

- We found that the JPG had direct access and a close reporting relationship with the Chief of Defence Force through the Chiefs of Staff Committee. However, we found no minutes of JPG meetings, and only limited records were kept of Chiefs of Staff Committee meetings. As a result, we were unable to follow the decision-making process adopted by senior NZDF personnel and the factors that they considered in reaching their decisions.
- 2.46 Planning for a possible East Timor operation took a number of different paths over time and involved a number of key decisions. The NZDF should be in a position to readily demonstrate to the Government and Parliament the basis on which those decisions were reached. A clear understanding of the planning process and assumptions is difficult to achieve without clear and detailed minutes of these high-level meetings.

Conclusions

- 2.47 The NZDF had in place an effective structure to plan for a range of military contingencies. Strategic planning for a possible East Timor operation was undertaken by a Joint Planning Group (JPG). The JPG played an important role in monitoring and analysing developments in East Timor, developing a range of options to meet political and military goals, and maintaining links with other departments and the Government. The JPG had direct access to the highest levels of decision-making within the NZDF.
- 2.48 The JPG did not have an explicit mandate it operated with a wide-ranging but largely undefined brief. The loose arrangement for the operation of the JPG created the potential for differing interpretations of its roles and responsibilities, and for conflicts with the roles of other planning groups in particular the two Joint Operational Planning Groups which were assigned responsibility for planning at an operational level.
- 2.49 There were no systematic records of JPG meetings. This was also the case for meetings of the Chiefs of Staff Committee. Incomplete records make it difficult to follow those processes and deliberations which led to key courses of action taken by senior NZDF personnel.

Forward Planning and Critical Path Identification

Expectations

- 2.50 Effective forward planning was a key to the NZDF's ability to respond if directed by the Government. In anticipation of a possible deployment, the NZDF needed to identify and address critical personnel and equipment deficiencies. Contingency planning also required the NZDF to initiate those preparations likely to influence its ability to respond.
- 2.51 Our expectations were that the NZDF:
 - used intelligence to begin early planning for a possible East Timor operation;
 - used critical path planning to identify those areas of capability which were likely to dictate its ability to respond in a timely and effective way; and
 - kept the Minister informed on progress with contingency planning, force options, and preparedness status, and sought timely Government approval for expenditure to meet identified capability shortfalls.

Findings

Forward Planning

- 2.52 Intelligence alerted the NZDF to key issues for which planning needed to begin early. The NZDF began preparations for a possible East Timor operation in early-1999, having secured a mandate from the Government to undertake the necessary contingency planning to position itself for a timely and effective response if required. Contingency planning was a vital early phase in the NZDF's preparations for a possible deployment.
- 2.53 This process of gathering and analysing intelligence exposed a number of key issues. Two of these were:

Arrangements for the Movement of Military Personnel and Equipment

Early planning documents identified strategic lift capability as a critical planning issue. In July 1999, for example, a number of airlift options were being considered, including use of United States transport aircraft. The need to transport a large amount of equipment by sea was also recognised at an early stage. With the Navy sealift ship HMNZS *Charles Upham* unavailable, it became clear that alternative options would be needed. This became even more important once planning centred around the deployment of a Battalion Group. We discuss strategic transport arrangements in more detail in Paper 5 Contracting of Civilian Services.

Inoculation against Japanese Encephalitis Virus (JEV) – see <u>case study on page 34</u>

Intelligence told the NZDF that JEV was present in East Timor, as a result of which any personnel deployed would need to be inoculated against the disease. The inoculation becomes fully effective only after a period of 38 days. The lead-time for obtaining supplies of the vaccine, selecting priority personnel and administering the inoculations, were factors dictating the preparedness of New Zealand force elements and the timing of any prospective deployment. Inoculation was identified as a critical factor as early as 28 April 1999 in a briefing paper to Ministers on the current and prospective situation in East Timor, and options for the deployment of NZDF personnel. Preparations for the inoculation of selected personnel by the single Services began in mid-April 1999, co-ordinated by the Joint Command.

Critical Path Planning

- As part of contingency planning, the NZDF assessed the costs and timescales for preparing a force for deployment to East Timor. The NZDF identified a number of equipment enhancements that it considered essential. The most significant of these enhancements were the:
 - refurbishment of 25 Armoured Personnel Carriers (APCs) for infantry support (at an estimated cost of \$2.5 million);

- fitting of armour and communications equipment to the Air Force Iroquois helicopters; and
- purchase of light operational vehicles to replace Army's ageing Land Rover fleet.
- 2.55 Early identification and approval allowed for an early start to the acquisition and enhancement of the identified equipment:
 - on 10 May 1999, Cabinet approved the purchase of 35 commercial fourwheel drive vehicles; and
 - on 28 June 1999, Cabinet approved the refurbishment of 25 APCs and the purchase of Iroquois secure communications equipment.
- 2.56 The NZDF identified that upgrading the APCs would take the longest time and that it posed the greatest risk to timely deployment. Sending NZDF personnel without the protection of APCs was seen to expose Army's infantry to an unacceptable level of risk. The importance of the APC refurbishment to the safe deployment of an infantry Company was first formally brought to the attention of Ministers in April 1999. In order for the work to begin early, the refurbishment was undertaken in a phased manner. The contract included a clause that allowed cancellation of the contract should the Government decide not to send a New Zealand force to East Timor.

Force Element Options and Response Times

- A flexible and informed planning process enabled the NZDF to adjust its planning to meet new circumstances, adapt to new assumptions, and devise military requirements. Over the course of its contingency planning, the NZDF changed the:
 - size of the commitment and the possible dates of deployment;
 - structure of the possible force to match the evolving situation; and
 - response times of force elements.
- 2.58 Initial planning was based on assumptions about the deployment of a Company Group. This would enable a quick response to any likely development. However, as intelligence about the developing situation in East Timor was reviewed, planning focused on the deployment of a Battalion Group, which is formed of more than one Company plus support elements. This option was later adjusted to the early deployment of a Company Group that would be rounded out by a later contingent of personnel and equipment to Battalion Group strength. From late-June through to October 1999, the Company and Battalion Groups were the basis for NZDF operational planning.
- 2.59 To meet the Government's expectations, response times for the Company and Battalion Groups were reduced as the likely deployment date approached. The benefits of flexible planning were underlined when the NZDF was required to have its force elements ready within a compressed deadline.

Reporting to the Government

- 2.60 The NZDF kept the Minister well informed over the course of planning for East Timor by way of reports and meetings. It was important that any Government decisions to commit military resources were based on realistic expectations in terms of risk, timing, and capability. From the outset the NZDF kept the Minister and the Government informed of force options available and of the costs, limitations, and risks associated with those options. Reports to the Minister were an integral part of the planning and deployment process.
- In early-April 1999, for example, the Chief of Defence Force met the Ministers of Foreign Affairs and Defence to discuss a possible New Zealand military contribution. This and later meetings, and reports to the Minister of Defence from the NZDF, discussed options for the:
 - range of force elements which might be deployed to East Timor;
 - national objectives which any such military contribution might meet; and
 - tasks which a New Zealand contingent might perform.
- 2.62 The NZDF prepared a draft Military Strategic Estimate for East Timor in late-May 1999. This document identified a preferred national strategy to conduct military operations as part of a UN Multinational Force. The comprehensive document formed the basis for subsequent advice to the Government, and included:
 - consideration of a range of political factors;
 - identification of a national strategy and a possible set of national interests and objectives; and
 - consideration of the NZDF's strategic options to achieve the potential national objectives.
- 2.63 NZDF reporting was wide-ranging, and included commentary on:
 - additional funding requirements;
 - force options;
 - military threat assessments;
 - costs associated with a likely deployment;
 - impacts on other concurrent NZDF commitments; and
 - shortfalls in operational capability.
- In particular, the NZDF identified the need to purchase or upgrade equipment likely to be required for any deployment. Of these tasks, the most significant were the immediate purchase of up to 35 non-military light operational vehicles, and the upgrading of Army's fleet of 25 APCs.
- 2.65 The NZDF sought early approval from the Government to begin making the necessary equipment enhancements in anticipation of a possible deployment. The need to approve funding at an early stage was drawn to the attention of

relevant Ministers in April 1999. Papers to the Government over subsequent weeks reiterated the need for such work to proceed if the NZDF was to be able to respond to any Government directive within the required response time. Approval and funding was given for the required APC upgrading (at an expected cost of \$2.5million) in June 1999.

2.66 The NZDF reported frequently – daily in September 1999 – to its Minister on the preparedness status of force elements available for deployment. Current information about the preparedness of NZDF forces made it possible for the Government to reach political decisions about New Zealand's military commitment to the UN Multinational Force with a good understanding of capability limitations, risks to personnel, and deployment time.

Conclusions

- Forward planning was timely and effective. The NZDF used information gathered from intelligence sources to begin early planning for a possible East Timor operation. Critical paths were developed to identify lead times, complete planning tasks, and address known capability deficiencies.
- 2.68 The NZDF identified early those tasks that were vital to the success of any possible deployment and had the longest lead times, and sought approval to begin the necessary contingency planning. In turn, timelines enabled the NZDF to seek timely Government approval for necessary expenditure. An intense focus on planning and on making contingency preparations contributed significantly to the NZDF's preparedness and ability to respond.
- A number of uncertainties such as the situation in East Timor, the requirements of the UN, and the composition of the coalition force made military planning difficult. The NZDF developed a range of force options, and adjusted its planning assumptions as circumstances changed. A flexible set of planning assumptions enabled the NZDF to change the shape of its proposed force and move to different response times as the East Timor situation evolved and (with it) the Government's likely requirements.
- 2.70 The NZDF kept the Minister well informed on progress with contingency planning, and of the costs, limitations and risks associated with force options and response times. Cabinet was given early notification of the need for equipment enhancements to enable the NZDF to perform those tasks likely to be assigned to a New Zealand force in East Timor. Costs and contractual implications were clearly stated.

Issue Three Operational Planning

Contents

	Page
3 – Operational Planning	49
<u>Introduction</u> .	51
<u>Expectations</u>	51
<u>Findings</u>	51
How Operational Planning was Conducted	51
The New Joint Forces Headquarters	53
Conclusions	55

Introduction

3.1 The military objectives and tasks developed from the strategic planning process provide the framework for operational planning. Operational planning links the tactical employment of a force to strategic objectives – focusing on activities such as mobilisation, deployment, sustainment and re-deployment.

Expectations

- 3.2 The East Timor operation involved planning and co-ordination across all three Services. Direct involvement in operational planning ensures that each Service understands the role it will play alongside the other Services within the joint force. A joint approach to operational planning promotes a seamless integration of force elements into a joint force.
- 3.3 We expected that the NZDF would have set up an operational planning structure that:
 - assigned clear responsibility for managing operational planning tasks associated with preparation for, and deployment to, East Timor; and
 - facilitated effective co-ordination and communication between the Joint Planning Group (based at Defence Force Headquarters and responsible for strategic planning), the single Services, and those groups responsible for joint operational planning.

Findings

How Operational Planning was Conducted

- A Joint Operational Planning Group (JOPG) was formed in late-June 1999. It was the first of two such planning groups. Initially, the Air Commander chaired the JOPG, which undertook planning for the deployment of a Battalion Group. The Terms of Reference for the first JOPG were clearly defined in a Directive from the Chief of Defence Force. Tasks assigned to the JOPG included:
 - identifying force elements to be deployed;
 - determining how those force elements would be integrated into a composite Battalion Group;
 - identifying critical paths for operational planning tasks;
 - issuing guidance and directives in relation to key planning tasks, such as implementation of equipment enhancements, preparation of single Service budgets, and inoculation of personnel;

- monitoring preparedness times for the three Services;
- forecasting in-theatre³ supply requirements; and
- addressing a range of administrative tasks, such as welfare provision for deployed personnel.

3.5 JOPG planning followed four phases:

- *Phase One* identifying planning tasks critical to the pre-deployment process.
- *Phase Two* preparing a joint assessment of the likely force elements and capabilities required for a possible military deployment.
- *Phase Three* evaluating single Service requirements and the time needed to move to a state of operational preparedness (from DLOC to OLOC).
- Phase Four bringing together single Service cost estimates and information and developing options for the possible deployment of a New Zealand force.
- 3.6 On 14 July 1999, the JOPG (chaired at the time by the Air Commander) made a comprehensive presentation to the Chief of Defence Force. Four main possible deployment options were presented along with the associated costs and risks.
- 3.7 The JOPG identified those critical issues with the most significant cost or time implications and the greatest impact on capability and operational preparedness. These included:
 - charter of a sealift vessel;
 - the capacity of the port facilities in Dili;
 - the supply of water in-theatre; and
 - inoculation of deploying troops against the Japanese Encephalitis Virus (JEV).

Critical tasks and items were identified as part of planning

- As the situation in East Timor developed, it became clear that New Zealand might be called on to deploy earlier, and with a smaller force. At that point, Land Command assumed responsibility from Air Command for conducting operational planning for a Company Group deployment. This second JOPG began planning in late-July 1999.
- 3.9 The Land Commander formally assumed his role as Chair of the JOPG in the second week of September 1999, marking the beginning of a period of intense operational planning. The planning concentrated on further developing force options and adjusting operational planning to changing response times and force structures in response to the developing situation in East Timor.

³ In-theatre is a term used by the NZDF to describe the area of military operations – in this case East Timor

- 3.10 The JOPG was responsible for developing and issuing mobilisation and deployment orders to the single Services, and co-ordinating estimates of the costs of pre-deployment force preparations. Over the pre-deployment period, the JOPG played an important role in closely monitoring the preparedness and OLOC-generation times of single Service force elements. For example, the JOPG sought weekly reports from each single Service on progress with its JEV inoculation programme, and maintained close oversight of progress with modifications to the Air Force's helicopters and refurbishment of Army's APCs.
- 3.11 Some operational planning could not begin until Defence Force Headquarters had issued a relevant directive. A number of decisions needed to be made by the NZDF on a range of strategic issues before they could be translated into guidance for unit or formation training or detailed planning for the movement of personnel and equipment. These issues included:
 - the determination and promulgation of *Rules of Engagement*;⁴
 - response times for force elements;
 - the management of communications with coalition forces; and
 - the chartering of civilian transport resources.
- The JOPG structure provided a useful channel for liaison between the Joint Planning Group at Defence Force Headquarters and the single Services (responsible for bringing individual force elements up to operational strength and state of preparedness to deploy). Close liaison between these groups was critical to successful co-ordination and effective flows of information. Exchanges of staff helped to ensure that operational planning was consistent with strategic planning for a possible deployment, that tight deadlines were met, and that respective responsibilities were clearly understood.
- 3.13 From the outset, the JOPG drew on the planning resources of the single Services. Direct involvement in the operational planning process promoted the flow of information between the JOPG and the single Services. Based on our reviews of planning documentation, we found that single Service commands (such as the Land Force Group at Linton) were kept well informed of JOPG priorities and were well aware of operational planning requirements as they were developed.

The New Joint Forces Headquarters

- 3.14 Historically, operational planning within the NZDF was conducted within a joint structure as the need arose. The formation of the JOPG in the context of the East Timor operation was the most recent example of such a temporary arrangement.
- 3.15 The need for a permanent joint approach to operational defence planning was identified following the Bougainville operation and formalised in May 1999,

53

The term "rules of engagement" refers to the directions guiding the application of armed force by military personnel within a theatre of operations.

leading to a decision to review command and control arrangements within the NZDF.

