

HON RON MARK, MINISTER OF DEFENCE

Defence: Approval to Buy a Dive and Hydrographic Vessel – Cabinet Material

December 2018

This publication provides the Cabinet decision and subsequent delegated approval by the Minister of Finance and Minister of Defence on the purchase of a Dive and Hydrographic Vessel for the New Zealand Defence Force. These decisions provide for the purchase of the MV *Edda Fonn* and stage one modifications. Stage two modifications are subject to further negotiations.

The pack comprises the following documents:

- Report to the Ministers of Finance and Defence *New Zealand Defence Force: Approval to Commit to Contract for the Dive and Hydrographic Vessel*. This was signed by the Secretary of Defence and Chief of Defence Force on 15 August, and approved by the Minister of Defence on 15 August and Minister of Finance on 19 August 2018.
- Cabinet Government Administration and Expenditure Review Committee minute of 12 June 2018: *Defence: Approval to Buy a Dive and Hydrographic Vessel* [GOV-18-MIN-0031]
- Cabinet paper: *Defence: Approval to Buy and Dive and Hydrographic Vessel* [GOV-18-SUB-0031].

This pack has been released on the Ministry of Defence website, available at: www.defence.govt.nz/publications.

It has been necessary to withhold certain information in accordance with the following provisions of the Official Information Act 1982. Where information is withheld, the relevant sections of the Act are indicated in the body of the document. Where information has been withheld in accordance with section 9(2) of the Act, no public interest has been identified that would outweigh the reasons for withholding it.

The business case for the purchase of the Dive and Hydrographic Vessel is withheld in full in accordance to the following provisions of the Act. Recognising the public interest in information on the decision to purchase major defence capabilities, the Cabinet paper provides a summary of the key information that formed the basis of Cabinet's decision to make this purchase.

Information is withheld where making it available would be likely to prejudice the security or defence of New Zealand or the international relations of the Government of New Zealand [section 6(a)].

Information is also withheld in order 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)(b)(ii)]
- maintain the constitutional conventions for the timing being which protect the confidentiality of advice tendered by Ministers of the Crown and officials [section 9(2)(f)(iv)]
- enable a Minister of the Crown or any department or organisation holding the information to carry out, without prejudice or disadvantage, negotiations [section 9(2)(j)].



NEW ZEALAND DEFENCE FORCE: APPROVAL TO COMMIT TO CONTRACT FOR THE DIVE AND HYDROGRAPHIC VESSEL

Proposal

1. This paper seeks approval from Joint Ministers (Finance and Defence) for the expenditure of public money up to the amount of \$98.416 million for a Dive and Hydrographic Vessel for the New Zealand Defence Force, under the authority delegated by Cabinet in June 2018 [CAB-18-MIN-0281 refers].
2. The total capital cost of the project (including contingency) is \$103.416 million. This includes \$5.000 million which Cabinet approved in June 2018 for due diligence, inspection and negotiations for the purchase of a second-hand commercial offshore support vessel [CAB-18-MIN-0281 refers].
3. The capital for the project will be funded from the Defence White Paper 2016 (DWP 2016) – contingent Capital Funding tagged-contingency established as part of Budget 2017. Operating costs of this project will be funded from within New Zealand Defence Force baselines.

Background

4. Cabinet considered the Single Stage Business Case for a Dive and Hydrographic Vessel in June 2018, and agreed to the purchase of a second-hand commercial offshore support vessel to provide continued support for the New Zealand Defence Force's dive and hydrographic capabilities.
5. At this time, Cabinet directed Defence to report back to the Minister of Finance and Minister of Defence with finalised contracts for the purchase and modification of a second-hand commercial offshore support vessel.
6. The Ministry of Defence and New Zealand Defence Force have undertaken further due diligence and contract negotiations for the purchase and modification of the preferred vessel, the MV *Edda Fonn*.

