

HON PEENI HENARE, MINISTER OF DEFENCE

Logistics Management Information System

September 2022

This paper and the attached Work Programme Business Case seeks investment approval of the first phase of a generational upgrade of the New Zealand Defence Force Logistics Management Information System.

The pack comprises the following documents:

- August 2022 Cabinet Government Administration and Expenditure Review Committee Minute of Decision *Logistics Management Information System* [GOV-22-MIN-0028]; and
- The associated Cabinet Paper *Defence: Logistics Management Information System*.

This pack has been released on the New Zealand Defence Force website, available at: www.nzdf.mil.nz/nzdf/search-our-libraries/documents/?document-type=Official+information&sort=relevance.

Information has been withheld in full in accordance with:

- section 9(2)(f)(iv) of the OIA: *to maintain the constitutional conventions for the time being which protect the confidentiality of advice tendered by Ministers of the Crown and officials; and*
- section 9(2)(j) of the OIA: *to enable a Minister of the Crown or any department or organisation holding the information to carry out, without prejudice or disadvantage, negotiations.*

The business case for this project is withheld in full in accordance with:

- section 9(2)(b)(ii) of the OIA: *to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied the information;*
- section 9(2)(f)(iv) of the OIA: *to maintain the constitutional conventions for the time being which protect the confidentiality of advice tendered by Ministers of the Crown and officials; and*
- section 9(2)(j) of the OIA: *to enable a Minister of the Crown or any department or organisation holding the information to carry out, without prejudice or disadvantage, negotiations.*

The public interest is met with a summary of the key information that formed the basis of Cabinet's decision to invest this funding being provided by the Cabinet paper.



Cabinet Government Administration and Expenditure Review Committee

Minute of Decision

This document contains information for the New Zealand Cabinet. It must be treated in confidence and handled in accordance with any security classification, or other endorsement. The information can only be released, including under the Official Information Act 1982, by persons with the appropriate authority.

Logistics Management Information System

Portfolio **Defence**

On 25 August 2022, the Cabinet Government Administration and Expenditure Review Committee:

- 1 **noted** that the New Zealand Defence Force (NZDF) Logistics Management Information System (LMIS) is out of date and in need of a substantial upgrade;
- 2 **noted** the preferred solution is a three phases approach to prioritise investment, and provide off-ramps for future phases in the event further investment is not agreed;
- 3 **noted** the LMIS programme business case has been scheduled so that each phase stands alone but if Phases 2 and 3 are not funded then the programmed enhancements for these phases will not occur and the capability of the system will progressively degrade from 2024/2025 onwards and become more pronounced over time;
- 4 **agreed** for Defence to proceed with Phase 1 of the Work Programme, which focuses on projects to maintain the existing LMIS, and improve the capability of the highest priority components;
- 5 **noted** that the capital cost for Phase 1 is s.9(2)(j) including contingency, for the acquisition of hardware and associated software, and associated project management costs;
- 6 **noted** that the annual operating costs for Phase 1 are estimated to be s.9(2)(j) per annum (at steady state from financial year 2026/27) and that at steady state, after allowing for internal cost savings from the Phase 1 investment, the incremental operating costs are estimated to be s.9(2)(j) above current Vote Defence Force baselines;
- 7 **noted** that the forecast depreciation expense of s.9(2)(j) per annum (at steady state from financial year 2026/27) will be met within Vote Defence Force Baselines);
- 8 **noted** that the total capital cost (including contingency) for the proposed solution for Phase 1 of s.9(2)(j) will be funded from the NZDF's depreciation reserves;
- 9 **noted** that on 12 April 2021, Cabinet agreed to establish a Tagged Operating Contingency associated with the Defence portfolio of up to the following amounts, to provide for the sustainment and evolution of the LMIS, and jointly authorised the Minister of Defence and Minister of Finance to draw down the tagged contingency funding, subject to an approved business case [CAB-21-MIN-0116.09];