- 3.16 The benefits of a permanent joint operational planning structure were seen to be:
 - the ability to make decisions more quickly;
 - a clear separation between strategic and operational levels of planning;
 - the opportunity to make better use of limited NZDF resources:
 - the need to foster skills in joint planning, continuity in joint operational command responsibilities, the conduct of joint operations, and the maintenance of standing response plans; and
 - the strengthening of the NZDF's interoperability⁵ with the Australian Defence Force.
- 3.17 In September 2000 a paper was sent to the Cabinet External Relations and Defence Committee proposing the establishment of a permanent Joint Forces Headquarters. That paper noted:

Over the past few years, the NZDF has recognised the need to adjust its command and control to gain a greater joint effect throughout the tactical and operational level of command. Furthermore, recent experience in Bougainville and East Timor has confirmed that greater synergy in planning, deploying and controlling the NZDF on operations could be achieved through a dedicated operational level JHQ, rather than forming a JHQ on an ad hoc basis, as is the current practice.

- 3.18 The decision to establish a single, permanent, operational level joint command headquarters will have implications for roles, responsibilities and relationships within the NZDF.
- 3.19 Single Service Chiefs will retain command responsibility for their own Services. As at present, their primary role will be to generate and maintain capability within the three single Services including conducting single Service training. Single Service chiefs will be responsible for the delivery of all output classes except Output Class 16: Operationally Deployed Forces.
- A new position of Commander Joint Forces (NZ) has been created to permanently head the Joint Forces Headquarters. The Joint Forces Commander will be of similar rank to the single Service Chiefs and will be directly responsible to the Chief of Defence Force. In peacetime the Joint Forces Headquarters will conduct all training exercises of a joint (involving the three Services) or combined (with other national forces) nature. It will be staffed by single Service staff from each of the three existing single Service headquarters in key functional areas, such as:

-

Interoperability is a term used by the NZDF to describe the ability to work closely or as part of another nation's military forces.

- personnel;
- intelligence;
- operations;
- logistics;
- plans;
- communications;
- training;
- doctrine assessment;
- evaluation; and
- finance.
- 3.21 Drawing on unit and formation assessments, the Joint Forces Headquarters will have overall responsibility for reporting on force preparedness and capability. We note that this responsibility will need to be clearly defined, having regard to the respective roles of the Joint Forces Headquarters and the single Service Chiefs. The joint organisation may allow for a new set of *joint* Output Classes.
- 3.22 Should circumstances require, single Service Chiefs will assign their forces to the Joint Forces Commander at agreed and evaluated levels of operational capability. The Joint Forces Commander will determine operational objectives, the sequence of operations, resources required and priorities. The Joint Forces Commander will also command any New Zealand force deployed on operations. The Joint Planning Group will be responsible for assigning the Joint Forces Commander with broad objectives and tasks.
- 3.23 The Chief of Defence Force will retain overall responsibility for the operational capabilities of the NZDF, preparedness, risk, equipment, and force structure. He will also determine the military strategies and objectives for any operation to be conducted under the command of the Joint Forces Headquarters.

Conclusions

3.24 The NZDF assigned clear responsibility to a Joint Operations Planning Group for managing operational planning tasks.

The planning structure promoted effective liaison between strategic and operational planners, and facilitated the process of translating strategic directives into operational instructions and guidance to the three Services. The

The Joint Forces Headquarters offers new opportunities

JOPG played an important role in directing operational level planning. It oversaw the preparations undertaken by the single Services and monitored force preparedness.

- 3.25 The newly established Joint Forces Headquarters will provide a permanent structure in place of what were previously temporary arrangements. The new structure offers opportunities for the NZDF to establish policies and processes for:
 - joint operational planning;
 - mobilisation, training and deployment;
 - the conduct of joint military operations; and
 - the development of joint doctrine.

Issue Four **Pre-deployment Training**

Contents

	Page
4 – Pre-deployment Training	59
Introduction.	59
<u>Expectations</u>	59
Findings	60
A Framework for Training	60
Developing Training Programmes	62
Delivery of Pre-deployment Training	65
Drawing on Operational Lessons to Refine Training	68
Conclusions.	69

Introduction

- Pre-deployment training is a vital component of moving force elements from DLOC to OLOC where they are ready to deploy. Without the required training, military personnel can be put at unnecessary risk, and the force may not be capable of carrying out its assigned tasks either on its own or as part of a joint or coalition force.
- 4.2 Moving from a peacetime state of readiness to readiness for a given military operation entails:
 - training more intensively in core skills;
 - refreshing or adding to critical competencies; and
 - focusing on tasks specific to the context and environment in which personnel are to be deployed.
- 4.3 Completion of specific training tasks over a period of time is a key measure of force readiness. Personnel skills can be measured both during and following training to provide an indicator of an individual's competencies in a set of combat or non-combat skills. Once training is complete, it is the responsibility of the unit commander to evaluate whether the unit has reached OLOC and is able to deploy.

Expectations

- 4.4 We identified aspects of pre-deployment training that we regarded as being vital to successful preparation for a situation such as East Timor. We expected pre-deployment training for East Timor to:
 - be based on an operational framework which enabled the single Services to draw up detailed, timely, and relevant training plans;
 - draw on intelligence about the environment and terrain (so that training would focus on the conditions in which military personnel would be operating);
 - adequately train the force elements that were to be deployed to East Timor in those tasks required for the mission; and
 - build on existing skills, and include joint operations to ensure that each Service would be capable of operating with personnel and equipment from other Services.
- 4.5 Our findings are structured around three main areas of pre-deployment training:
 - the framework guiding the development and delivery of training;

- development of the training programmes; and
- the delivery of pre-deployment training.
- 4.6 We also set out our findings on drawing operational lessons to refine training.

Findings

A Framework for Training

- 4.7 Preparation for any operational deployment is directed and co-ordinated through the issue of a number of formal directives and orders. These will normally be issued from an operational headquarters. Such orders can include:
 - Warning Orders;
 - Operational Orders;
 - Administration Instructions; and
 - Mobilisation Orders.

Formal orders are an important part of the planning process

- Training units and deploying personnel should be able to draw on clear and comprehensive guidance in developing their training programmes. The Joint Operational Planning Group had responsibility for developing and issuing such orders to the single Services, with the purpose of:
 - initiating the planning of training programmes;
 - defining the timescale; and
 - directing the focus of training having regard to the mission, the tasks to be performed, and the environment within which military operations would be conducted.
- 4.9 The most significant of such orders are Warning Orders and Operational Orders.
- 4.10 **Warning Orders** alert force elements to the possibility of deployment setting out the likely mission and intended outcome of the military operation. They are often the first notification of the need to begin training for a likely deployment. A Warning Order formally gives unit commanders the authority to dedicate time and funds to the preparation of force elements.
- An **Operational Order** is issued once the need to deploy has been confirmed. This document will confirm or amend the previous Warning Order, and provide more detailed directions as to the range of tasks the deploying force is expected to perform. An Operational Order contains:
 - timelines for bringing force elements to a state of operational readiness;
 - details of the likely tasks to be undertaken; and
 - the expected focus of the training plan.

- 4.12 Operational Orders are an important element of operational planning, serving as a detailed guide for unit commanders on the scope and focus of predeployment training.
- 4.13 From April 1999, the single Services had access to directives and a variety of other planning documentation that outlined the purpose of any likely mission, the mission-essential tasks on which training would need to be based, and the time within which such training should be completed. Training plans for the first Battalion Group to deploy to East Timor identified timelines and tasks for varying response time scenarios, along with detailed cost estimates for individual force units.
- 4.14 Such information was available to the single Services, but there was a failure to issue formal orders for deployment of the first Battalion Group.
- 4.15 NZDF reports note that the absence of a formal Warning Order reduced the amount of time available to Army force elements for mobilisation and training. In contrast, No. 3 Squadron (the Air Force Helicopter unit) received a Warning Order from Air Command at the end of July 1999. This enabled No. 3 Squadron to conduct planning and obtain personnel and equipment within the time allowed.
- 4.16 The NZDF observed, however, that no Operational Order was issued to No. 3 Squadron, and that the Army received its Operational Order too late to be of any real use for training. It was noted that basic parameters such as the Force Commander's Intent and Mission were not clearly understood until the Operational Order had been received. In one case, a force element received the Operational Order only after it had been deployed to East Timor.
- Where formal orders were received, stated deadlines were often unrealistic. As a consequence, such orders were largely ignored out of necessity. Planning of pre-deployment training in practice followed timescales that were considered more pragmatic.
- 4.18 In the absence of an Operational Order, training units were not able to draw on a training schedule for guidance in developing detailed training programmes and critical deadlines. Instead, we understand that training plans were largely generic, and were compiled from experience and a collection of other general sources. The NZDF noted that a detailed schedule confirming training activities and time allowed would have helped to reduce the time taken to bring force elements to a state of operational readiness.
- 4.19 We recommend that priority be given to addressing this deficiency in the context of a more intensive focus in future on readiness for joint operations.

Developing Training Programmes

Knowledge of the Conditions

- 4.20 In formulating a training plan, planners need to have a good knowledge of the physical, social, military and political environment in which force elements will be operating.
- 4.21 Considerable information was available to deploying force elements about different aspects of the environment in East Timor. For example, the first Battalion Group to be deployed had access to a range of intelligence documentation prepared by the NZDF headquarters, as well as regular situation reports from East Timor itself.
- 4.22 Key documents such as the Military Strategic Estimate, Directives from the Chief of Defence Force, and Military Threat Assessments provided important information that fed into the formulation of a training programme. These documents provided a picture of the likely operating environment (physical, social, military and political), as well as the wider context in which the force elements would be operating.
- Support packages compiled by single Service commands dealt with issues such as topography, climate and living conditions. Personnel also received country briefings as part of the pre-deployment training programme. These intelligence briefs were useful, as they gave personnel a picture of the environment into which they would be deployed.
- We are aware that while these documents and intelligence sources were available, both allied and internal restrictions on access to information, or a lack of detail in that information, meant that training planners were not fully

aware of the likely operating environment. Access to intelligence sources was tightly controlled. For example, contact with personnel from the Australian Defence Force and other coalition partners was largely confined to staff at Defence Force Headquarters. Training staff considered that

Access to intelligence was tightly controlled

direct contact with their counterparts would have increased their understanding of the scope of operations, and provided more detail of the operating environment.

Planning the Training

4.25 No standing contingency plans were available when training plans were drawn up for the first Battalion Group. A contingency plan serves as a template from which to tailor training plans for a specific engagement. It provides an efficient starting point when planning to tight deadlines.

- 4.26 No detailed checklists were available as references for drawing up training programmes for a given employment context. Such references would contain (among other matters) guidance on:
 - equipment needs;
 - exercise scenarios:
 - estimated consumables; and
 - training tasks.

There were no contingency training plans to work from

- 4.27 We were told that, as a consequence, the training programme was developed largely from scratch, without the benefit of reference to relevant existing sources. Significant resources were directed into planning, organisational and administration tasks associated with developing a training plan when the time available was limited.
- 4.28 In our view, this time could have been utilised more effectively had contingency training plans been available. Their absence also created the risk that some tasks would be overlooked.
- 4.29 Training planners were, nonetheless, able to draw on a number of sources. From late-August 1999, it was known that the INTERFET deployment would be made under a UN Chapter Seven mandate. This provided immediate parameters within which to plan. A Chapter Seven mandate calls for a focus on a higher intensity of military operations than peacekeeping alone. This gave training planners an important reference point when developing a training programme.
- 4.30 In developing training plans, training personnel also drew on documentation from other forces. Both Australian and British doctrine gave guidance to training planners on the range of tasks that the New Zealand force might be called on to perform.
- In 1999 Army was undertaking a review of its doctrine documentation and had recognised that much of its existing doctrine was not applicable to a scenario like that in East Timor. Mission Essential Task Lists (METLs) were being developed for force elements as a part of this review.
- 4.32 METLs are generated for various possible scenarios and describe the likely tasks a force element would be expected to undertake in each scenario. When completed, this list should give trainers a sound base from which to tailor a training programme to a specific situation. They should also form the basis for any training annex issued with an Operational Order. We understand that a similar process was being undertaken by the Air Force.
- 4.33 The Navy was able to draw on a detailed list of training requirements known as Naval Operational Readiness Criteria Statements. These statements prescribe tasks that ships must complete in order to meet the required standard of capability. The Navy vessels were already capable of performing the tasks assigned to them in East Timor, without the need to undergo significant additional training. We understand that the Navy is integrating Mission

Essential Task Lists into its Readiness Criteria Statements, so as to more fully develop training tasks for individual Employment Contexts.

We suggest that the NZDF review doctrine and formulates contingency training plans across the NZDF. These should be applicable to the various employment contexts into which a New Zealand force may be deployed. This task could be assigned to the newly formed Joint Forces Headquarters (once it is fully established and operational).

Adapting Training Plans to Evolving Situations

assumptions for training.

- Trainers had been informed of the likely tasks to be performed by a New Zealand military contribution to a multinational force in East Timor. In addition, they had access to regularly updated (sometimes daily) intelligence information about the military, environmental and cultural context. However, some planning information (such as the level of participation by other national forces and the military threat posed by Timorese militia) was changing rapidly, or was not known until shortly before New Zealand's personnel were ready to be deployed. Among the information not available was the exact scope and location of the NZDF military mission to East Timor.
- Changing information highlighted the importance of having a training programme which is flexible, and at the same time based on the consolidation of core skills and competencies applicable to a range of likely tasks and operating environments. One NZDF review noted that some intelligence was generic or incorrect, leading to incorrect
- A notable illustration of the need for flexibility was the fact that training was planned and conducted without knowledge of the area of operation to be assigned to the New Zealand force. We were told that Battalion training was planned in the expectation that a New Zealand force would be assigned an area of operation in the town of Dili, and training exercises were designed accordingly to include tasks appropriate to an urban environment such as the checking of buildings and conduct of street patrols.
- In fact, on arrival in East Timor, the Company Group spent only a short time in Dili. The Company was then assigned to a largely rural area with mountainous terrain and only the small township of Suai as a major settlement. The decision to make this region New Zealand's area of operation was made only in early-October 1999.
- 4.39 It was inevitable that there would be some uncertainty about the full range of tasks in which personnel needed to be trained to meet possible military threats and to operate effectively in a foreign environment. This means that responsiveness and flexibility in the design of pre-deployment training is important particularly when the likelihood of requirements changing is high.

4.40 The NZDF developed flexible training plans and altered them where necessary as its knowledge of the situation developed. We were told that training was adjusted at one point to include tasks designed to address new potential military threats for personnel. This also highlights the importance of establishing and maintaining reliable and effective intelligence networks, in order to ensure that planning proceeds on the basis of accurate assumptions and expectations.

Delivery of Pre-deployment Training

- 4.41 Training takes place at two levels: individual and collective. Individual training is designed to develop competency in a defined skill area, such as shooting or tracking. This training generally takes place in a classroom or in organised training areas.
- 4.42 Collective training involves personnel and force units exercising within a larger group to perform defined tasks such as reconnaissance, patrolling and live firing for example within a Platoon or as a Company. Collective training also promotes skills in the management of command and control structures. As discussed later in this chapter, significant elements of collective training were not carried out.