Due diligence

7. Defence commissioned a marine survey of the *Edda Fonn*, which was conducted by a leading independent ship surveyor and marine consultant. These surveys confirmed that the *Edda Fonn* was in a very good material condition equivalent to a ship aged five to ten years younger.
8. Detailed seakeeping analysis has also been undertaken by an independent contractor to explore the seakeeping characteristics of the *Edda Fonn*, a vessel designed for operations in the North Sea. The analysis assessed the expected characteristics of the vessel, were it to be operated in the high to extreme sea conditions that occur in New Zealand's maritime area.
9. The conclusions of the analysis were a favourable seakeeping performance when compared to HMNZS *Canterbury* or the *Otago Class* offshore patrol vessels, in most sea states for a given speed and heading.

10. The Royal New Zealand Navy's Naval Engineering Authority has acknowledged the results and agrees that *Edda Fonn* exhibits acceptable seakeeping characteristics for New Zealand waters.
11. The information received from the due diligence visits and the negotiated contract for the purchase and modification of the *Edda Fonn* were approved by the Acquisition Review Board on 02 August 2018.

Procurement Arrangements

12. The purchase of the vessel includes the installation of commercially available equipment. [REDACTED] s6(a)

The Negotiated Deal

13. The Agreement includes a fixed purchase price. This price includes the modification of the vessel by the seller prior to delivery, according to the terms set out in the Agreement. Following the completion of stage one modifications, the seller will deliver the vessel to Devonport Naval Base. The seller will be responsible for the condition of the vessel up to the point of delivery.
14. Up to [REDACTED] s6(a) Defence personnel may be embarked on the vessel for familiarisation voyages and during the delivery voyage, for observation and training. The Crown would need to indemnify the seller against the injury or death of these individuals. The Secretary of Defence will report to the Minister of Defence on the details of this indemnity, and will seek approval to embark personnel on-board the vessel for the delivery voyage.

Stage Two Modifications

15. Stage Two modifications will be undertaken following delivery of the vessel. [REDACTED] s6(a)
16. In order to reduce risk and ensure transparency of costs and scope, the stage two modifications will be undertaken following a separate approval processes. It is recommended that the Secretary of Defence and the Chief of Defence Force approve funding for stage two, subject to the full scope of stage two modifications being delivered within the project budget based on the negotiated contracts.
17. If this requirement is not met, the Secretary of Defence and Chief of Defence Force will report to Joint Ministers on options for modification trade-offs to remain within the project budget, prior to approving the commitment of the remaining funding.
18. The overall procurement and modification of the *Edda Fonn* is therefore recommended to be broken down into the following stages:

Table 1: Project Procurement Strategy

Stage One: Subject to Joint Ministers approval	Purchase, initial modification and delivery of the <i>MV Edda Fonn</i> to Devonport, as per the negotiated fixed price contract.
	Design of Stage Two modifications to be completed under a fixed price contract.
	Development of Stage Two Acquisition Plan based on completed design, identified suppliers s9(2)(j).
Stage Two: Subject to Chief Executive Approval	Stage Two modification procurement and installation to be completed s9(2)(j).
	Introduction Into Service.

Through Life Support

19. s9(2)(j)
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

Contract Management

20. The Ministry of Defence would be responsible for project management and for the acquisition of the vessel, including all modifications. The Defence Force would be responsible for capability integration and operation of the vessel.
21. Contract negotiations for the purchase have been undertaken with contract signature planned for August 2018. The *Edda Fonn* is a vessel in high demand. As such, there is a risk that the owners of the vessel may be offered a long term lease arrangement from a third party which would compete with the offer from the Crown, should the August contract signature not occur.

Table 2: Project baseline schedule following contract signature

Description	Start date	End date
Norwegian Sales Form submitted 10% deposit paid	03 Sep 18	07 Sep 18
Survey and modifications commenced on vessel	7 Jan 19	15 Mar 19
Vessel delivery s9(2)(b)(ii)	11 Mar 19	31 May 19
Stage Two Modifications commenced on vessel	5 Jul 19	15 Nov 19
Interim Operating Capability	22 Nov 19	16 Apr 21
Full Operational Release	26 Mar 21	16 Apr 21

Change Management Arrangements

Infrastructure

22. The delivery and integration of the Dive and Hydrographic Vessel requires only minimal infrastructure requirements, with these being addressed through other projects in the Defence Capital Plan. This includes the Devonport Naval Base wharf upgrade included in the Defence Estate Regeneration Plan.