	\$m - increase/(decrease)				
	2020/21	2021/22	2022/23	2023/24	2024/25 & Out years
Operating Contingency Total	-	0.800	1.605	2.153	2.616

- 10 **agreed** that the business case, attached to the paper under GOV-22-SUB-0028 has been satisfactorily completed and Phase 1 can now proceed;
- 11 **approved** the following changes to appropriations for the direct operating costs required to give effect to paragraph 3 above, with a corresponding impact on the operating balance and net Debt:

		NZ \$m – increase/(decrease)				
Vote 1 – Defence Force		2022/23	2023/24	2024/25	2025/26	2026/27 & Out Years
12	Proposed changes to appropriations for 2022/23 above be included in the 2022/23					
	Minister of Defence					
	Departmental Output Expense: Army Capabilities Prepared for Joint Operations and Other Tasks (funded by Revenue Crown)	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)

Supplementary Estimates and that, in the interim, the increases be met from Imprest Supply;

- 13 **agreed** that the expenses incurred under paragraph 10 above be charged against the Contingent Funding to sustain and Evolve the Logistics Management Information System to Sustain Delivery of Defence Policy – Tagged Operating Contingency described in paragraph 8 above;
- 14 **noted** that following the adjustments detailed in paragraph 10 above, the tagged operating contingency described in paragraph 8 above is now closed;
- 15 **noted** that implementation cases for subsequent phases will be bought to Cabinet for approval as they are completed.

Vivien Meek
Committee Secretary

Attendance (see over)

Present:

Hon Grant Robertson (Chair)
Hon David Parker
Hon Nanaia Mahuta
Hon Stuart Nash
Hon Peeni Henare
Hon Michael Wood
Deborah Russell, MP

Officials present from:

Office of the Prime Minister
Officials Committee for GOV

Released by the Minister of Defence

Office of the Minister of Defence

Chair, Government Administration and Expenditure Review

DEFENCE: LOGISTICS MANAGEMENT INFORMATION SYSTEM

Proposal

1. This paper and attached Work Programme Business Case seeks investment approval of the first phase of a generational upgrade of the NZDF Logistics Management Information System (LMIS).
2. Logistic management is critical to the NZDF. It is the combination of people, platforms, processes, information, and data that ensures missions are conducted on time, safely and effectively. The current LMIS is over 20 years old. Its outdated hardware and software cannot manage current logistic demands efficiently, and cannot be satisfactorily upgraded.
3. The LMIS Work Programme will address operating deficiencies to move NZDF logistics management into the 21st century. This supports our people, and ensures that training and operations can be planned and resourced efficiently.
4. The initial capital investment to progress Phase 1 is s.9(2)(j) which will be funded from depreciation reserves. No additional capital or operating expenditure is required to progress Phase 1 of the LMIS Programme.

Executive Summary

5. Logistics management ensures that the NZDF delivers on Government requirements. It is the combination of people, platforms, processes, information, and data that ensures missions are conducted on time, safely and effectively.
6. Logistics management supports our priorities of People and the Pacific. Recent global events, including successive disaster relief operations in the Pacific region have shown the critical importance of accurate inventory management and efficient supply and maintenance arrangements. This has extended to our own support of Ukraine through the transfer of much needed systems and training support.
7. The LMIS is the core of the logistics 'system of systems'. It encompasses information, people, processes, and data, in order to optimise operations and day-to-day logistics management. The LMIS ensures that the logistics information is accurate, timely, and relevant.
8. The current system was implemented over 20 years ago, and is no longer up to supplying timely and complete management information. It cannot efficiently support NZDF's logistics now, and will not meet our needs into the future.
9. Commanders and managers across the NZDF rely on the information provided by the LMIS. This information is essential in ensuring that all platforms, equipment, and materiel are serviceable and safe to operate. Without this crucial information, training, operations and personnel safety are put at risk.
10. This LMIS project provides a generational change, encompassing new technology, new systems, and a new way of working. Phase 1 implements the most urgent changes and will bring the LMIS up to date for present needs. Subsequent phases are planned to

further 'future-proof' the system, and support new information-heavy capabilities as they come on stream.