Individual Training

- The first New Zealand contingent to be deployed to East Timor was a Company Group. We were told that this Company essentially trained itself, with responsibility assigned to the Company commander who subsequently led the Company to East Timor.
- 4.44 The 16th Field Regiment (Artillery) was assigned responsibility for training the first Battalion to go to East Timor. A generic training programme was followed so as to gather the various elements of the Battalion together and bring it to a state of operational readiness. Training took place over late September and early October 1999.
- 4.45 Some basic training was necessary before personnel could be brought to a state of operational readiness. Pre-deployment training revealed some deficiencies in basic competencies such as:
 - experience of live firing;
 - knowledge of urban patrolling techniques;
 - conduct of weapon searches; and
 - skills in unarmed combat.
- The Company and Battalion Groups conducted similar training tasks. These included Section and Platoon battle handling and internal security drills, and open country live firing in pairs, Sections, and Platoons. Some specialist training was also undertaken. Signals training was undertaken at a variety of

levels. The Field Surgical Team underwent infantry training as well as preparing for the medical tasks it was expected to perform in East Timor.

There was evidence of training being tailored to East Timor conditions. Training programmes included modules in language, cultural familiarisation,

and the use of interpreters. Personnel were also briefed on health precautions to combat the risks of diseases – principally malaria. The Air Force's helicopter crews undertook mission-

Training was tailored to East Timor conditions

specific training – including special training for door gunners. Task-focused training included familiarisation with, and reinforcement of, skills such as clearing buildings, manning checkpoints, patrolling, and field defences.

APEC and Individual Training

- 4.48 Duties associated with the 1999 Asia Pacific Economic Co-operation (APEC) Forum gave personnel some limited operational experience, and brought them to a high level of readiness, preparing them to some extent for pre-deployment training. Familiarisation with some tasks (such as mounting roadblocks, crowd control and media awareness) was useful for personnel subsequently deployed to East Timor.
- 4.49 At the same time, we were told that, in carrying out APEC duties, NZDF personnel were carrying out some

very different tasks in a quite different environment. Pre-deployment training for East Timor required personnel to shift their thinking from

APEC both helped and hindered preparations

a focus on policing, to a combat role in a hostile and unknown environment.

Collective Training

- A tight deployment timetable limited the amount of collective training conducted. For example, we were told that co-ordination of a Company Group with Armoured Personnel Carriers (APCs) was a largely unfamiliar command and control scenario. This lack of familiarity reflected a limited focus on such training in the past. Only basic training was possible in preparing for East Timor.
- 4.51 Time constraints meant that some collective training, while planned, was conducted only when Battalion Group personnel gathered in Australia in preparation for deployment to East Timor. We were told that the NZDF had conducted only limited Battalion level exercises in the past.
- 4.52 Some limited training was conducted in headquarters command post procedures using the Army Simulation Centre's computerised battle simulation system. This was an eight-hour exercise, but we understand that a longer multi-day exercise would have been conducted had time allowed. This training contributed to verification of operational readiness, and was

undertaken with the help of officers from the Australian Defence Force's training centre.

- 4.53 The three Navy vessels that joined the INTERFET Task Force the frigates HMNZS *Te Kaha* and *Canterbury*, and the Fleet replenishment tanker HMNZS *Endeavour* were assessed as being largely prepared for the assigned tasks with the multinational force. Those tasks were:
 - surveillance;
 - deterrence:
 - support to land forces; and
 - command and control.
- 4.54 In particular, all three ships had taken part in *Kakadu*, an Australia-led combined exercise over July/August 1999. Other regional participants included naval units from Singapore, Philippines, and Papua New Guinea.
- 4.55 The exercise consisted of two phases:
 - harbour training; and
 - a ten-day period at sea incorporating maritime warfare manoeuvres.
- 4.56 In the course of the HMNZS *Canterbury*'s passage to East Timor, the ship's crew underwent additional training in firefighting and damage control in preparation for possible hostilities.

Joint Training

4.57 The NZDF knew at an early stage that operations in East Timor would be joint in nature. Because of the terrain to

be covered and the nature of the military tasks demanded of the New Zealand force, it was clear that interaction between the Air Force helicopters and Army's Battalion

The East Timor operation was a joint mission

Group would be required. In these circumstances, air insertion and support to Army units were likely to be heavily utilised. Some joint training was desirable to ensure that the two Services were able to work together effectively.

- 4.58 Familiarisation with helicopters is part of basic training for Army recruits. It gives the recruits an opportunity to gain experience of getting in and out of helicopters, and to learn about safety when around helicopters. Joint exercises held by the Air Force and Army confirm this initial experience and extend the level of familiarisation.
- Joint training can, to some extent, be simulated. Thus, Army units can gain some familiarity with operating procedures and requirements such as embarking and disembarking from helicopters without the need to have aircraft physically present.

4.60 However, no "live" joint pre-deployment training was undertaken, as the Air

Force was supporting APEC when pre-deployment training was taking place. After it had left New Zealand, the Company Group underwent some familiarisation training with Australian Air Force Blackhawk

No joint pre-deployment training was undertaken

helicopters. Limited training with the New Zealand Air Force helicopters was conducted once the Company Group was in East Timor.

- As a consequence, there was potential to improve joint command level understanding of helicopter operations. Co-ordinating joint operations between Army Company Groups and Air Force helicopters was an unfamiliar command and control scenario. Platoon and Company commanders needed to appreciate more fully how best to utilise helicopters. We understand that this is the result of fewer large-scale joint training exercises having been conducted over recent years.
- One role of the Navy's vessels in East Timor was to provide gunfire support for New Zealand's land force. We understand that training of Army personnel in procedures for directing naval gunfire ashore is conducted in Australia where the appropriate ranges are available. The Navy practises these procedures as a component of ongoing training.

<u>Drawing on Operational Lessons to Refine Training</u>

- We examined NZDF reports that reviewed the completeness and relevance of training delivered to the Company and Battalion Groups deployed to East Timor in September and October 1999. We also interviewed those personnel directly responsible for delivery of that training.
- The NZDF reports noted that training was affected by a number of factors. These included:
 - the limited time available;
 - the significant commitment to security duties in connection with APEC operations;
 - existing, reported deficiencies in capability and readiness; and

Training was influenced by a number of factors

- the need to form a composite Battalion Group comprising both infantry and non-infantry personnel.
- 4.65 The need to supplement infantry with non-infantry personnel to form a full Battalion Group created a body of force elements with differing skill levels and experience. The NZDF reports noted that basic soldier skill levels of non-infantry personnel about to go to East Timor were low, and that they should not have been expected to train within the same length of time as the infantry.

- 4.66 In January 2000, an NZDF lessons learned team visited East Timor to validate training in an operational setting, and to feed lessons into the training of future rotations. To determine to what extent the NZDF has refined its training on the basis of experience in-theatre, we reviewed training documentation for subsequent rotations. This documentation included:
 - post-activity reports;
 - lessons learned reports;
 - training validation reports;
 - mobilisation directives and accompanying training schedules; and
 - details of training programmes.
- 4.67 We concluded that, with the benefit of longer lead times and drawing on intheatre operational experience, the NZDF has planned training for subsequent rotations in a considered and comprehensive manner, drawing extensively on the lessons from preceding Battalion Group rotations. Training units have also been responsible for training to re-generate skills in returning personnel.
- 4.68 We consider that the NZDF should make use of its accumulated experience in the development, delivery, and review of successive training programmes, to both:
 - compile contingency training plans for possible future deployments; and
 - refine basic training to address identified skill deficiencies across units.

Conclusions

- Early guidance available to units being deployed included the scope of the likely military mission, the tasks a New Zealand force would be called on to perform, and timeframes for training. Formal orders would have provided useful confirmation of tasks and mission focus, along with detailed training requirements. Such orders were not always issued to units being deployed, or were issued too late to be useful for pre-deployment training.
- 4.70 A variety of information was available about the conditions in which the deployed force would be operating. This information gave NZDF personnel a picture of the environment in East Timor. However, for reasons of either operational security or a lack of detail, training personnel did not have full knowledge of the likely operating conditions for which they were delivering training.
- 4.71 Trainers had only limited and general documentation on which to draw for developing a training programme specific to the East Timor deployment. Comprehensive standing documentation directly relevant to New Zealand's force structure and likely employment contexts (including detailed checklists and contingency training plans) would have made the development of a training programme more efficient, and minimised the risk that some tasks might be overlooked.

- A degree of uncertainty is unavoidable in preparing for such a deployment. The experience of preparing for East Timor highlights the importance of gathering reliable operational intelligence thereby ensuring that operational planning and training is based on an accurate set of assumptions and expectations.
- 4.73 Training focused on strengthening core skills and competencies, and on tasks assessed as being most relevant to the New Zealand mission. Units being deployed were trained on the basis of the most current and reliable information available. At the same time, some information about the environment and military threat as well as the scope and location of the engagement was not known.
- 4.74 Individual training was conducted across a variety of tasks and competencies. However, time constraints limited the depth and breadth of training conducted at a collective level. As a result, Company commanders did not have the full opportunity to become familiar with the skills and procedures involved in coordinating force elements with capabilities such as helicopters, APCs, and maritime vessels. In this set of circumstances, a contributing factor was also NZDF's commitment to APEC security duties. Training with helicopters was part of pre-deployment training for the second rotation force.
- 4.75 The NZDF has identified those core skills and competencies which operational experience in East Timor showed as needing to be strengthened. The NZDF has also refined its training on the basis of lessons learned in-theatre, and validation visits to East Timor.

Issue Five Contracting for Civilian Services

Contents

	Page
5 – Contracting for Civilian Services.	71
<u>Introduction</u> .	73
Expectations	73
Findings	74
Preparedness Reporting	74
Identifying Mission-critical Equipment Deficiencies	74
Funding	75
Assessment of Equipment Needs	76
Managing Equipment Enhancement Projects	77
Moving the New Zealand Force to East Timor	81
<u>Conclusions</u>	87

Introduction

- 5.1 The NZDF relied on civilian suppliers and contractors in two main areas when preparing for the East Timor deployment:
 - enhancement or upgrading of major equipment; and
 - provision of strategic transport.
- It was not feasible to address all major equipment shortfalls such as replacing ageing radio sets, or purchasing new light armoured vehicles within the time required. Major equipment that was either enhanced or upgraded included Army's Armoured Personnel Carriers (APCs), the Air Force's Iroquois helicopters, and Army's container handling capability. In addition, the NZDF chartered two civilian vessels and one air freighter to transport heavy military equipment and supplies to East Timor.
- We examined the process by which the NZDF entered into contractual arrangements for the provision of civilian services. It was essential that the NZDF concluded these civilian arrangements in a timely and effective manner if it was to meet the Government's requirements for deployment.

Expectations

- We expected that the single Services would have:
 - identified at an early planning stage the requirement to address any equipment deficiencies;⁷
 - defined the costs and timeframe for undertaking such work; and
 - managed the necessary contracts to provide appropriate project oversight.
- The contracting process was subject to a number of critical time constraints. We expected the NZDF to have contracts or Memoranda of Understanding already in place with contractors, brokers or agents, where appropriate. These would enable the NZDF to respond quickly to a notice to prepare for a possible deployment.
- We expected to find that any major equipment deficiencies were known and clearly identified in Operational Preparedness Reporting System (OPRES) reports. We also sought evidence that the NZDF had estimated the time

The Ministry of Defence undertook accelerated purchase of Holden Rodeos as non-military vehicles for use in East Timor. We did not examine the contracting process as part of this study.

73

The NZDF also made various minor capital purchases to enhance its military capability in preparation for a possible deployment, such as night vision goggles and communications facilities.

required for establishing contracts, undertaking upgrading work, or purchasing the necessary equipment.

Findings

Preparedness Reporting

- As the NZDF was making preparations for a possible deployment, major equipment deficiencies were already known and had been raised in OPRES reports or reports to the Minister. These reports noted the need to upgrade Army's APCs, which were due to be replaced by a new fleet of light armoured vehicles, and to replace its ageing four-wheel drive Land Rovers with a fleet of new light operational vehicles.
- These equipment deficiencies limited the ability of the NZDF to deliver its outputs. For example, a Land Command OPRES report of June 1999 noted that, without the capability provided by container handling equipment (a truck with a swing-through crane), the NZDF faced a significant constraint in its ability to support operations.
- Plans were in place at the time to address the equipment deficiencies. An acquisition project to replace the APCs with new light armoured vehicles had begun in 1997, and was due to be completed by 2002-03. A similar proposal to purchase a light operational vehicle to replace Army's fleet of Land Rovers was also being developed. NZDF documents indicated that it was addressing the need to fit armour protection to its fleet of Iroquois helicopters through the Defence Capital Plan. Army was awaiting approval to purchase a locally-made crane
- None of the identified deficiencies were scheduled to be addressed within the time available to prepare for East Timor. As such, the deficiencies remained significant capability shortfalls as the NZDF prepared contingency plans for a possible deployment.

Identifying Mission-critical Equipment Deficiencies

- 5.11 We examined the processes by which the NZDF:
 - identified equipment deficiencies which it considered critical to success of the mission;
 - informed Ministers and sought funding approval; and
 - took action to carry out the necessary purchasing and contracting tasks to bring its equipment to a state of operational preparedness.

5.12 The NZDF identified early in the contingency planning process the need to purchase or upgrade mission-critical equipment. The Chief of Defence Force

noted in early April 1999 that there was a need for the NZDF to advise the Government of those force elements likely to be deployed. At the same time, it would be necessary to outline the extent and timetable for work which

Mission-critical items were noted early in the planning process

would need to be done to bring equipment up to a state of operational preparedness, and seek approval for additional funding where necessary.

On 17 April 1999, the NZDF advised the Minister of Defence of mission-critical enhancements needed to Navy, Army and Air Force equipment, along with likely costs and the likely time required to complete the enhancements. This advice was set against the background of the NZDF's obligation to meet the response times as specified in its Purchase Agreement with the Minister.

Funding

- The NZDF's report of April 1999 noted the long lead time required to prepare force elements for a possible operation, and the need for approval of \$3.228 million in additional funding. The NZDF noted that it would only meet the required response times for its various force elements (as agreed with the Government) if it received funding approval sufficiently early to enter into the necessary contracts and complete the enhancement work.
- In early-May 1999, the NZDF submitted a paper to the Minister for referral to the Cabinet seeking funding approval for equipment enhancements considered mission critical given the likely operational tasking that would be assigned to these force elements on East Timor. Any deployment was assessed as being likely to involve at least a Company Group. On the basis of this planning assumption and equipment requirements as set out in its output agreement, the NZDF sought funding approval for the following equipment enhancements:
 - overhaul of 25 APCs to provide protected transport for ground troops; and

for the NZDF ely 35 light

Overhaul of the APCs

was a time critical task

- purchase of approximately 35 light operational vehicles.
- The NZDF also noted the need for minor planned equipment enhancements, including:
 - secure communications equipment;
 - purchase and fitting of Iroquois armour protection; and
 - purchase of a swing-through crane.
- 5.17 Funding for these lower-cost items was met out of minor capital budgets or by re-programming of capital expenditure.