Personnel

23. The Personnel requirements for the Dive and Hydrographic Vessel are currently estimated at 39 regular force personnel. This compares to a combined crew of 59 for *Resolution* (35) and *Manawanui* (24). This crew size represents the estimated minimum manning required to safely sail the ship and conduct operations.
24. The qualification of personnel to operate the vessel is a key risk for the project, particularly against new systems being introduced into the Royal New Zealand Navy such as dynamic positioning, and new diving systems. This will be mitigated by early identification of personnel for training and experience opportunities, and through the recruitment/contracting of experienced dynamic positioning operators.

Operational Release

25. Due to the systems being introduced and the compressed timeframes of the project, operational release will be undertaken using a staged approach. This will see individual capabilities of Dive and Hydrographic Vessel released iteratively. Full operational release is expected to be realised by April 2021.

Financial Implications

Initial Capital cost

26. The total capital cost of the project (including contingency) is \$103.416 million. This is being funded from the Defence White Paper 2016 (DWP 2016) – contingent Capital Funding tagged-contingency established as part of Budget 2017. No additional capital funding is required. The total capital cost of the project is broken down in table 3.

Table 3: Project Total Capital Costs

MV Edda Fonn Delivery Costs	Total (\$M NZD)
Initial Purchase and Stage One Modifications	s9(2)(b)(ii), s9(2)(j)
Stage 1 Government Furnished Equipment s9(2)(j) contingency	
Stage Two Modifications (includes s9(2)(j) contingency)	
Project Management Costs <ul style="list-style-type: none"> - Personnel - Travel - Consultants - Integrated Logistic Support - Misc. 	
Introduction Into Service	
Contingency (Project Management)	
Total Capital \$M (escalated)	103.416

27. The total capital cost of the project includes \$5.000 million capital approved in June 2018 for due diligence, inspection and negotiations, for the purchase of a second-hand commercial offshore support vessel [CAB-18-MIN-0281 refers].

28. The total financial impact of the project is shown in the table below:

Table 4: Total Financial Impact of Project

New Zealand Dollars (M)	Total all years	FY 18/19	FY 19/20	FY 20/21
Initial capital investment	s9(2)(j)			
Contingency				
Forex Contingency	-	-	-	-
Total including contingency	103.416	s9(2)(j)		
Whole of life cost (Net Present Value discounted @ 6%)	215.433	-	-	-

29. Of the total capital, \$5.000 million will be allocated to the New Zealand Defence Force for introduction into service costs.

Contingency

30. The purchase of the vessel and stage 1 modifications have been negotiated using a firm, fixed price. No contingency has been applied.

31. Firm fixed contracts will be used to account for uncertainty in all stages of the project. A degree of risk will remain for the stage two modifications until such time as the design is completed and contracts have been negotiated. To account for this the following contingency has been included in the project:
- A contingency of [s9(2)(j)] has been included for stage two equipment purchases and installation.
 - A contingency of [s9(2)(j)] has been applied for government furnish equipment purchases.
 - The project has a relatively short life-cycle, therefore a contingency of [s9(2)(j)] has been applied to project management costs.
32. The capital costs for the purchase and initial modifications will be in Norwegian krone. A short term currency risk has been calculated at up to [s9(2)(j)] against the krone. [s9(2)(j)]
- [s9(2)(j)] Forward cover for this currency will be purchased by the Ministry of Defence as soon as Ministerial approval to commit the funds has been given.