11. Phase 1 is expected to run from now until 2025. The initial capital investment to progress Phase 1 is s.9(2)(j) which has been prioritised for funding from depreciation reserves¹. The initial direct operating expenditure uplift increases up to s.9(2)(j) in FY23/24, before decreasing to s.9(2)(j) in FY26/27 and out years.

12. The operating expenditure uplift can be funded from the *Contingent Funding to Sustain and Evolve the Logistics Management Information System to Sustain Delivery of Defence Policy* established at Budget 2021. No new capital or operating funding is required.

Relation to Our Priorities

13. This proposal aligns with my defence priorities of People, Infrastructure and the Pacific, as well as our overall Government's priorities.

14. In sustaining and upgrading the LMIS, the NZDF will be provided with modern ICT systems that are required for our people, ensuring they are properly supported, have access to the tools and equipment they need and are thus best placed to undertake whatever tasks we ask of them.

15. The LMIS is also essential to maintaining the regulatory compliance and approval of aircraft, ships and other equipment. We need absolute confidence that we are managing and maintaining complex assets in line with international standards. Our people need to be assured that their platforms and equipment are functional, safe, and compliant.

16. This supports the Pacific, as it enables the almost continuous operational deployments currently occurring, ranging from disaster relief to regular support for maritime awareness patrolling, exercises with partners and operations in support of the international rules based order. As new capabilities come on stream, the support these capabilities require will rapidly outstrip our current logistics management system's ability to cope unless we upgrade.

Background

What is the LMIS?

17. The LMIS is the means by which the NZDF manages all information associated with its logistics functions and how these functions enable and support operational activities. Some of the key logistics activities enabled by the LMIS include safety assurance for platforms, equipment and materiel; operational logistics planning; understanding demand for resources; and domestic and overseas supply chain management.

¹ Annually, the NZDF invests approximately \$400M from depreciation reserves to sustain and maintain the various capabilities, platforms and infrastructure necessary to deliver outputs. Defence have prioritised funding from the sustainment investments to the Logistics Management Information System Phase 1 in order to sustain the digital infrastructure necessary to ensure the efficient and effective management of this complex logistic system that is critical to the mission effectiveness of our service men and women.

18. As the LMIS is made up of a number of different applications and systems, each with their own technological obsolescence issues, a systematic approach to upgrades is required. The LMIS programme includes 40 individual, low-risk projects. By upgrading progressively the overall LMIS will be greatly improved, fit for purpose, and deliver the logistic information and efficiencies that we want.

Why is this important?

19. The NZDF has around 138,000 discrete items of supply. It supports 50 major platform types (ships, aircraft and major land systems) and over 1,400 different types of equipment in use which range in complexity from network enabled communications equipment to rifles, ration-packs and rucksacks.

20. NZDF logistics undertakes around four million stores movements annually. The efficient and effective management of this complex logistic system is critical to the mission effectiveness of our service men and women. It underpins the statutory and regulatory compliance that governs the safe operation of its equipment – for example, ensuring that our aircraft are fully compliant with international safety regulations.

21. Supporting NZDF logistics relies on over 8,000 industry suppliers and vendors. Maintenance of these commercial relationships is vital. The LMIS manages the flow of orders and deliveries, and ensures that vendors get fore-warned of demand and paid for services and goods supplied.

Current State

22. Investment in the initial implementation of logistics modules was made in 1998, followed by further investments in 2003 and 2005. While these implementations have been maintained and evolved as best as possible, the legacy LMIS technology and systems are significantly outdated and no longer fully fit for purpose.