Assessment of Equipment Needs

- 5.18 The NZDF had previously assessed the APCs as being capable only for benign operations. Given the military threat posed by the East Timor operation, the NZDF identified an urgent need to upgrade sufficient vehicles to support a New Zealand force. The scope of the proposed upgrade was:
 - fitting of external armour kits to provide protection against small-arms fire (kits were already held by the NZDF);
 - replacement of track and suspension components to ensure that the APCs could operate effectively in the East Timor terrain; and
 - a comprehensive check of mechanical and structural components given that depot-level maintenance facilities would not be available in-theatre.
- The cost to carry out the APC enhancement was estimated at \$2.5 million. This was a time-critical task. Together with completion of the JEV vaccination programme for all personnel being deployed, timely completion of the APC overhaul posed the greatest risk to the NZDF's ability to respond to a Government order to deploy a force within the agreed response period.
- This risk was noted by the NZDF in successive reports to its Minister. The NZDF had first advised the Minister of the need to overhaul its APC fleet for an East Timor deployment in April 1999. Funding approval to begin the upgrade was not given until 28 June 1999. The NZDF was directed to refurbish the fleet in a phased manner and to include in the contract a cancellation clause should the Government ultimately not decide to deploy a force to East Timor.
- 5.21 The NZDF also sought funding from the Government to purchase 35 commercial four-wheel drive vehicles. The poor reliability of the ageing Land Rover fleet in Bougainville had led to the view that the vehicles should not be deployed overseas again. The NZDF therefore required a light operational vehicle to provide general transport for the Company Group. As the purchase of similar vehicles was already under consideration for the 1999-2000 financial year, the Government gave approval for the NZDF to bring this cost forward to begin procurement in early 1999.
- Equipment enhancement and purchasing processes were quickly put in place

once funding approval had been given. Within two weeks of gaining Cabinet approval for acquisition of the four-wheel drive vehicles, the NZDF had reported back to Cabinet that arrangements were already advanced. On 7 July 1999 the first project meeting

NZDF acted quickly once funding approval was given

was held to initiate the overhaul of the APCs. Only two days later, the first six of the vehicles were delivered to the contractor to start work

5.23 The process to acquire the Iroquois armour began once the Air Force was formally aware of the likely role it was to play in any deployment. The Iroquois helicopters had armour protection for the pilots but none for other crew or passengers. As the helicopters were expected to operate at low altitudes in support of ground troops – exposed to hostile small arms fire – it was assessed that the helicopters would require more extensive armour protection to fulfil their role. By 7 July 1999, the Air Force was in contact with possible suppliers of the required armour. By 30 July 1999 the Air Force had obtained approval for funding from the Chief of Defence Force.

Managing Equipment Enhancement Projects

- We assessed the manner in which the NZDF entered into, and managed, contracts for equipment enhancements, involving:
 - finding sources for goods and services;
 - developing product specifications or task scope; and
 - monitoring the contract.

Overhauling the APCs

- Since November 1997, the NZDF has had a standing contract in place with Serco Project Engineering Ltd (SPEL) for depot level supply and maintenance. The contract contains a *surge* clause allowing the NZDF to request SPEL to undertake non-scheduled work. In such circumstances, the *surge* clause requires the contactor to:
 - report on its ability to undertake the work in the specified time;
 - submit a detailed estimate of its price for the unscheduled work; and
 - make itself available to discuss a joint plan with Army's representative.
- 5.26 Additional resources may be provided by Army, or by SPEL, at agreed rates.
- 5.27 The contract provided an existing framework for the NZDF and its contractor

to define the scope, timescale, and cost of the project. We sought the views of the NZDF and the contractor on the usefulness of the standing contract in the context of the APC overhaul project. The NZDF and SPEL confirmed that the contract served as a

The standing contract with SPEL was robust and flexible

robust yet flexible basis for the project – noting that it avoided delays associated with negotiation of a separate contract.

- 5.28 The contractor identified factors which, in its view, made a key contribution to the success of the project:
 - The standing contract gave the contractor the necessary freedom to manage capacity to meet *surge* requirements by changing work effort

- and production methods through employing significant numbers of additional staff, tooling up for the job, and installing workshop facilities.
- The contractor was consulted on, and participated in, project planning and scoping of the work programme.
- It had access to technical Army resources (such as personnel with weaponry expertise) to supplement the contractor's own skills.
- A simple purchase order system gave the contractor prime responsibility for work planning.
- Army contract personnel had a sound understanding of technical issues and clear delegated authority to approve expenditure.
- The NZDF maintains a close working relationship with SPEL as a strategic partner. An NZDF contract manager is based with SPEL, facilitating daily personal contact and an understanding of Army's requirements. This partnership arrangement proved valuable when the NZDF and SPEL needed to work together with limited time available.
- 5.30 The NZDF began considering the possibility of overhauling the APCs in the first quarter of 1999. As a first step, the NZDF sought from SPEL a likely schedule of work. This schedule outlined the work the NZDF might request from SPEL, although little detail of scope or time required was available at this early stage. The schedule outlined the following likely engineering tasks:
 - track replacement;
 - mechanical testing and repair;
 - electronic testing and repair;
 - side armour fitting;
 - weaponry refurbishment;
 - painting;
 - fitting spall lines; and
 - a rebuild of the engine, gearbox and steering.
- 5.31 SPEL advised the NZDF on its ability to complete the work, provided likely times for completing the work, and supplied an estimate of costs.
- 5.32 The scope of the overhaul, and the required times, changed over the course of the project. The likely cost was known from upgrading work undertaken for

the deployment to Bosnia, and from SPEL's own maintenance experience. SPEL provided the NZDF with an initial approximate costing on 12 April 1999. Initial planning was based on the

The likely cost of the overhaul was known

overhaul of 60 vehicles, with 58 days for completion. An Army directive of 7 July 1999 ordered that 25 vehicles undergo a limited refurbishment within a 60-day time period.

5.33 The project was managed closely by Army's Fleet Manager. User requirements were defined at a meeting between Army and SPEL on 7 July

1999. Refurbishment took place throughout July and August 1999, with the contractor completing work in the first two weeks of September. The times set by the contractor provided for a 40-day period to

The project was closely managed

complete the key refurbishment tasks. Core overhaul tasks were completed within this period, providing an opportunity for Army to identify further minor enhancements to meet the tropical conditions under which the vehicles would be operating.

- Frequent meetings took place with SPEL from July 1999 onwards to monitor progress, confirm user requirements, and assign responsibilities. Close project management was important given the importance of the work and the tight timetable. Close oversight of the project enabled Army to ensure that vehicles were available for pre-deployment training, to familiarise crew with the refurbished vehicles, and to adjust the work programme for changing priorities. SPEL provided ongoing cost statements and status reports to the NZDF as the project proceeded.
- This oversight of the project also gave Army a picture of completion dates for different vehicles in the fleet of 25 APCs. By 12 September 1999, it had become apparent that a much smaller number of vehicles would need to be made ready at short notice to be deployed with a Company Group. Knowledge of the status of the project made it possible for Army to direct the contractor to complete work on four selected vehicles to a tight deadline.
- 5.36 SPEL noted that service records for the fleet of APCs did not readily allow it select those vehicles most suitable for

select those vehicles most suitable for overhaul. Rather, service history was provided through discussions with Army personnel sent from Army's vehicle operating base in Waiouru. Army should explore means of recording service histories in a more accessible manner

APC fleet service records were not readily accessible

Purchase and Fitting of Helicopter Armour

- 5.37 The purchase and fitting of armour plating to the Iroquois helicopters was a key preparedness activity for the Air Force. Airframe armour was designed to provide crew protection from small arms fire without the need for heavyweight armoured seats. User requirements were well defined. Financial approval for expenditure of up to \$400,000 to purchase the armour sets for four helicopters was given on 30 July 1999.
- 5.38 The Air Force identified and researched four possible suppliers in July 1999, and made contact with three of them. Detailed product specifications were drawn up. At the beginning of August 1999 an Air Force engineering officer and senior Iroquois operator visited the three companies in the United States to

assess the extent to which their products met the Air Force's technical and operational specifications.

5.39 A thorough tender evaluation process was undertaken. On 24 August 1999 the RNZAF Base Auckland Tenders Board met to consider the tenders received, resulting in Armour of America being chosen as the preferred supplier.

A thorough yet expedient tender process was followed

- On 26 August 1999, the Air Force prepared a Purchase Order for the supply of four sets of Iroquois armour. This order included a detailed list of conditions that were to be met by Armour of America in fulfilling the contract. One important requirement was that the supplier would provide on-site assistance for the first installation at no extra cost.
- Armour of America manufactured the armour sets in late-August and early-September. The first two armour sets were shipped from America on 17 September 1999. Installation was carried out in New Zealand by Air Force engineers.
- Once it became clear that New Zealand was going to deploy a larger contingent, the Chief of Defence Force issued a directive on 18 September 1999 requiring the Air Force to deploy a total of six helicopters an additional two aircraft within the prescribed time limit. In response, the Air Force sought and obtained approval to purchase and install an additional two sets of armour. Funding was approved by Air Staff at the Defence Force HQ on 28 September 1999. Obtaining additional funding without delay was vital in meeting the deadlines set by the Chief of Defence Force's directive.

Purchase of Two Swing-through Cranes

5.43 The purchase of container movement equipment in the form of two swing-

through cranes was a further illustration of the NZDF's ability to respond to a set of circumstances at short notice. Logistics planners recognised that the majority of equipment deployed overseas in support of a military force would be containerised. Army did not have the means to move

Swing-through cranes were vital for force self-sufficiency

containers on arrival in East Timor, or within the force's area of operation. The purchase of container handling equipment was also identified as vital for force self-sufficiency.

The NZDF had prepared a draft Minor Force Development Proposal to purchase the swing-through cranes. This process placed the cranes on the NZDF's capital acquisition programme, but with a low priority. When the need to deploy became evident, the procurement of the two cranes was brought forward in the capital programme due to its critical nature.

- However, the acquisition of the equipment was left until late in the planning process. Purchase of the cranes was initiated in September 1999, when initial discussions were held with *Swing Thru International (NZ) Ltd* of Timaru as to the capabilities required by the NZDF. The Purchase Order was placed with the supplier in late September. We were concerned, however, that such a key component of the NZDF's ability to deploy, and a relatively affordable component, was not acquired until such a late stage.
- The two cranes were delivered to the NZDF as the first chartered vessel, the MV *Edamgracht*, was being loaded in Wellington. They had been manufactured and delivered within a month, well within the company's normal three-month delivery deadline. This allowed the NZDF to utilise the cranes on the first sailing, greatly facilitating the logistics effort.

Moving the New Zealand Force to East Timor

New Zealand's Strategic Lift Capability

5.47 Any deployment of a New Zealand force abroad will require some form of "strategic lift" to transport troops and material into the theatre of operations.

At present, the NZDF strategic lift capability requirements are met by five C130 Hercules and two Boeing 727 aircraft operated by No. 40 Squadron of the RNZAF. This air transport force is essential for rapid long-distance movement of NZDF force elements and transport

Strategic lift is vital to NZDF's overall military capability

support for operations in New Zealand and the South Pacific Region.

- The Air Force's C130 Hercules aircraft performed a valuable role alongside similar aircraft from other nations in providing an air bridge to transport personnel and equipment between Darwin and East Timor. They also performed regular supply flights from New Zealand to the force in East Timor.
- 5.49 At the time of the East Timor deployment, the NZDF had no strategic sealift capability of its own. HMNZS *Charles Upham* had been chartered out to a commercial firm in 1998 after the vessel failed to meet NZDF needs.
- In its Defence Policy Framework, the Government identified strategic lift as one of the guiding principles of New Zealand's military capability, stating that New Zealand requires a flexible and adaptable mix of air and sealift capabilities.
- 5.51 The Government confirmed this policy position in its May 2001 policy statement. On 8 May 2001, the Government publicly announced its intention to sell the *Charles Upham*. Any future requirements for strategic sealift would be met by charter arrangements, while the requirement for limited tactical sealift would be considered as part of a review of the composition of the Navy's maritime surface fleet. The *Charles Upham* has since been sold.

In its May 2001 defence policy statement, the Government also announced its intention to upgrade or replace the C130 Hercules fleet and complete a study of options for replacing the Air Force's Boeing 727 transport planes, *including ownership, or the possibility of leasing or chartering*.

Planning Considerations for Strategic Lift to East Timor

5.53 It was evident at an early stage that strategic lift would play an important role

in the deployment to East Timor. From an early planning phase, logistics personnel conducted extensive analysis of the types and volume of personnel and material which would need to be transported to establish and sustain operations. Estimates had been made as early as March 1999, and these

The need for charter arrangements was identified early

were further refined to support the joint planning process in July 1999. The NZDF did not have a sealift vessel available to transport heavy military equipment to East Timor.

- In its presentation to the Chief of Defence Force on 14 July 1999, the Joint Operational Planning Group noted that in order to deploy a Battalion-sized force a substantial sea and air transport effort would be required. The NZDF had the capability to transport personnel and equipment for a Company Group using its own Hercules and Boeing aircraft. However, the Air Force's transport fleet did not have the capacity to transport the volume of heavy equipment needed to sustain a larger, Battalion Group force.
- All deployment options assumed that the NZDF would need to make use of civilian transport resources; the chartering of either a civilian aircraft or ship. Ensuring that the NZDF had timely access to civilian transport resources was identified as a key planning factor. The lead-time to acquire a logistics support ship, it was noted, *may in fact form the critical path in any deployment*. The options presented to the Chief of Defence Force identified estimated costs associated with these commercial contracts.
- The options developed by the Joint Operational Planning Group (JOPG) were supported by a detailed analysis of sea charter requirements. Mission supply estimates had been prepared, and container manifests and inventories developed. Planning assumptions were based on the need to move an estimated 166 container loads of equipment and stores, and 1,190 'lane metres' of vehicles.
- 5.57 The Air Force also compiled a detailed report on the freight capacity of a Boeing 747 and possible suppliers of such a service. It was envisaged that the Boeing 747 would transport the majority of the Battalion troops and their equipment in conjunction with the Air Force's C130s. The Air Force reported to the Chief of Defence Force that, if only C130s were used to deploy the force, this would result in overtasking and generate serious risks. Some of the Air Force's C130 Hercules fleet were already being used for flights between Australia and East Timor, and supply flights from New Zealand.

The NZDF was limited in its ability to define its civilian strategic lift needs by the requirement to keep the details of planning for East Timor strictly confidential. Logistics personnel were under instructions not to disclose the Government's likely intention by making contact with civilian suppliers. As a consequence, logistics planners had a limited period within which to secure suitable charter vessels and aircraft, and negotiate contracts.

5.59 Logistics planning documents identified the risks associated with the lead time to acquire a logistics support vessel. Delays in arranging a charter would have made it difficult to co-ordinate the sequencing of

There was limited time to secure a charter

force deployment. The NZDF had developed an indicative time of some 32 days for chartering a civilian vessel, comprising:

- 20 days to secure a ship and bring it to Wellington;
- 2 days loading; and
- 10-12 days sailing time to East Timor.
- 5.60 In the light of the need to respond in a timely way to the Government's decisions and the requirements of the coalition force, the NZDF had limited time to decide whether to send stores, equipment and heavy vehicles by air or sea.
- 5.61 Authority to contact civilian contractors was given on 24 August 1999. This gave planners less than one month in which to confirm the availability of prospective charters.

Risks of Chartering Civilian Transport

We identified a number of risks associated with chartering civilian transport in a military context. Other nations' forces, such as that of the United Kingdom,

have had to manage similar risks – recognising that modern military organisations cannot afford to own all the assets required to deploy their forces into theatre. We found that the NZDF was aware of these risks, and had taken steps to address them (where possible).

Charter arrangements involve significant risks

A Limited Market

5.63 The JOPG noted that reliance on civilian operators would reduce overall flexibility of deployment. The NZDF was obliged to accept whatever vessels or aircraft were available within a restricted geographical area and within a restricted period of time – given the need to co-ordinate the arrival of personnel and equipment in-theatre. The charter market limited the type and number of vessels from which the NZDF was able to choose. The NZDF

sought to address this risk by monitoring shipping schedules through its broker.

Since it was obliged to approach the market at short notice for short-term charters on a voyage-by-voyage basis, the NZDF was not well placed to obtain the best price. In these circumstances, a comprehensive competitive tendering process may not be feasible. The NZDF had identified the likely costs of such a charter arrangement.