Through life capital

33. Indicative costs for unplanned maintenance, rolling refresh programmes, and other capital funding lines such as the Defence Major Restoration Programme, are [s9(2)(f)(iv)].
34. Through-life capital investment is estimated to be [s9(2)(f)(iv)] over 15 years up to 2034/35, or [s9(2)(f)(iv)] up to 2029/30. This is higher than the \$9.00 million indicated in Defence White Paper 2016. The higher costs will be addressed as part of the broader New Zealand Defence Force review of maintenance, repairs & overhaul, and the Defence Capital Plan, currently underway.

Operating expenditure

35. The total operating expenditure of \$7.045 million per annum can be managed within current operating baselines.

Whole of life costs

36. The Dive and Hydrographic Vessel project represents a whole of life cost including total cash flows from capital expenditure and 15 years of operating of \$301.590 million.

Opportunities for Local Industry

37. New Zealand companies will have the opportunity to tender to provide the stage two modifications.

Consultation

38. Treasury has been consulted. Other agencies were consulted during the Single Stage Business Case process.

Publicity

39. There is likely to be public interest in a Dive and Hydrographic Vessel facility in New Zealand. It is recommended that the Minister of Defence consider issuing a press release following the signing of the contract.

Recommendations

It is recommended that the Ministers of Finance and Defence:

1. **note** that Cabinet agreed to the purchase of a second-hand commercial offshore support vessel to provide continued support for the New Zealand Defence Force's dive and hydrographic capabilities [CAB-18-MIN-0281 refers];
2. **note** that Cabinet directed Defence to report back to the Minister of Finance and Minister of Defence with finalised contracts for the purchase and modification of a second-hand commercial offshore support vessel [CAB-18-MIN-0281 refers];
3. **note** that Cabinet authorised the Secretary of Defence to conduct due diligence, inspection and negotiations, with a cost up to \$5.000 million, for the purchase of a second-hand commercial offshore support vessel [CAB-18-MIN-0281 refers];
4. **note** unspent funds from the \$5.000 million referred to in recommendation 3 will be used for the acquisition of a dive and hydrographic vessel;
5. **note** that Cabinet delegated to the Ministers of Finance and Defence the authority to approve capital expenditure of up to \$98.416 million for the Dive and Hydrographic Vessel, funded from the Defence White Paper 2016 (DWP 2016) – contingent Capital Funding tagged contingency established as part of Budget 2017 [CAB-18-MIN-0281 refers];
6. **note** that further due diligence has been conducted on the preferred vessel, the MV *Edda Fonn*, and the vessel has been found to be in very good material condition and exhibits acceptable seakeeping characteristics for New Zealand waters;
7. **note** that the Project Team has negotiated a fixed price contract for the purchase, initial modification, and delivery of the *Edda Fonn* to Devonport Naval Base;
8. **note** that some modifications will be required to be undertaken following delivery of the vessel, [REDACTED] s9(2)(j)
[REDACTED]
[REDACTED];
9. **note** that the total capital cost of the project (including contingency) is \$103.416 million;
10. **note** that the Dive and Hydrographic Vessel average annual direct operating and personnel costs (excluding depreciation and capital charge) are estimated to be \$7.054 million per year. Operating costs can be met from within New Zealand Defence Force baselines;
11. **authorise** the Secretary of Defence and the Chief of Defence Force to enter into acquisition and through life support contracts respectively for the Dive and Hydrographic Vessel;

12. **approve** additional expenditure of public money up to the amount of \$98.416 million for the procurement and modification of a Dive and Hydrographic Vessel as delegated by Cabinet [CAB-18-MIN-0281 refers];
13. **note** that s9(2)(j) of this figure is for the acquisition and modification of the Dive and Hydrographic Vessel, including systems and subsystems, training, support and other services;
14. **approve** the following appropriation changes for the Ministry of Defence to commit to the procurement and modification of the MV *Edda Fonn*:

Vote Defence Minister of Defence	\$ million – increase/(decrease)				
	2018/19	2019/20	2020/21	2021/22	2022/23 & Outyears
Non departmental Capital Expenditure Defence Equipment	s9(2)(j)			-	-