23. This is resulting in the following problems:

- a. **Poor support for decision making:** a lack of accurate and accessible information about equipment and materiel availability, including a 'safe to operate' status, meaning increased risk to operations;
- b. **Limited support for mobile working:** most LMIS functionality is only available to users through desktop terminals. Work is performed using outdated manual processes which are slow, inefficient and error prone. Logistics data is not always captured at the point of transaction, and similarly, information is not readily available where it is wanted;
- c. **Lack of usability:** The legacy LMIS has user interfaces which are out of date and out of step with current practice. It is hard to both input and extract information. Users become frustrated, and either find 'work-arounds' or avoid the systems altogether; and
- d. **Limited deployability:** the legacy LMIS has not been designed to support deployed operations and in-the-field training. Near real time information is not always available and work-arounds are used, which are slow and error-prone. This reduces the ability of logisticians to effectively support deployments.

Options for Implementation

24. Defence developed four options for the Work Programme, highlighting a number of different pathways that could be undertaken. A summarised options analysis is detailed below.

25. Option 1 – Do Nothing. A continuation of the existing support arrangements. This option will impact the LMIS, with progressive degradation of the system leading to an increasing inability to provide high quality reliable information to support decision making for military training and operations. This includes decisions about whether NZDF capabilities are safe to use and operate. It also risks service failure of some components of the system such as an inability to reliably meet health and safety and legislative requirements relating to the storage, packaging, handling and distribution of medicines and controlled drugs. As new more complex capabilities come on line this situation will be compounded.

26. Option 2 – Do Minimum. A minimum level of investment, in order to sustain the current system and improvements delivered by the Consolidated Logistics Project (CLP).² This option does not enable the LMIS to keep pace with business and technology change.

27. Option 3 – Maintain and Grow. This option is designed to maintain the LMIS, and grow the current system to enable an adequate level of capability, ensuring a credible and reliable LMIS which meets the NZDF's baseline requirements.

28. Option 4 – Optimise for the Future. This option builds on Option 2 by providing additional investment for projects which will improve efficiency and effectiveness in tasks performed by the NZDF's logisticians.

Evaluation of the Options

29. The options were evaluated and scored against the investment objectives, critical success factors, and risks. The table below shows the option scores.

Assessment Criteria	Option 1 Do Nothing	Option 2 Do Minimum	Option 3 Maintain and Grow	Option 4 Optimise for the Future
Investment Objective 1 – Sustain and Evolve	1	2	3	3
Investment Objective 2 – Support Change	1	1	2	3
CSF 1: Strategic Fit	1	1	3	3
CSF 2: Business Needs	1	2	3	3
CSF 3: Value for Money	1	1	3	3
CSF 4: Supplier Capacity and Capability	3	3	3	3
CSF 5: Affordability	2	2	3	1
CSF 6: Achievability	3	3	3	3
Score	13	15	23	22
Risk 1: Significant Change to Requirements	1	1	2	3
Risk 2: Organisational Capability and Capacity	3	3	3	2
Score	4	4	5	5
Total	17	19	28	27
Ranking	3	4	1	2

Table 1: Results of Options Assessment

² The CLP is a business change project implementing new processes, systems and infrastructure to provide Defence with smarter, more efficient and more relevant logistics, including the infrastructure that underpins logistic capabilities.

30. Options 1 and 2 were discarded as a result of poor scoring. Options 3 and 4 were close in scoring, with Option 3– Maintain and Grow scoring slightly higher. **Option 3 (Maintain and Grow) is thus recommended as the preferred option.**

Refinement of the Preferred Option

31. The full delivery of the preferred Option 3 has been split into three Phases. This allows the integration of the new LMIS to be progressive whilst managing both cost and workload. Phase 1 will address the most urgent deficiencies, and provide a platform for further implementation as required, based on experience gained.

32. Phase 1 will be implemented over the next three years. The sub-projects to be included in this phase are well defined. This reduces risk and provide a high level of confidence that benefits will be delivered within cost estimates.

33. This paper seeks approval of Phase 1. The subsequent Phases 2 and 3 will be the subject of their own implementation cases. Their exact timing and sub-projects will be determined based on Phase 1 experience. Whilst Defence has made budgetary planning provision for both Phases 2 and 3 in its forward planning (each of the subsequent phases is similar in cost to Phase 1), and the full benefits of LMIS will be achieved on the completion of all phases, Phase 1 will provide some LMIS benefits even if subsequent phases do not proceed.