As already noted, operational security considerations precluded logistics personnel from approaching the charter market sooner in order to secure a more favourable price and increase the likelihood of having shipping available to meet operational needs. Nonetheless, requests for sea charter were placed with three brokers, providing the NZDF with options in terms of price and provisions of charter. Because of the urgency with which charter arrangements were concluded, the NZDF Tenders Board (whose prior approval is normally required for arrangements of this nature) gave retrospective approval in November 1999.

War Risks

- Relying on civilian charter services to transport military cargo also exposes the military organisation to a number of risks associated with the nature of the charter itself. Owners of civilian vessels may not be willing to enter into charters where the threat to a civilian vessel is likely to be high. This will reduce the number of vessels available for charter.
- In circumstances where hostilities are largely controlled (as was the case in the region of East Timor), the master and owners of the vessel will assess the dangers of entering a particular zone. At their discretion, they may choose to take a different route to the discharging port, keep the vessel at sea, or offload cargo at the nearest safe port. Such action may seriously delay the arrival of critical military equipment and create additional trans-shipping costs.
- Most conditions of charter contain a clause allowing the vessel owners to exercise such judgements and take the necessary action to protect the safety of the vessel, crew and cargo. The contract between the NZDF and the vessel owners included such a "war risks" clause.
- 5.69 Insurance underwriters are likely to impose a premium to reflect the risk of making a voyage into a zone where hostilities are known to be taking place. Logistics planners foresaw this possibility in considering transport options.

The Charter Arrangements

Chartering a Boeing 747 Aircraft

5.70 The NZDF has a comprehensive standing Memorandum of Understanding with an air transport broker, covering a range of possible brokering services. A standing agreement enables the broker to develop a good understanding of

the NZDF's requirements. The agreement also gives the NZDF direct access to charter information as and when the need arises – facilitating the chartering process and avoiding the need to embark on a lengthy tender or evaluation process at short notice.

- 5.71 Early logistics planning papers had identified the need for the NZDF to supplement its own airlift capability. In August 1999, for example, a report was prepared investigating the options involved with transportation of military consignments from Auckland International Airport, based on the compatibility of Boeing 747 freight consignments and C130 Hercules configurations. While load requirements were not known until much later, the likelihood that the NZDF would have to utilise civilian airlift capacity was well recognised.
- The NZDF did not take advantage of the standing arrangement with its broker until late in September 1999. Up to that point, the NZDF was receiving informal offers of airlift assistance from a variety of sources. Logistics personnel were notified at short notice of aircraft movements into Australia and New Zealand, which offered airlift opportunities. These opportunities included civilian and military aircraft among them aircraft passing through New Zealand in connection with the Asia Pacific Economic Cooperation Forum and associated state visits. The NZDF considered for some time the possibility of securing United States military airlift capability.
- 5.73 Such offers were given serious consideration within the NZDF, even though no formal offer had been made. There was no clarity over whether priority was to be given to using allied force capabilities over a commercial contract. This uncertainty points, in our view, to the absence of a clearly stated airlift strategy.

The NZDF had no clearly stated airlift strategy

- For example, a JOPG briefing to the Chief of Defence Force as late as 14 September 1999 noted that United States Air Force strategic airlift was an option. Detailed costings and time lines were also presented. These costs were known to be significantly higher than those of engaging a civilian operator. Continuing debate over the benefits and costs of airlift options at such a late planning stage increased the risk that the NZDF would not be able to obtain strategic airlift capacity within the short amount of time available. One strategic option was to pursue a firm airlift agreement, but the absence of criteria for the selection of options made planning for an airlift uncertain and (to some extent) *ad hoc*.
- 5.75 The NZDF made contact with its air charter broker in September 1999, specifying its requirements. After failing to secure a first offer, the NZDF accepted the offer of a Boeing 747 freight charter on 22 September 1999 at a cost of \$US170,000. The chartered freighter left New Zealand on 26 September 1999 carrying light operational vehicles and stores for the Company Group.

Sealift Charter

- 5.76 The NZDF used three shipping brokers to secure offers of a suitable charter vessel. The NZDF specified the following requirements:
 - on-board cranes able to lift 60 metric tonnes;
 - ability to enter the East Timor port of Dili without tug assistance;
 - ability to ship 100 twenty-foot containers, each with an all-up weight of 10,000 kg;
 - ability to meet deadlines for delivery to Dili to coincide with arrival of New Zealand's Company and Battalion Groups;
 - ability to offload at either Dili or Darwin; and
 - a competitive charter price and fee.
- The NZDF monitored shipping movements through its brokers, and a number of vessels were scheduled to visit New Zealand ports in late September or early October. However, not all were likely to meet NZDF requirements. Some vessels due to arrive at New Zealand ports also had scheduled backloads, and so were not available for charter.
- 5.78 The NZDF's brokers identified a number of vessels for consideration. NZDF logistics personnel assessed each for compliance with specifications. From the four vessels that met NZDF specifications, two were chosen on the basis of cost
- A notice of intent to charter the first civilian vessel (the MV *Edamgracht*) was issued by the NZDF on 10 September 1999. Advice was obtained from risk management and legal advisers within Army's Directorate of Contract Management before the contracts were concluded. Less than two days were available to obtain this advice and appropriate approval. The need to secure the charter before the vessel was let to another party was critical.
- The first chartered vessel left New Zealand on 30 September 1999, carrying 21 APCs, light operational vehicles, and stores for the Company and Battalion Groups. A second vessel (the MV *Edisongracht*) left New Zealand on 19 October 1999. Together, the two vessels carried a total of 195 military vehicles, equipment and stores, making up 1,000 metric tonnes of general cargo, and 96 sea containers, each weighing on average almost 10,000 kg. Charter costs for the two vessels totalled US\$254,300 and US\$248,300 respectively.
- The NZDF faced short deadlines for securing a suitable civilian charter. Constantly changing requirements as to force size, deployment sequences and response times were all factors which made it difficult to judge when formal authority should be given to begin dealing with brokers. The need to maintain operational security and flexibility in mission timing make it difficult to avoid last minute decision-making. Inevitably, deferring such decisions narrows the options available, and makes it likely that the NZDF will incur a cost penalty through having to arrange a charter at short notice. As far as possible, the NZDF needs to have in place arrangements which facilitate the process of

entering into such commercial arrangements in the future should the need arise.

- The NZDF did not have documented procedures to provide guidance for entering into such civilian charters, and relied on Australian guidelines. If charters are to provide strategic lift capability in future, the NZDF should develop a set of guidelines and processes to facilitate rapid decision-making and negotiation of suitable contractual arrangements.
- While the NZDF has a Memorandum of Understanding (MOU) with an aircraft broker, it does not have an MOU with a shipping broker. The NZDF view is that such an agreement is not necessary because logistics personnel maintain continual relations with charter brokers and the freight industry.
- However, the NZDF has continued to develop standing agreements or MOUs for the provision of services in a contingency, such as:
 - aeromedical evacuation services; and
 - freight forwarding services.
- We encourage the NZDF to consider opportunities to put in place arrangements for securing other contracted services it may require at short notice in the event of future deployments.

Conclusions

- Major equipment deficiencies were known and clearly identified by the NZDF. Plans were in place to address these, but not in the short term. As the NZDF began to prepare for a possible deployment these deficiencies came to represent significant capability shortfalls, and posed serious risks to the proposed mission. The NZDF had a limited amount of time to carry out the necessary enhancement or upgrading work.
- Early identification of mission-critical equipment deficiencies enabled the NZDF to develop a critical planning path and to put a timely case before the Minister and the Government for additional funding to carry out equipment purchases or upgrades. User requirements or specifications were well defined, suppliers identified, and contracts effectively managed with due regard to limited available time. The NZDF was successful in completing this work before the first New Zealand contingent left at the end of September 1999.
- As deficiencies in mission-critical equipment represented known capability shortfalls, it was important that these deficiencies were quickly addressed. In order to achieve this, the NZDF had to manage a number of restrictions including:
 - the need for Government approval of additional expenditure;
 - long lead times for key mission-critical tasks; and
 - limited and changing response times.

- 5.89 Some purchases or equipment enhancements (that were vital to managing operational mission risks and were time-critical) involved relatively minor expenditure, but were undertaken late and came to represent critical capability shortfalls. A good illustration was the upgrading of the APCs, for which funding approval was given only in June 1999. While the NZDF did not deploy its force until September 1999, the need for an earlier deployment was always possible.
- Many factors such as changing force requirements and timescales in response to ongoing coalition planning were outside the control of the NZDF, and made it difficult to carry out logistical planning with any certainty. The scope and time available within which logistics planning took place were likely to change over the life of contracts. Above all, the decision to move from a planning scenario based on deployment of a Battalion Group, to deployment of a smaller Company Group at shorter notice, had a significant bearing on the management of civilian contracts.
- 5.91 Standing agreements or contracts provided valuable flexibility in a volatile planning environment. Partnership relationships with contractors promoted ongoing liaison and co-operation in the NZDF's interests. The NZDF's experience in engaging civilian resources and expertise to supplement its own resources in the context of preparing for a possible East Timor deployment highlighted the value of putting in place standing agreements for the delivery of services when contingencies arise. Such arrangements provide a flexible contractual framework within which to engage critical services at short notice.
- Logistics planners anticipated at an early stage the need to use civilian resources to transport equipment to East Timor. The NZDF chartered one aircraft and two civilian vessels. However, the process took place at a relatively late stage, once force structure and deployment sequences were known. Logistics planners had limited time to arrange the charters, and were fortunate that suitable vessels and aircraft were available when needed.
- Moreover, the NZDF had not clearly defined its strategy with regard to contracting airlift transport, with the result that a number of third-party approaches were still being considered at a late planning stage. This uncertainty created the risk that vital charter opportunities would be missed, and is an issue that needs to be clarified for future contingencies.
- 5.94 We concluded that the process exposed the NZDF and the Government to significant risks. However, in the circumstances, the NZDF successfully arranged the necessary charters and adequately managed the associated risks.

Issue Six

Public Relations, Parliamentary Reporting and Financial Management

Contents

	Page
olic Relations, Parliamentary Reporting and Financial Management	8
Public Relations	
Introduction and Expectations	
Findings.	9
Accountability Reporting	9
Introduction and Expectations.	9
<u>Findings</u>	9
The Annual Report	9
Forecast Report.	9
Purchase Agreement	9
Financial Management	9
Introduction and Expectations.	9
Findings	10
Costing and Reporting	10
Budgeting Preparations and Monitoring	10
Financial Management System	10
Management Controls	10
Recovery of Deployment Costs for United Nations	10
Conclusions	10
Public Relations	10
Accountability Reporting	10
Financial Management	10

- The East Timor operation has provided an ongoing opportunity for the NZDF to address public interest in the role played by the New Zealand military within the region. It also provides Parliament with the opportunity to consider issues of military planning, capability and sustainment within the context of a large-scale military operation. This Paper discusses three dimensions of public accountability:
 - public relations;
 - accountability reporting; and
 - financial management.

Public Relations

Introduction and Expectations

- The situation in East Timor has received a great deal of publicity since the beginning of 1999. For the New Zealand public, this interest was heightened once it became known that New Zealand troops would be involved in a peacekeeping operation.
- While interest peaked during the initial deployment and operations, New Zealand's military commitment to the East Timor operation has continued to be of high interest to the public and Parliament. The way in which the NZDF has gone about preparing for and conducting operations in East Timor has provided Parliament with an opportunity to observe the participation of a large New Zealand force in a military operation overseas.
- 6.4 We expected that the NZDF would:
 - utilise a combination of media sources to effectively inform the public of its activities in East Timor;
 - have actively sought opportunities to supply media information; and
 - have taken steps to ensure that a correct and consistent message was transmitted through the various media.

Findings

- The NZDF issued a strategic public relations/public information plan. This plan has been supplemented by media plans for each subsequent deployment rotation, which focus on providing print and television media with as much support as possible.
- The NZDF's media plan aimed to promote a number of key messages. These included emphasising that:

- East Timor was a joint operation;
- the NZDF is able to react effectively and quickly to these types of contingencies; and
- the level of training received by NZDF personnel equipped them to deal with the risks they were likely to face.
- 6.7 The overall objectives of the media plan included emphasising New Zealand's participation and roles in East Timor to an international audience, and demonstrating to New Zealanders the professionalism and capabilities of the NZDF.
- A small Media Support Unit was deployed with the New Zealand force to facilitate an active relationship with the media. Primary functions of the Media Support Unit included:
 - facilitating live interviews with deployed NZDF personnel;
 - providing a continual flow of media-related information from the area of operations;
 - co-ordinating visits by VIPs and media representatives (both New Zealand and international); and
 - providing digital communications facilities to support the above.
- The Media Support Unit escorted New Zealand and international media representatives throughout the NZDF's area of operations in East Timor in order to ensure a broad coverage of New Zealand's operations. For example, it helped a camera crew from the New Zealand current affairs programme 60 Minutes to gather information to broadcast to the New Zealand public.
- New Zealand and international correspondents were given training and were briefed by the NZDF. Briefings covered a range of subjects, including:
 - East Timor as a country;
 - health issues and hazard awareness;
 - the basic organisation of the three Services and the United Nations;
 - safety around helicopters; and
 - basic field craft instruction.
- 6.11 The NZDF also made arrangements for the transportation of media representatives (where possible) into East Timor, and within the area of operations.
- The NZDF prepared a number of articles and press releases for the media. These ensured that media interest was maintained as the deployment moved beyond the initial stages. The monthly *Defence Update* issued by the NZDF often included information on operations in East Timor. Community newspapers were also encouraged to provide interest stories on soldiers, sailors and air-crew from their areas who were currently deployed in East Timor. As

a part of this initiative, the NZDF listed the home-town locations of serving personnel in order to assist newspapers in identifying relevant stories.

- The NZDF's own lessons learned process has noted that the public information strategy developed was not as timely or comprehensive as it could have been. The overall media strategy was not issued until 17 September 1999, almost three months after the relevant Chief of Defence Force directive. This meant that the strategy was not fully integrated as part of earlier planning and the commander's considerations. The NZDF also commented that the Media Support Unit was at times understaffed and under-resourced to carry out its functions.
- In addition, the Navy felt that there was little media coverage given to the role that it played in the East Timor deployment. Not being formally part of the New Zealand Force East Timor (it was placed under the command of HQ INTERFET), the Navy found it difficult to gain a suitable media profile during the initial stages of the deployment.
- Overall, however, the media strategy did provide a sound base to ensure that a clear and consistent message was delivered. This was important in achieving the objectives stated in the Chief of Defence Force Directive.
- The individual Services' web sites were also an important means of conveying information to the public. The Navy web site (www.navy.mil.nz) kept the public up to date by frequently posting articles related to Navy operations in East Timor. In addition, the site had links to the Navy's Family Link service. This service uses satellite technology to allow family and friends of Navy personnel to e-mail them messages wherever they are serving in the world.
- Army's web site (www.army.mil.nz) provides similar services. Articles are posted regularly and are complemented by a background to the operation, a map of East Timor, pictures of Army personnel conducting operations, and spotlights on key people such as the Joint Force Commander and Senior National Officer. Army's site also allows family and friends to e-mail messages to those serving in East Timor. This message service is utilised regularly.
- A large number of photographs are available for the public to view on the Air Force web site (www.airforce.mil.nz). These photographs showed the Air Force helicopters and transport planes in operation in East Timor, both in Suai and surrounding areas. The public can also browse pictures depicting what life in the helicopter camp is like, including some of the duties undertaken.
- There was no single web site that contained comprehensive information on the NZDF's operations in East Timor. The single Service web sites do not provide a comprehensive picture of the joint operation.
- 6.20 Each Service also utilised its magazine and paper publications to provide information to the public. *Navy Today, Airforce News*, and *Army News* each carried articles on the general situation in East Timor and on the operations of

the respective Services. Articles described the range of experiences for personnel in East Timor, from day-to-day activities through to issues at the command level. This gave military personnel and the public a broad and interesting picture of the East Timor operation.