15. **note** that the costs in recommendation 14 above are offset by a capital receipt from the New Zealand Defence Force;
16. **note** that the New Zealand Defence Force is forecasting to incur initial capital expenditure totalling \$98.416 million in the establishment of the Dive and Hydrographic Vessel, and that this includes s9(2)(j) for introduction into service costs;
17. **approve** the following capital injection to the New Zealand Defence Force to give effect to the decision in recommendation 14 above, and to undertake introduction into service activities, with a corresponding impact on debt:

	\$ million – increase/(decrease)				
	2018/19	2019/20	2020/21	2021/22	2022/23 & Outyears
New Zealand Defence Force: Capital Injection	s9(2)(j)			-	-

18. **agree** that the proposed changes to appropriations for 2018/19 above be included in the 2018/19-year Supplementary Estimates and that, in the interim, the increase be met from Imprest Supply;
19. **agree** that the capital expenditure in recommendation 17 above be a charge against the Defence White Paper 2016 (DWP 2016) – contingent Capital Funding tagged-contingency established as part of Budget 2017.
20. **direct** that the Secretary of Defence and the Chief of Defence Force report to Joint Ministers, providing options for trade-offs prior to proceeding with the procurement and installation of the stage two modifications, if the full scope of stage two modifications cannot be met within the project budget.

21. **direct** the Secretary of Defence to report to the Minister of Defence on the details of the indemnity required to station Ministry of Defence and/or New Zealand Defence Force personnel on-board the *Edda Fonn* for familiarisation voyages and during the delivery voyage.

Helene Quilter
Secretary of Defence

Kevin Short
Air Marshall
Chief of Defence Force

Hon Ron Mark
MINISTER OF DEFENCE

Hon Grant Robertson
MINISTER OF FINANCE

Date:

Date:

Approved Yes / No

Approved Yes / No

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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.

Defence: Approval to Buy a Dive and Hydrographic Vessel

Portfolio Defence

On 12 June 2018, the Cabinet Government Administration and Expenditure Review Committee:

- 1 **noted** that the Royal New Zealand Navy's dive and hydrographic capabilities are important for both military and other tasks carried out around New Zealand and in the South Pacific, including disposal of underwater explosive ordnance and improvised explosive devices, humanitarian assistance and disaster relief, maritime explosive ordnance disposal, and search and recovery;
- 2 **noted** that with the retirement of the previous hydrographic survey and dive support vessels there are no suitable vessels in service to support dive and hydrographic capabilities;
- 3 **noted** that in June 2016, the previous government agreed that a Littoral Operations Vessel was the preferred solution and authorised the Secretary of Defence to undertake a competitive tender process to select a replacement Littoral Operations Support Capability within a capital cost of \$275 million [EGI-16-MIN-0140];
- 4 **noted** that in Budget 2017, the previous government approved \$301.65 million over five years for Defence White Paper 2016 - contingent capital funding [CAB-17-MIN-0185.06]
- 5 **noted** that in December 2017, the Cabinet Business Committee agreed that additional funding required to complete the Frigate System Upgrade be funded by a reduction in the scope of the Littoral Operations Support Capability project from a littoral operations support vessel to a dive and hydrographic vessel, and directed Defence to report back to Cabinet by July 2018 with costed options for a dive and hydrographic vessel [CBC-17-MIN-0037];
- 6 **noted** that:
 - 6.1 in May 2018, the Cabinet External Relations and Security Committee (ERS) agreed the *Strategic Defence Policy Statement 2018*, attached as Annex D to the paper under ERS-18-SUB-0008 [ERS-18-MIN-0008]
 - 6.2 the *Strategic Defence Policy Statement 2018* identified an increasing demand on the Defence Force to respond to emergencies in the Pacific, and an ongoing role in supporting other government agencies;