Summary of LMIS Phase 1

34. Investment into Phase 1 of the Work Programme will avoid service failure by ensuring that essential work started in the Consolidated Logistics Project (CLP) is continued. This work includes the Regional Equipment Pool Application Suite, a set of applications that focus on demand planning and equipment allocation, and the Clothing and Personal Equipment System, an application which provides visibility of an individual service-person’s holdings, and supports better use of returned clothing and personal equipment. The investment will also ensure that a baseline capability is established.

35. Key sub-projects are summarised in the table below. All of these projects have delivery plans ready, including quotations from preferred third parties, where required.

Project	Overview
Logistics Data Framework (LDF)	Provides assurance that core logistics data is fit for purpose, and establishes the LDF as a cornerstone capability so all users can benefit from high quality data and consequential logistic information.
Pilot of Reporting and Analytics Solution for Logistics	Pilot project of a software suite to prove technical feasibility of a range of reporting and analytics tools, including support and mentoring, for key logistics users.
Extended Supply Chain Management – Distribution	Logistics transportation management solution to optimise freight management, provide full visibility of the supply chain, and reduce costs year-on-year.
Implementation of Reporting and Analytics Solution for Logistics	Phased implementation of SAP Business Objects, in order to provide a suite of analysis and reporting tools for key logistic users, to improve decision making and operational effectiveness, and reduce through-life costs.
Technical Assurance & Monitoring (TAM)	Incremental enhancement of the system used for safety assurance, in order to provide commanders and managers with all relevant information on safe-to-operate status.

Implementation

36. The management of the programme will be undertaken by personnel from the Defence Logistics Command (DLC) who will work closely with other organisations within

the NZDF, most notably the Defence Digital Group (DDG), and also with selected commercial partners.

37. The programme and projects will be governed and delivered according to the NZDF's Capability Management System (CMS). Technical control of IT architectures, solutions and changes will also be managed by DDG. The project will also focus on change management, implementation of new developments, and transition to business-as-usual to ensure LMIS improvements are successfully adopted and exploited across the NZDF.

38. Both NZDF and industry have the requisite skills and people available to successfully implement the programme. By incrementally upgrading the LMIS over time, the programme has been designed to be agile and adaptable, and will be able to incorporate lessons learned.

39. s.9(2)(f)(iv)



40. As noted earlier, Phases 2 and 3 will build off the experience of Phase 1. Note that Phase 1 delivers benefits in and of itself even if subsequent phases are not supported, although the full benefits of the LMIS programme are dependent on subsequent phases being funded in future.

Phase 1 Investment

Capital Investment

41. The capital investment for Phase 1 is estimated at s.9(2)(j) (including contingency), and this investment can be funded from depreciation reserves. The capital investment is expected to take place during the period FY2022/2023 and FY2024/25.

Operating Costs and Funding

42. The direct operating costs are made up of software maintenance and licence fees, external vendor costs to sustain and support the solutions, and contractor resources with particular subject matter expertise for delivering the tailored software applications.

43. The estimated annual direct operating costs are s.9(2)(j) per annum, offset by savings initiatives of s.9(2)(j) per annum (when investment reaches steady state at financial year 2026/27). This paper seeks approval for the Phase 1 operating baseline uplift to be funded from the Contingent Funding to sustain and Evolve the Logistics Management Information System to Sustain Delivery of Defence Policy established at Budget 2021 as follows:

Direct Operating Cost Uplift \$M	2022/23	2023/24	2024/25	2025/26	2026/27 & Out Years
Phase 1	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)

Depreciation

44. The forecast depreciation expense of s.9(2)(j) per annum (at steady state from financial year 2026/27) will be met within Vote Defence Force Baselines.