The NZDF also facilitated the visit of members of the Foreign Affairs, Defence and Trade Parliamentary Select Committee on three occasions. The NZDF and the Ministry of Foreign Affairs and Trade provided pre-visit advice to the Committee members, who were accompanied by the Chief of Defence Force. The NZDF facilitated briefings by the United Nations and the Peacekeeping Force Headquarters in Dili, as well as visits to the New Zealand Battalion in the Sector West area of operations.

Accountability Reporting

Introduction and Expectations

- Under the Public Finance Act 1989, the NZDF is required to prepare the following public and Parliamentary accountability documents:
 - A Forecast Report which sets out the forecast performance statements and financial statements for the upcoming year; and
 - An Annual Report which sets out a statement of the financial position at the balance date and the performance achieved throughout the year against the outputs specified in the Purchase Agreement and the Forecast Report.
- 6.23 In addition, a **Purchase Agreement** records the costs, quantity and quality of outputs agreed between the Chief of Defence Force and the Minister of Defence.
- We examined copies of these NZDF reports for the period 1999 to the current Purchase Agreement for 2001-02. We considered what information they presented about NZDF activities and capabilities, and assessed the extent to which that information gave the reader a useful understanding of the achievements and effects of the East Timor deployment.
- 6.25 We expected that:
 - The Annual Report would clearly report for each Output Class, and for the NZDF in total, the cost and the achievement of activities in East Timor as well as any impact on NZDF capability and preparedness. The report would also address any emerging issues such as sustainment.

- The Forecast Report would provide a forecast of NZDF outputs and activities. Planned activities associated with the East Timor operation would be clearly set out in each Output Class, as well as a description of the operational activities within Output Class 16.8
- The Purchase Agreement would record the cost, quantity and quality of outputs to be delivered by the Chief of Defence Force. As such it could be expected to set out the known impacts and any planned variations to activities due to the East Timor operations. It should also set out any impact on the individual output classes and the collective capability of the NZDF.

Findings

The Annual Report

- The NZDF Annual Report for 1999-2000 is a well-presented document with clearly structured information about both the financial and non-financial performance of the organisation. The structure of Output Classes, based around force elements, gives the reader a good understanding of the resources and capability that the NZDF is able to deploy if required. Reporting operational activities under the single Output Class 16 enables the NZDF to provide consolidated information about its range of current operational commitments. In 1999-2000, new funding of \$23.263 million was provided under Output Class 16 to pay for East Timor operational activities.
- The Annual Report 1999-2000 also contains commentary from the Chief of Defence Force, who noted that *NZDF preparedness* [had] *been stretched* and that *peacekeeping contributions* [would] *test our ability to provide a third Battalion rotation.* Such general commentary would be a useful addition to the NZDF Forecast Report and Purchase Agreement.

Forecast Report

6.28 The NZDF Forecast Report is prepared in accordance with section 34A of the Public Finance Act 1989, and sets out the:

- forecast financial statements for the coming financial year; including
- a statement of the performance to be achieved for each output class in the coming year, as agreed with the Minister.
- 6.29 We examined the NZDF's Forecast Reports for 1999-2000, 2000-01, and 2001-02.

NZDF reports on its participation in military operations in Output Class 16. Other Output Classes report on preparedness and capability in a non-operational context.

- As a general observation, the NZDF Forecast Report is a well-structured document with forecast activities based around force elements. It also provides significant information about the context within which the NZDF is operating, with commentary and explanation of ideas such as *Strategic Outcomes, Operational Outcomes* and *Key Priorities*.
- The NZDF's 2000-01 Forecast Report was published with the Budget in June 2000 some 10 months into the East Timor operation and at a time when it was clear that the UNTAET operation would continue into the foreseeable future. However, despite expectations about the likely duration of the operation, references to East Timor in the report were limited to the:
 - additional funding required for the operation;
 - numbers of troops committed to the operation under Output Class 16;
 and
 - flying hours that would be allocated by the C130 Hercules and Iroquois helicopters under Output Classes 13 and 14.
- The NZDF's 2001-02 Forecast Report (published with the Budget in May 2001) contains even less information on the impact of the East Timor operation. The references are limited to the:
 - additional funding for the operation; and
 - numbers of troops committed under Output Class 16.
- 6.33 The NZDF Forecast Reports clearly deal with the additional cost associated with East Timor operations under Output Class 16. However, the Forecast Reports for 2000-01 and 2001-02 do not expand on the issues raised in the 1999-2000 Annual Report. The information we expected to be provided included:
 - descriptions of any changes to the forecast activities for the coming years due to the need to plan, train and deploy forces to East Timor;
 - recognition within Army's output classes that planning, training, operating, and regeneration activities would be taking precedence in the delivery of Output Class 16; and
 - more detailed information in Output Class 16 about the types of resources committed and activities that would be taking place.
- 6.34 The NZDF Forecast Reports provide little or no information about the likely impact of the East Timor deployment on future delivery of particular output classes and on NZDF's overall capability.

Purchase Agreement

- 6.35 The Purchase Agreement allows the Minister of Defence to:
 - agree to the cost, quantity and quality of desired outputs;
 - make comparisons with other providers where possible:

- assess the risk and obligations associated with delivery;
- subsequently verify that each output has been delivered; and
- hold the Chief of Defence Force accountable for delivery of the specified outputs.
- 6.36 The NZDF Purchase Agreement has a separate section (Schedule 4) that contains classified information and has a restricted circulation. The Schedule sets out response times for particular employment contexts and any current variances to the NZDF's ability to deliver its required outputs.
- We examined the Purchase Agreements for 2000-01 and 2001-02. Increased appropriations under Output Class 16 to take account of the East Timor operation were first provided in 1999-2000. In turn, the commitment of significant NZDF resources to East Timor in 1999 affected the organisation's ability to deliver other outputs. However, this shift in resources was not reflected in the content of the 2000-01 Purchase Agreement.
- 6.38 The NZDF and the Minister should consider reviewing any future Purchase Agreement to reflect significant changes that took place during the preceding year.
- The Purchase Agreement for 2000-01 notes that *in some instances, DLOC* variances are expected due to the NZDF's commitment in East Timor. The DLOC target, however, remains the capacity to undertake low level national tasks, including counter terrorism, and maritime. This comment is repeated in the 2001-02 Purchase Agreement. Schedule 4 to the 2000-01 Purchase Agreement notes that from time to time DLOC will be unable to be maintained because of commitments to peace support operations in East Timor. This comment is again repeated for the same range of Output Classes in Schedule 4 to the 2001-02 Purchase Agreement.
- Both the Forecast Report and the Purchase Agreement change little from one year to the next. They contain little reference to the impacts that the East Timor operation is having on the specific output classes and the overall capability of the NZDF. The provision of additional appropriate information as part of Output Class 16 in the Forecast Report would be one way to address this shortcoming.
- The NZDF has reported internally and publicly on the impact the East Timor operation is having on its capability. An NZDF report of October 2000 analysed the impact of sustaining operations in East Timor (UNTAET). The report stated that, with respect to Army, there are problems in providing the capabilities (numbers and quality of specialist personnel and equipment) that it needs in theatre. These problems will be accentuated for NZBATT 4 and 5, and could lead to mission failure if not addressed.
- Other, more general, issues that were highlighted in the October 2000 report were that:
 - hollowing out of capability manpower was occurring in some areas;

- there was a heavy reliance on Territorial Forces' supplementation;
- there were serious force regeneration impacts of using artillery capability for a second deployment; and
- there was a risk of not being able to execute Army 2005 and other management initiatives without additional personnel.
- The predicted impacts on the Purchase Agreement are addressed in some detail within the same report. In summary, the report noted that Army and the Air Force were unable to meet their commitments in East Timor without an urgent expansion of mission-specific capability (personnel and equipment) and a change to tour-of-duty policy. It also noted that the East Timor operation would erode the NZDF's ability to deliver the full range of other outputs. Details of the impacts on specific employment contexts were set out in the report.
- The confidential Schedule 4 to the Purchase Agreement could be used to address sensitive issues such as the impact of the East Timor operation on NZDF capabilities and activities.
- The Purchase Agreement and Forecast Report should set out (with respect to East Timor or any other significant operation):
 - changes or variations to planned training and operational activities and the extent of those changes within each Output Class;
 - the known impact on the delivery of particular Output Classes;
 - the known impact on wider NZDF capability and preparedness; and
 - any known sustainment or force regeneration issues.
- The NZDF's accountability documents provide insufficient information for the reader to:
 - obtain a clear understanding of the impact of the East Timor operation on the NZDF's ability to deliver all its outputs (particularly those associated with Army activities);
 - develop an understanding of the changing nature of activities within the NZDF resulting from the East Timor operation; and
 - understand the cumulative impacts and changes over time on the NZDF's capability and preparedness.
- We suggest that the NZDF review the format and content of the Purchase Agreement and Forecast Report documents to better illustrate the impacts of the East Timor deployment on:
 - individual Output Classes;
 - cumulative impacts on capability; and
 - capability and preparedness over time.

- 6.48 The NZDF should also review the format and content of its Purchase Agreement and Forecast Report to better illustrate its preparedness to conduct joint operations.
- Activity related to East Timor was well reported in the NZDF's Annual Report. The NZDF should keep the Government informed of the current and ongoing costs associated with the deployment, along with likely future costs of restoring force elements to full levels of capability on completion of the deployment.

Financial Management

Introduction and Expectations

- The NZDF is funded for ongoing training and readiness and, as such, must seek special appropriation for expenditure on military operations such as East Timor. The sustainment of a military operation requires significant expenditure additional to that incurred in training. A total of \$23.3 million of new funding was provided to the NZDF in the 1999-2000 financial year for activities associated with the deployment to East Timor.
- Operational expenditure is likely to demand financial management structures, authorities, controls and reporting that are different from those routinely followed by the NZDF. In September 2000 we assessed:
 - the processes used by the NZDF to manage costing and financial reporting;
 - the budgeting and reporting process; and
 - other related financial management issues.
- We expected the NZDF's financial management systems to:
 - be based on appropriate delegations and authorities;
 - provide adequate controls over expenditure;
 - support the achievement of military objectives;
 - enable transactions to be clearly accounted for and reported; and
 - facilitate the recovery of NZDF costs from the UN.
- 6.53 The NZDF should be in a position to report on the financial impact of the deployment. We also sought evidence that the NZDF was drawing on its East Timor experience to document issues for future learning.
- The review was undertaken by examining NZDF systems and interviewing selected NZDF personnel with financial management responsibility.

Findings

Costing and Reporting

- Overall responsibility for financial management of the operation rested with the Joint Forces Commander. Land Command was assigned responsibility for co-ordinating budget preparation and cost management reporting for the deployment as a whole.
- A financial reporting framework was put in place before the main force was deployed to East Timor. Separate cost centres across the single Services were readily identifiable, enabling budgets and expenditure to be consolidated under a single NZDF responsibility centre. The NZDF sought appropriate authority for expenditure on the deployment by way of Cabinet approval and subsequent Parliamentary appropriation.
- The NZDF is providing for accelerated depreciation and extra maintenance as a result of its deployment to East Timor. The NZDF will need to monitor and manage the effects of those extra costs on its annual appropriation requirements.

Budgeting Preparation and Monitoring

- The single Services were responsible for preparing budgets based on their expected involvement in the deployment. These budgets were then consolidated at the Joint Forces Headquarters showing full joint costs. Budgets are continually being refined using up-to-date information.
- 6.59 The budget for deployment includes only the direct marginal costs of deployment. Ongoing fixed costs, such as salaries, are not included. Marginal costs include:
 - increased personnel allowances;
 - direct operating costs such as fuel and other supplies; and
 - accelerated depreciation.
- The Joint Forces Headquarters prepares a monthly report of actual costs against budget for the East Timor operation, drawing on reports from the single Services. Budgets and costings for the deployment are reviewed on a regular basis.
- The NZDF has identified the need to review its budgets to take account of the following factors:
 - the need to budget for the impact of leave entitlements for deployed personnel (the budget for East Timor did not include this cost); and
 - the cost impact of using Territorial Force personnel to supplement the Regular Force.

The NZDF has recognised the need to review its budgets for these factors.

Financial Management Systems

- The NZDF had developed a draft policy and procedures manual covering the financial management of deployments, which it used as the basic framework for issuing finance instructions. Specific finance instructions were issued in September 1999.
- NZDF personnel in Darwin (Australia) process and reconcile financial transactions for the deployment. The majority of transactions are posted online to the NZDF data processing system SAP.
- At the time of the first deployment to East Timor, the ready ability to track inventory was lost for a period of time when the content of containers had to be trans-shipped. This problem has now been overcome through the expensing of stock at the time of issue in New Zealand.

Management Controls

- As part of its monthly monitoring, the Joint Forces Headquarters regularly reviews the appropriateness and completeness of costs charged against the deployment. A sample of costs is examined, and checks are made of compliance with delegated authorities.
- 6.67 Initially there were few personnel with formal delegations to approve expenditure for the East Timor deployment, causing some delays. This problem has now been overcome.

Recovery of Deployment Costs from the United Nations

- 6.68 The NZDF largely met its own costs of deployment to East Timor for INTERFET. The UN reimburses the NZDF for a range of costs associated with New Zealand's support of UNTAET.
- The basis for reimbursement is set out in a Memorandum of Understanding between the UN and the NZDF. The NZDF and the Treasury have agreed protocols for handling such reimbursements. However, we identified the need to tighten the system by which reimbursement money from the UN is collected and recorded. The NZDF has taken steps to consolidate data in a form appropriate for verification of the information required for UN reimbursement.
- NZDF's financial management systems supported the effective deployment of forces to East Timor. The costs related to the deployment were clearly accounted for through the establishment of specific cost centres, and appropriate delegations were in place. The Joint Forces Headquarters maintains oversight of expenditure against budget.

- Regular reviews are carried out of costs charged to the operational deployment output and of delegations, ensuring adequate management control over expenditure. The NZDF has drawn lessons for financial management systems and practices from the East Timor experience.
- Activity related to East Timor was reported in the NZDF's Annual Report. The NZDF should keep the Government informed of the current and ongoing costs associated with the deployment, along with likely future costs of restoring the force to full levels of capability on completion of the deployment.

Conclusions

Public Relations

- 6.73 The NZDF has responded positively to public interest in the East Timor operation. The operation has also provided Parliament with the opportunity to consider issues of military planning, capability and sustainment within the context of a large-scale military deployment.
- The NZDF developed a media strategy and provided assistance to media organisations to ensure that a clear and consistent message was delivered. The strategy had set objectives of:

The media strategy delivered clear and consistent messages

- providing a continual flow of information from the area of operations of interest to the New Zealand public; and
- clearly communicating key messages during the operation.
- The NZDF's own lessons learned process has noted that its public information strategy could have been more comprehensive, and that the strategy was not issued until almost three months after the CDF Directive was issued. This meant that the strategy was not a fully-integrated part of the earlier planning and the commander's considerations.
- The NZDF does not have a single web site that provides comprehensive information on its operations in East Timor. Having to utilise the single Services' web sites makes it difficult to gain full appreciation of the joint operation being conducted.