- 7 **agreed** to the purchase of a second-hand commercial offshore support vessel to provide continued support for the New Zealand Defence Force’s dive and hydrographic capabilities;
- 8 **noted** that:
- 8.1 \$103.416 million of the capital funding set aside in Budget 2017 for the purchase of a littoral operations vessel remains available;
- 8.2 no additional capital funding is required for the purchase of the vessel described in paragraph 7 above;
- 9 **authorised** the Secretary of Defence to conduct further due diligence, inspections and negotiations for the purchase of a second-hand commercial offshore support vessel with a cost up to \$5.000 million;
- 10 **directed** Defence to report back to the Minister of Finance and Minister of Defence with finalised contracts for the purchase and modification of a second-hand commercial offshore support vessel;
- 11 **authorised** the Minister of Finance and Minister of Defence jointly to commit and draw down additional capital funds of up to \$98.416 million, from the tagged contingency “Defence White Paper 2016 (DWP 2016) – Contingent Capital Funding” for the purchase, modification and entry into service of a dive and hydrographic vessel;
- 12 **approved** the following appropriation changes for the Ministry of Defence to commit to the pre-contract costs required to undertake due diligence, inspections and negotiations associated with the dive and hydrographic vessel project:

Vote Defence Minister of Defence	\$ million – increase/(decrease)				2021/22 & Outyears
	2017/18	2018/19	2019/20	2020/21	
Non departmental Capital Expenditure					
Defence Equipment	-	5.000	-	-	-

- 13 **noted** that the costs in paragraph 12 above are offset by a capital receipt from the New Zealand Defence Force;
- 14 **approved** the following capital injection to the New Zealand Defence Force to give effect to the decision in paragraph 12 above, with a corresponding impact on debt:

s9(2)(f)(iv)

- 15 **agreed** that the proposed changes to appropriations for 2018/19 above be included in the 2018/19 year Supplementary Estimates and that, in the interim, the increase be met from Imprest Supply;

- 16 **agreed** that the capital expenditure in paragraph 14 above be a charge against the Defence White Paper 2016 (DWP 2016) – contingent Capital Funding tagged-contingency established as part of Budget 2017.

Rachel Clarke
Committee Secretary

Secretary's note: This minute is republished to correct paragraph 14 and add paragraph 16 to reflect wording in the approved Cabinet paper.

Present:

Hon Kelvin Davis
Hon Grant Robertson (Chair)
Hon Chris Hipkins
Hon Dr David Clark
Hon Stuart Nash
Hon Clare Curran
Hon Ron Mark
Hon Tracey Martin
Hon James Shaw

Officials present from:

Office of the Minister of Finance
Officials Committee For GOV

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Minister of Finance
Minister of Defence

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Chair, Cabinet Government Administration and Expenditure Review Committee

DEFENCE: APPROVAL TO BUY A DIVE AND HYDROGRAPHIC VESSEL

Proposal

1. This paper seeks agreement to purchase a dive and hydrographic vessel for the New Zealand Defence Force, with authority delegated to the Ministers of Finance and Defence to approve the final vessel purchase and related contracts.

Executive Summary

2. The Navy's dive and hydrographic capabilities are important assets for New Zealand, playing a lead role in protecting access to harbours, disaster response, search and recovery, disposal of underwater explosive ordnance and improvised explosive devices, and other support to government agencies around New Zealand and its neighbourhood, including the South Pacific. The Strategic Defence Policy Statement 2018 predicts an increasing demand to respond to these types of tasks in the future.
3. Diving and hydrographic survey were previously provided by the hydrographic survey ship *Resolution* (retired in 2012) and the dive support ship *Manawanui* (retired in February 2018). The ships were both procured second-hand.
4. Defence had identified a littoral operations vessel as the preferred option to provide an enhanced dive and hydrographic capability. In December 2017, Cabinet agreed to reprioritise funding to address cost pressures in the Frigate Systems Upgrade, reducing the scope from a littoral operations vessel to a dive and hydrographic vessel. Cabinet directed Defence to report back by July 2018 with costed options for a dive and hydrographic vessel.
5. Defence considered a range of options in the attached Single Stage Business Case. The preferred option is the purchase of a second-hand commercial offshore multi-purpose support vessel. These vessels are designed to provide a wide range of support and, if necessary, be modified for different tasks in the offshore oil and gas industry.
6. Defence conducted an extensive market study and identified the MV *Edda Fonn* as the preferred vessel, after evaluation and due diligence. *Edda Fonn* is a Norwegian vessel, built in 2003. It has recently undergone a significant maintenance period, including a mid-life upgrade of navigation and electronic systems. It has a moon pool (opening in the ship to dive through), cranes, a dynamic positioning system (to keep the ship in place), a helideck suitable for the Defence Force's helicopters, a large working deck and a dedicated hangar for a remotely operated vehicle.
7. Defence would add commercial dive and hydrographic systems, military communications, weapon mounts and armoury to the vessel, to provide a contemporary replacement for *Resolution* and *Manawanui*.