Phases 2 and 3

45. The programme phasing provides 'on-ramps' for future progress. Defence will seek approval from Cabinet for Phase 2 and 3 investments at the appropriate time, which will allow Cabinet to review progress before implementing the next phase.

Impact Analysis

46. There are no legislative, gender, disability, climate, population or human rights implications resulting from this proposal.

Consultation

47. This paper has been prepared by the Ministry of Defence and the New Zealand Defence Force. The Department of Prime Minister and Cabinet and the Department of Internal Affairs have been informed of this paper. The Treasury has been consulted.

Communications

48. No communications are planned at this point.

Proactive Release

49. If Cabinet approves this submission, this paper and other relevant papers relating to the programme will be proactively released.

Recommendations

The Minister of Defence recommends that the Committee:

1. **note** that the New Zealand Defence Force (NZDF) Logistics Management Information System is out of date and in need of a substantial upgrade;
2. **note** the preferred solution is a three phases approach to prioritise investment, and provide off-ramps for future phases in the event further investment is not agreed;
3. **note** the LMIS programme business case has been scheduled so that each phase stands alone but if Phases 2 and 3 are not funded then the programmed enhancements for these phases will not occur and the capability of the system will progressively degrade from 2024/2025 onwards and become more pronounced over time;
4. **agree** for Defence to proceed with Phase 1 of the Work Programme, which focuses on projects to maintain the existing LMIS, and improve the capability of the highest priority components;
5. **note** that the capital cost for Phase 1 is s.9(2)(j) including contingency, for the acquisition of hardware and associated software, and associated project management costs;
6. **note** that the annual operating costs for Phase 1 are estimated to be s.9(2)(j) per annum (at steady state from financial year 2026/27) and that at steady state, after allowing for internal cost savings from the Phase 1 investment, the incremental

operating costs are estimated to be s.9(2)(j) above current Vote Defence Force baselines;

7. **note** that the forecast depreciation expense of s.9(2)(j) per annum (at steady state from financial year 2026/27) will be met within Vote Defence Force Baselines);
8. **note** that the total capital cost (including contingency) for the proposed solution for Phase 1 of s.9(2)(j) will be funded from the NZDF's depreciation reserves;
9. **note** that on 12 April 2021 [CAB-21-MIN-0116.09 refers], Cabinet agreed to establish a Tagged Operating Contingency associated with the Defence portfolio of up to the following amounts, to provide for the sustainment and evolution of the LMIS, and jointly authorised the Minister of Defence and Minister of Finance to draw down the tagged contingency funding, subject to an approved business case;

	\$m - increase/(decrease)				
	2020/21	2021/22	2022/23	2023/24	2024/25 & Out years
Operating Contingency Total	-	0.800	1.605	2.153	2.616

10. **agree** that the attached business case has been satisfactorily completed and Phase 1 can now proceed;
11. **approve** the following changes to appropriations for the direct operating costs required to give effect to recommendation 3, with a corresponding impact on the operating balance and net Debt:

Vote Defence Force Minister of Defence	NZ \$M – increase/(decrease)				
	2022/23	2023/24	2024/25	2025/26	2026/27 & Out Years
Departmental Output Expense: Army Capabilities Prepared for Joint Operations and Other Tasks (funded by Revenue Crown)	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)	s.9(2)(j)

12. **agree** that the proposed changes to appropriations for 2022/23 above be included in the 2022/23 Supplementary Estimates and that, in the interim, the increases be met from Imprest Supply;
13. **agree** that the expenses incurred under recommendation 10 above be charged against the Contingent Funding to sustain and Evolve the Logistics Management Information System to Sustain Delivery of Defence Policy – Tagged Operating Contingency described in recommendation 8 above;

14. **note** that following the adjustments detailed in recommendation 10 above, the tagged operating contingency described in recommendation 8 above is now closed; and
15. **note** that implementation cases for subsequent phases will be brought to Cabinet for approval as they are completed.

Authorised for lodgement

Hon Peeni Henare
MINISTER OF DEFENCE

Released by the Minister of Defence