Accountability Reporting

The commitment of resources to East Timor since September 1999 has had a significant impact on most of the NZDF's activities, funding, and capability. We analysed the NZDF's accountability documents to establish to what extent such impacts were disclosed. While our analysis of the NZDF accountability

documents has raised concerns, positive aspects to the NZDF's reporting include:

• The use of Output Class 16 to report on current military operations such as East Timor.

The Annual Report allows for clear reporting of impacts

- Useful financial and non-financial information about East Timor activities was contained in the NZDF's Annual Report for 1999-2000. In addition, the report made some reference to the potential future problems associated with a longer-term commitment in East Timor.
- 6.78 However, our analysis of the Purchase Agreement, the Forecast Report, and the Annual Report for the period from 1999-2000 to 2001-02 illustrated that these documents provide insufficient information for the reader to:
 - clearly understand the impact of the East Timor operation on the NZDF's ability to deliver its full range of outputs (particularly those associated with Army's activities);
 - develop an understanding of the changing focus of activities within the NZDF (for example, training) as a direct result of the East Timor operation; and
 - understand the cumulative impacts over time on NZDF capability and preparedness.
- The Purchase Agreement should reflect the true nature of the outputs being purchased by the Minister. The commitment of significant NZDF resources to East Timor in 1999 resulted in a shift of resources to the achievement of Output Class 16, with consequences for the NZDF's ability to deliver other outputs. This change in the nature and balance of the outputs being purchased was not reflected in any changes to the information in the 2000-01 Purchase Agreement.
- We understand from information we gathered during the study that the East Timor operation is having considerable impact on the activities and capability of the NZDF, and in particular Army. Schedule 4 to the Purchase Agreement, a classified document, could be used to address such issues (given their sensitive nature).
- 6.81 The Forecast Reports appear to be reproduced annually with little variation and little reference to the impacts of the East Timor deployment. The provision of additional appropriate information as part of Output Class 16 would go some way to address these shortcomings.

Forecast Reports are

The NZDF should continue to use the Annual Report to keep Parliament informed of the current and ongoing impacts associated with the deployment – along with likely future costs and activities necessary for restoring the force to full levels of capability on completion of the deployment.

Financial Management

- 6.83 The NZDF needs additional appropriation for expenditure on military operations such as East Timor. Operational expenditure demands financial management structures, authorities and reporting that differ from those routinely followed by the NZDF.
- The NZDF's financial management systems supported the effective deployment of military personnel to East Timor. The costs related to the deployment were clearly accounted for through the establishment of specific cost centres, and appropriate delegations were in place.
- The NZDF has drawn lessons for financial management systems and practices from its East Timor experience. For example, the NZDF has identified the need to review its budgets to take account of factors such as budgeting for leave entitlements and cost allocation for Territorial Force personnel.

Issue Seven Lessons Learned

Contents

	Page
7 – Lessons Learned.	105
<u>Introduction</u>	107
Expectations.	107
Findings	108
Operational and Strategic Lessons Learned	108
Tactical Lessons Learned	110
Potential Additional Sources of Lessons Learned Material	115
What Lessons has the NZDF drawn from the East Timor Operation?	116
Conclusions	120

Introduction

- 7.1 "Lessons learned" refers to the process of using experience for improvement.

 A formal lessons learned system is one that ensures all individual knowledge and organisational experience is gathered and analysed for future use.
- 7.2 In a military context, an effective lessons learned system ensures that problem areas (such as gaps in training or defective equipment) are not encountered repeatedly, and picks up lessons at all levels (strategic, operational, and tactical). Lessons learned systems are used by military organisations all over the world.
- 7.3 In this paper we firstly examine the way in which the NZDF collects and analyses lessons learned data at an operational and strategic level. We briefly describe how each of the single Services is conducting its operational and strategic lessons learned processes.
- 7.4 In addition, we look at how the NZDF has learned tactical lessons from the East Timor deployment. We consider how the single Services collect lessons learned data, the confirmation and verification processes undertaken, and whether any analysis is being carried out.
- 7.5 Finally, we summarise the main lessons learned by the Navy, Air Force and Army from the East Timor deployment.

Expectations

- 7.6 We expected the NZDF would have a system to identify and analyse lessons from the East Timor experience. We sought evidence that:
 - data was collected from all relevant sources:
 - such data was analysed and validated to form lessons learned; and
 - lessons learned were translated into changes to equipment, training, doctrine, structure, procedures or policies – resulting in improved military practice.
- 7.7 We expected that training of successive Battalion Groups deployed to East Timor would have built on the knowledge and experience of returning units. We sought evidence that, with successive rotations, lessons were passed from one contingent to another.
- 7.8 Finally, we sought evidence that:
 - the experiences of East Timor are used constructively throughout all levels of the NZDF; and

- where appropriate, lessons were fed into force development proposals, capability reviews, single Service doctrine, and the NZDF planning processes.
- 7.9 We examined a selection of lessons learned documentation from the three Services, and interviewed personnel about lessons learned processes. We also examined the format of a database set up by the Centre for Army Lessons Learned (CALL).
- 7.10 We analysed a range of documentation supplied by the three Services reviewing a variety of aspects of the East Timor deployment, and identified the key lessons drawn from their experience.

Findings

Operational and Strategic Lessons Learned

Collection of Lessons Learned Data

7.11 The lessons learned process at an operational/strategic level across the

Services is not approached in a formal, systematic manner. Post-activity reports and post-exercise reports are established channels for the communication of observations and issues from which to derive lessons. These reports refer to

Higher level lessons learned processes are not systematic

some strategic and operational matters – such as command and control, and intelligence matters. However, such observations are not recorded, collated or analysed by the single Services in such a way as to readily facilitate formal analysis and improvements to doctrine, policies and procedures.

7.12 At the operational/strategic level, a key source of feedback is the Senior National Officer's (SNO) end-of-tour report, which is sent through to the

respective Service Chief. This report can cover a range of issues from the initial planning of the operation through to matters of command and control in-theatre. SNO reports contain useful observations and commentary

Without analysis and follow up important lessons may be lost

for collation and analysis as part of the lessons learned process. However, there is no formal process for distilling the operational, strategic and managerial dimensions of such lessons learned reports, and embedding lessons in NZDF policy.

Army's Lessons Learned System

7.13 We reviewed two reports that contained broad lessons learned from the East Timor operation: one prepared by Army General Staff, and a second by the Army's Logistics Executive. Both reports contain valuable observations that

should be recorded formally, analysed, and translated into improved processes and military practice. However, no system is in place to ensure that such observations are followed up and the necessary action taken to change procedures and processes, creating the risk that such lessons will be lost.

- 7.14 Not all individual units are not required to identify operational issues arising from the operation. Lessons learned reports from individual units such as the Forward Surgical Team, Communications Group, National Supply Element and Engineering Unit could provide useful guidance for future operations.
- 7.15 CALL does not have an overview of all strategic and operational lessons learned material. It does not automatically receive all such reports, and may

receive only selected extracts because of a document's security classification. As a consequence, the lessons learned system at the strategic and operational levels is not comprehensive in its

CALL does not see all strategic/operational lessons learned

present form. The fragmented overall lessons learned system makes it more difficult for Army, and the NZDF, to link lessons at the tactical, operational and strategic levels.

The Navy's Lessons Learned System

7.16 The Navy's lessons learned system is based on post-operation or post-exercise reports prepared by the ship's commanding officer. These reports describe the performance of the vessel over the course of an operation or exercise (manning, supply, engineering,

Navy uses postoperation and postexercise reports

- etc.). They note any lessons learned and make recommendations for improvement.
- 7.17 Maritime Headquarters deals with the majority of issues raised in postoperation reports. Recommended solutions may include additional crew training, development of a minor capital expenditure proposal, or review of policies. For example, concerns expressed by vessel commanders about the provision of logistic support were to be taken account of in the Navy's supply chain review. Issues of an operational nature may also be incorporated in future checks of crew and ship safety and capability.
- Maritime Headquarters reports to the Chief of Naval Staff on matters needing to be considered at a higher command level such as rules of engagement and personnel welfare. These reports are considered, among others, by staff of the Navy's Development and Operations Division, which has the role of addressing capability deficiencies. The Division is responsible for considering procedural, personnel and doctrinal matters; ranking bids for resources; and seeking funding. Those resource requirements that fall outside the Chief of Naval Staff's authority to approve are passed to the Defence Force Headquarters to be evaluated against bids from the other two Services.

- 7.19 Consideration of lessons across the Navy takes place, therefore, at different levels within the organisation. Each level of command is responsible for analysing matters within its area of authority and rectifying or proposing solutions.
- 7.20 In its *Strategic Plan for 2000 and Beyond* the Navy noted its intention to develop a rolling three-year evaluation programme to be included in its Major Exercise Programme and the Fleet Plan. In implementing the evaluation programme, the Navy should ensure that all lessons from the planned evaluation programme are formally recorded and analysed, and that action plans are developed in a systematic manner at all points in the chain of command

The Air Force's Lessons Learned System

- 7.21 Observations and comments by the Air Force's No. 3 Squadron at a tactical level were incorporated within the Army's lessons learned system. Informal post-operational briefings of aircraft crews are another valuable forum for the sharing of operational experience.
- Air Command's Air Power Development Centre published a report in June 2000 that reviewed operational aspects of the INTERFET deployment. This document highlighted both accomplishments and shortcomings and noted special issues that were encountered. Some shortcomings were noted as being addressed.
- 7.23 We understand that the report was discussed at Air Command Headquarters, but that the outcomes of that discussion were not documented, nor responsibility formally assigned for follow-up action. Rather, responsibility for applying lessons drawn from the review rested with individual staff officers. Without a formal evaluation and follow-up process useful lessons may be lost and opportunities missed to improve procedures or practices.

Tactical Lessons Learned

- 7.24 The lessons learned systems at the time of deployments such as Bosnia or Bougainville were largely informal. Some information was collected by way of reports prepared by Senior National Officers, post-operational and post-exercise reports, or feedback from personnel. However, there was little formal analysis of the issues identified in such reports, and no consolidated publication of issues resolved. Nor was responsibility clearly assigned for translating experience from training or operations into improved military practice.
- 7.25 Our examination of tactical lessons learned systems of the single Services revealed that only Army had put a formal lessons learned system in place. In June 2000, the Army established

CALL has been a major lessons learned initiative by Army

CALL based on a model adopted by the British Army.

Lessons Learned Model: Principles, Processes and Responsibilities

- 7.26 Army's formal lessons learned system is designed to *allow for the transparent capture, analysis, resolution and publication of lessons learned*. Army defines a lesson learned as an issue that results in a change to equipment, training, doctrine, organisational structure, procedures, policies or behaviour. The model is based on four processes:
 - observation (reports, observations or trends);
 - issues (one-off observations to be analysed, or recurring themes);
 - analysis (examination and resolution of issues); and
 - formal designation of an issue as a lesson learned.
- 7.27 CALL has the primary role of ensuring that data, comments and observations from a wide range of sources are transformed into lessons learned information. It also has overall responsibility for managing the lessons learned system within Army.
- 7.28 Army directives assign a wide range of tasks to CALL including:
 - maintaining the Army's lessons learned database;
 - analysing and monitoring the input of lessons learned into the database;
 - analysing trends;
 - co-ordinating action on any identified issues that require changes to doctrine or policy;
 - managing Army's input into the lessons learned databases maintained by its American, British, Canadian and Australian counterparts;
 - compiling and publishing lessons learned publications for Army; and
 - conducting training and education programmes for Army on the lessons learned process.
- 7.29 Individual Army units are responsible for appointing a lessons learned coordinator. The co-ordinator is charged with:
 - recording issues and observations from post-operation and postexercise reports in the lessons learned database, validating issues in practice; and
 - analysing those issues which fall within their areas of delegated authority.
- 7.30 Where possible, tactical lessons are to be implemented by the individual units. Only major issues are forwarded to CALL, or to Land Command Headquarters, for resolution. It is intended that, once analysed and formalised, lessons learned should give rise to changes in:
 - equipment;
 - training plans;
 - doctrine:

- operating procedures; and
- policies.

Resourcing the Centre for Army Lessons Learned

7.31 A number of comments were made to us that CALL was under-resourced to operate at full effectiveness. By way of comparison we looked at the

responsibilities of the Australian Centre for Army Lessons Learned and the relative resources available to the Australian and New Zealand lessons

CALL is under-resourced to operate effectively

learned units. The comparison suggests that the New Zealand centre is underresourced to meet its objectives in an effective manner.

- 7.32 Formed in 1999, the Australian Centre for Army Lessons Learned began operations early in 2001, with 12 staff assigned to data collection, data management, analysis and dissemination. The Australian Centre is designed to function as the Australian Army's knowledge management agency, collecting lessons from operations, exercises, and training providing an entry point into national and international lessons learned databases. In examining particular operations, the Australian Centre draws on the knowledge held by military personnel of the subject matter concerned.
- 7.33 An important component of the learning process is the review of procedures, protocols, policies and doctrine for consistency with lessons drawn from experience in operations or exercises. The Australian Centre has dedicated a full-time staff member to this task.
- 7.34 In contrast, the staff establishment plan for formation of the New Zealand Centre provided for only two staff on a part-time basis. At present CALL has only one dedicated full-time staff member. This limited level of resourcing precludes CALL from undertaking the full range of tasks for which it was established
- 7.35 Army units themselves are responsible for initial analysis of issues relating to their own operations. However, centralised management of the lessons learned system is vital to ensure that:
 - all areas of the NZDF benefit from the collection and storage of shared data:
 - responsibility is assigned for addressing issues;
 - appropriate follow-up action is implemented; and
 - lessons are disseminated.
- 7.36 CALL lacks the ability to collate, interpret, analyse and disseminate lessons learned data from a wide range of sources. At present it is not in a position to ensure formal and consistent oversight of the lessons learned system as intended. We consider that, in order to capture the full benefits of the lessons learned process, Army should consider strengthening its lessons learned analytical capacity.

- 7.37 Additional resourcing would assist Army in maintaining relationships with lessons learned groups attached to external organisations such as the UN and other military forces. It would also enable CALL to:
 - take full advantage of knowledge sharing through such forums;
 - take a more active leadership role in promulgating lessons learned; and
 - ensure that recommended improvements result in long-term changes to military practice.
- 7.38 We consider that Army should allocate the necessary resources to enable it to:
 - maintain close liaison with other lessons learned bodies;
 - co-ordinate and review tactical, operational and strategic lessons learned; and
 - review doctrines and policies in the light of lessons learned from operations and training.

Collecting Lessons Learned Data

- 7.39 From the time of the first Battalion Group rotation in May 2000, each soldier sent to East Timor has been given a lessons learned booklet. The booklet provides an opportunity for soldiers to note any issues they encounter in the course of the operation. Soldiers are taught how to use the booklet before they leave. Observations can also be entered electronically directly into Army's lessons learned database from *in theatre*.
- 7.40 The unit commander collates and summarises the individual comments, adding their own comments on a broader range of issues. A standard set of questions relating to the deployment is also distributed to the unit commanding officer for comment. Responses to these questions form the bulk of collated lessons learned data
- Psychological debriefs on the completion of tours of duty give soldiers an opportunity to talk about their deployment experience before returning home, and are a potential further source of lessons learned data. Due to privacy requirements, this source of information is not used directly for lessons learned purposes, but can supplement other data collected through the soldier's booklet or Army's database in-theatre. Debriefs may also identify common issues or concerns which could usefully be translated into lessons for future training or operations.

Confirmation and Verification

7.42 Clarification and validation of lessons learned are the responsibility of Subject Matter Analysis and Review Teams (SMART). SMART teams review each Battalion's operations in-theatre – a key focus being to validate pre-deployment training.

SMART teams observe operations in theatre for validation

- 7.43 SMART teams cover all aspects of in-theatre operations, and include members with experience in various unit specialisations. For example, a SMART team from the Army's Signals Unit visited East Timor in August 2000 to validate observations and issues on communications matters from the initial deployment and first rotation, making recommendations on:
 - training;
 - equipment capability; and
 - maintenance and servicing.
- 7.44 Successive SMART teams use the reports of previous teams as a benchmark for preparing their own summary reports, thereby facilitating a process of continuous improvement. Such reports record the lesson or competency concerned, assign responsibility for taking action, and contain a reference to the lessons learned database.

Analysis

- 7.45 Army analyses lessons learned data from a variety of sources:
 - SMART team reports;
 - Senior National Officer reports; and
 - evaluations of training programmes.

The Army uses a variety of sources for lessons learned

- 7.46 For example, in February 2001 Land Command analysed issues and observations on a range of matters under various subject-matter headings. The report summarised key points and any required improvements.
- 7.47 SMART teams analyse the data they gather, providing a valuable resource for ongoing training, force development and structure, and refinement of doctrine, policies and procedures. SMART team reports:
 - describe the issues, by reference to database records;
 - specify the lessons and actions needed to make the necessary improvements; and
 - assign unit responsibility for taking such actions.
- 7.48 For example, SMART team summary reports of February 2001 noted a lack of tracking skills among New Zealand soldiers in East Timor, particularly when operating in close country. The SMART team identified Land Command's training group and individual unit commands as the most appropriate units to develop such training, and suggested that trackers be assigned to rifle sections, and that a team of skilled trackers be formed
- 7.49 Summary reports are sent directly to unit trainers responsible for training the following Battalion Group. For example, a SMART team went to East Timor in January 2001 with the purpose of:

- validating the report from the visit by the preceding SMART team in the previous year (and observations from the operations of the current deployed Battalion Group) against the draft training plan for the Battalion Group to follow;
- capturing relevant data for analysis; and
- resolving training issues for preparation of the new Battalion Group for operations in East Timor.
- 7.50 The SMART team made a number of observations on training matters in the course of its visit grouping these under subject headings and recommending courses of action. The draft report was supplied to the Mobilisation Headquarters for issues to be implemented in the training programme. Unit trainers were also briefed separately on specific training issues. This process ensured that the benefits of lessons were directly obtained without delay.
- 7.51 While analysis is undertaken, no accountability framework was in place to ensure that recommended improvements were systematically translated into standard policies and procedures throughout Army. A variety of lessons emerging from Army's lessons learned system relate to matters concerned with broader force structure and development such as manning levels and doctrine. Making the necessary changes to systems, processes and procedures should be a key product of the lessons learned system, ensuring that improvements are embedded in Army policy. Army should give prominence to this role, in order to secure long-term gains from its lessons learned system, and to formalise best military practice.

Potential Additional Sources of Lessons Learned Material

7.52 We also identified potential sources that were not being used to draw more general lessons at all (tactical, operational and strategic) levels. While CALL has access to lessons learned reports from other nations through the ABCA

forum⁹, it does not analyse such reports for possible application to Army's system. Feedback from the UN Command – and in particular the UN's own Lessons Learned Unit of the Department of Peacekeeping

Some sources are not being utilised to identify lessons

Operations – may provide additional observations from the East Timor operation from which New Zealand could draw valuable lessons.

7.53 Although not intended for that purpose, situation reports from East Timor are a further source of lessons learned information. New Zealand Senior National Officers in East Timor send regular reports to Defence Force Headquarters over the course of their tour of duty. These reports summarise activities over the preceding period, and alert Joint Command to issues of immediate concern.

115

The ABCA Programme provides a forum for the armies of the United States, Britain, Canada and Australia to maintain and extend co-operation, interoperability and standardisation. Since October 1999, ABCA has maintained a lessons learned database enabling members to share lessons learned.

They also raise matters of more general significance that could usefully be analysed to identify a range of lessons for future operations.

- 7.54 We did not examine the way in which the single Services generate capital enhancement or purchase requirements from serviceability records or defect reports arising from operations or exercises. Therefore, we were not, therefore, able to assess to what extent major and minor capital programmes were responsive to the ongoing demands of the East Timor deployment. However, we did sight instances where equipment defects or user requirements had given rise to changes to Army's minor capital programme for the purchase of:
 - satellite communications facilities;
 - night vision equipment;
 - water storage tanks and ancillary plant;
 - lighting and power distribution equipment; and
 - container handling equipment.

What Lessons has the NZDF drawn from the East Timor Operation?

7.55 Each of the single Services had reviewed its experience with the East Timor deployment. We analysed the conclusions that the Navy, Army and the Air Force had drawn from those reviews, noting common issues and concerns.

The Navy

- 7.56 Three Royal New Zealand Navy vessels took part in New Zealand's INTERFET deployment at various times: the support ship HMNZS *Endeavour*, and two frigates HMNZS *Canterbury* and HMNZS *Te Kaha*. The activities of all three vessels fell under the command of a multinational task group, and were not formally part of the New Zealand Force.
- 7.57 HMNZS *Canterbury* and HMNZS *Te Kaha* conducted patrolling tasks within New Zealand's area of operation over the period from mid-September to the end of December 1999. HMNZS *Endeavour* assisted in the re-fuelling of vessels from the multinational naval force, and in the co-ordination of logistics support and stores.
- 7.58 The Commander of each vessel prepared a post-operation report reviewing the various aspects of their deployment and identifying lessons learned in the course of the deployment, under a variety of subject headings including:
 - manning;
 - operational control and the assignment of tasks;
 - personnel morale and welfare;
 - public relations;
 - logistics support and re-supply;
 - marine engineering;
 - equipment availability and reliability; and

- communications.
- 7.59 The two frigates HMNZS *Canterbury* and HMNZS *Te Kaha* were deployed at short notice, well within the response times prescribed in the Purchase Agreement with the Minister. This limited the opportunity to undertake planned maintenance, and engineering work was carried out to address minor defects before the vessels sailed into the area of operation. Both had only recently participated in training exercises, which had raised their level of preparedness for an operational deployment.
- 7.60 The most significant issues raised in Commanders' reports were concerned with:
 - Logistics support. Logistics support to the three vessels was provided not by a New Zealand logistics detachment but by a coalition partner. The Navy's post-operation reports noted that this arrangement led to communication difficulties over logistic matters and supply chain problems, with insufficient priority being given to New Zealand spares and stores.
 - Communications capability. The deployment highlighted the importance of the communications function. Communications issues focused on the reliability of existing equipment, the need to handle significant volumes of message traffic, and on the capability to maintain secure contact with other vessels, force elements, and shore units.
- The Navy's post-operation reports made useful observations on a range of operational matters that emerged in the course of the INTERFET deployment. Most issues raised by vessel Commanders were addressed by Maritime Headquarters, drawing on comments from functional units (such as the Navy Logistics Unit, or Development Group). Matters raised by the Commander of HMNZS *Canterbury*, for example, were analysed, significant concerns followed up, and solutions proposed. The Maritime Commander, in turn, reported to the Chief of Naval Staff, offering suggestions for improvements to later operations.

Army

- 7.62 Army has reviewed strategic and operational aspects of the INTERFET/UNTAET deployment. Such reviews complement the tactical lessons learned process managed by CALL.
- 7.63 Like the Navy and Air Force, Army prepares post-activity reports. These may comment on the conduct of particular exercises or operations, such as security activities concerned with APEC and associated state visits. They may also review the roles and tasks performed by a single unit such as the Mobilisation Planning Group charged with training New Zealand's Battalion Group over September and October 1999 as it prepared for deployment to East

Timor. Land Command is responsible for compiling and promulgating lessons learned at an operational level.

- 7.64 The primary reports we examined for lessons learned by Army at an operational and strategic level were:
 - a post-activity report prepared by Army's Mobilisation Group in December 1999, reviewing the conduct of pre-deployment training for the first Battalion Group sent to East Timor;
 - a comprehensive Land Command report *Lessons Learnt NZFOREM* (New Zealand Force in East Timor) of 16 February 2001;
 - an evaluation by the Logistics Executive New Zealand's Logistics Support to the Deployed Battalion Group for East Timor; and
 - Lessons Learned from Recent International Conflict: East Timor, prepared by Army General Staff in May 2000.
- Army's review of pre-deployment training identified shortcomings in soldier skills and competencies for particular tasks, and noted that the health status of individual soldiers at the time of mobilisation was not readily visible to unit commanders. It also observed the need to avoid conflicting commitments by making a clear distinction between the training role on the one hand, and logistics (the preparation of personnel and unit equipment) on the other.
- Land Command's report commented on three phases of force preparation: early planning, formation and training of the Battalion Group, and deployment. The report noted that movements planning and logistics were not well integrated with the preparation of individual units, limiting the information available for planning of training and deployment. We have commented on training matters in more detail in Paper 4.
- Army's assessment of the logistic operation noted a number of issues of operational and strategic significance. The report concluded that the logistic operation needed to be flexible and adequately resourced to move the Battalion Group at short notice. The report made a number of key points on logistics matters:
 - Coalition partners will expect the New Zealand force to be deployed with a reasonable degree of self-sufficiency.
 - The supply chain needs to draw on a mix of military and civilian resources (strategic alliances will be vital to ensuring that the NZDF can draw on third-party resources at short notice).
 - The process of filling and loading containers was hindered by the limited lift capacity of NZDF equipment.
 - Logistics planners had limited information on which to base their estimates of equipment and supply requirements.
 - The NZDF had few personnel with experience in the planning and transportation of people and freight. Cargo loading teams were formed on an as-required basis.

- There would be benefits in New Zealand working closely with Australia in conducting training in movements planning, and sharing resources in future combined operations.
- 7.68 The report prepared by Army General Staff in May 2000 provided the most comprehensive insight into strategic lessons from the deployment for Army and for the NZDF generally. The report identified a variety of issues arising from the INTERFET phase of the East Timor deployment including:
 - **Planning**. The need for effective combined planning with coalition partners, the success of the NZDF's joint planning approach, and the implications of readiness timeframes for timely and effective force planning.
 - Command and control arrangements. The importance of having an effective national command and control capacity to maintain a New Zealand point of authority and responsibility within a coalition force.
 - **Logistics**. The need to strengthen logistical skills and experience, particularly in the planning, mobilisation and transportation of personnel and equipment.
 - Capability. The recognition that manning levels limit planning and sustainment options; the need for more regular collective and combined training; and the risks posed by old and inadequate equipment to the achievement of tight planning deadlines.
- 7.69 Together, Army's reports provide valuable insights into lessons from the INTERFET deployment, and useful lessons for future contingencies.

The Air Force

- 7.70 In June 2000 Air Command published a report *Air Command Lessons from Operation Farina* that identified issues and observations arising from the deployment.
- 7.71 Key issues and lessons identified in the report were:
 - Operations Planning and Liaison. The joint operational planning structure proved successful, and communications between Air Command and the Joint Operational Planning Group (managed by Land Command) were effective. Liaison was aided by the secondment of Air Force staff to the Group where they were able to provide specialist advice on air movements planning and on helicopter operations.
 - **Administration.** The Air Force's administration systems and air operations centre could be strengthened to enable it to respond more quickly to a similar operation in the future.
 - **Transportation.** RNZAF aircraft transported all military personnel to East Timor, demonstrating the value of the flexibility afforded by the air transport capability. Its Boeing 727 and Hercules C130 aircraft moved, in total, 881 personnel over this period.
 - **Moving Personnel and Equipment.** The Air Force supported the Army in loading and unloading military freight from the two vessels

chartered to transport Battalion equipment to East Timor, and two air loading teams were deployed to Australia. However, these tasks stretched personnel numbers.

- **Air Security.** The Air Force's recently established Air Security Branch was not resourced adequately to perform the range of tasks demanded of it at the time.
- **Communications.** The deployment revealed shortcomings in some communication equipment.
- **Operational Security.** For reasons of operational security, the Air Force's No. 3 Squadron had only limited access to detailed operating information on the basis of which to prepare for the deployment.
- Again, we found no evidence of how these issues would be systematically addressed. For example, we could not determine whether anyone was accountable for analysing the report and for implementing any necessary changes.

Conclusions

- 7.73 All three Services generate lessons learned information at an operational and strategic level. The Navy's primary source of lessons learned is post-operation and post-exercise reports. Two of the Navy's frigates were deployed at short notice but at a high level of preparedness following an intensive period on exercises. Commanders' post-operation reports raised issues concerned with:
 - logistics support; and
 - communications capability.
- 7.74 The Air Force deployed transport aircraft, helicopters and associated personnel in support of the New Zealand deployment. Its report raised minor issues and made observations on different aspects of the deployment.
- Army has prepared a variety of reports reviewing operational and strategic aspects of the INTERFET deployment. These complement the tactical lessons learned process managed by the CALL. The Army's reviews have identified a variety of lessons from the East Timor deployment, including observations on:
 - the joint planning process;
 - readiness deadlines;
 - training
 - logistics, transportation and supply; and
 - force manning and structure.
- 7.76 Within each Service, operational and strategic lessons learned are not analysed and promulgated in a consistently systematic way. Not all steps in the evaluation process were documented in a formal and transparent way as issues were passed up the command chain particularly at a strategic level. Failure to record the evaluation system at all levels of the organisation creates the

potential for lessons to be lost or "re-learned". In the absence of consistent systems for analysing observations and following up on implementation, important opportunities to improve military practice and to share lessons between Services may be missed.

- 7.77 It is not clear where accountability lies within each single Service for reviewing all lessons learned, at each level (strategic, operational and tactical) against military doctrine, policies, and procedures. We suggest that each Service assign clear responsibility for this task as a central component of its lessons learned process.
- 7.78 At the tactical level Army has adopted a formal lessons learned model to collect, analyse and promulgate lessons learned from operations and exercises. The model has the potential to strengthen the development of best practice across Army ensuring consistency and continuous improvement. Consideration should be given by all three Services to formally adopting a common model and set of principles, while recognising the need to tailor practices and systems to the circumstances of each Service.
- 7.79 Army's lessons learned process has produced immediate training benefits for successive Battalion Group rotations. Army analyses issues and observations arising from the collection of lessons learned data. Tactical lessons are used directly to refine training of subsequent Battalion Groups preparing for deployment.
- 7.80 CALL has a wide-ranging brief, with overall responsibility for management of Army's lessons learned system. We concluded that CALL is not, at present, adequately resourced to carry out its full range of tasks in an effective manner. Nor are all information sources being used to identify possible lessons. As a consequence, opportunities will be lost to translate experience into improvements in policies and practices.
- 7.81 Additional resourcing would enable CALL and Land Command to take a more vigorous leadership role in analysing lessons learned information, reviewing and promulgating changes to doctrine, policies and procedures, and pursuing lessons learned initiatives both within the Army and with overseas counterparts.
- There would be value in the NZDF establishing a joint lessons learned framework. This framework would facilitate the sharing of lessons learned among the single Services and promote best practice for single Services working together. All three Services should consider formally adopting a common model and set of principles while recognising the need to tailor practices and systems to the circumstances of each Service.
- 7.83 The NZDF must balance the need to draw lessons from the East Timor operation with the need to design and develop future capability to meet a wider range of deployment circumstances. While East Timor does not represent a template for all future capability planning it does present valuable pragmatic lessons for improvement to NZDF systems and capability.