8. The capital cost of the project, including the vessel and added capabilities, can be met from funds already set aside for a littoral operations vessel at Budget 2017 (\$103.416 million).
9. If Cabinet agrees, the next step is to conduct further detailed inspections of the vessel in order to confirm its material condition, refine the costs of additional capabilities to be installed, and to undertake negotiations with the owner. The outcome of negotiations will be a final contract for approval.
10. To complete the due diligence and negotiation process, and to take advantage of the current state of the market, I recommend that Cabinet:
 - 10.1. agree to the purchase of a second-hand commercial offshore support vessel to provide continued support for the New Zealand Defence Force's dive and hydrographic capabilities;
 - 10.2. delegate authority to the Secretary of Defence to approve up to \$5 million to conduct further due diligence and negotiations for the purchase of a vessel; and
 - 10.3. delegate to the Ministers of Finance and Defence authority to commit additional capital funds of up to \$98.416 million for the purchase, modification and entry into service of a dive and hydrographic vessel.

11. [REDACTED] s6(a) [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Report

Requirement for Dive and Hydrographic Capabilities

12. The Navy's dive and hydrographic capabilities are an important asset to New Zealand. The Royal New Zealand Navy maintains dive and hydrographic survey capabilities in order to conduct military tasks, including disposal of underwater improvised explosive devices and explosive remnants of war and to protect access to harbours, and other tasks around New Zealand and in the Pacific. Recent examples of these tasks include:
 - 12.1. sea floor surveying and inspecting infrastructure following the Christchurch and Kaikoura earthquakes, allowing ports to rapidly resume operations;
 - 12.2. assessing beaches following Cyclone Winston striking Fiji in 2016, so supplies could be quickly and safely landed from the amphibious ship HMNZS Canterbury;
 - 12.3. locating and removing containers and other debris from the grounding of the MV Rena, which threatened the operations of the Port of Tauranga;

- 12.4. neutralising explosives including six World War Two sea mines near Auckland in 2014 and 50 unexploded munitions in the Solomon Islands in 2016; and
 - 12.5. responding to an average of 11 incidents a year in which other government agencies require the recovery of objects from underwater.
13. Diving and hydrographic survey were previously supported by the hydrographic survey ship *Resolution* (retired in 2012) and the dive support ship *Manawanui* (retired in February 2018). The ships were both procured second-hand and retired at 23 and 39 years of age respectively.



HMNZS *Manawanui* and *Resolution*

14. Cabinet recently agreed the Strategic Defence Policy Statement 2018, which updated New Zealand's Defence policy settings to align with the Government's foreign policy and national security priorities and reflect New Zealand's evolving strategic environment. This confirmed that the Government's highest priority for the Defence Force is its ability to operate and undertake tasks in New Zealand's territory and neighbourhood from the South Pole through to just below the equator. The Policy Statement also reinforced the role the Defence Force plays in contributing to New Zealand's broader national resilience and wellbeing, alongside its role in delivering military effects.

15. Investment in a dive and hydrographic vessel aligns with the updated policy settings. The replacement vessel will provide an enhanced level of support to other government agencies, including New Zealand Police, New Zealand Customs Service, Ministry for Primary Industries, Maritime New Zealand, Ministry of Civil Defence and Emergency Management, Department of Conservation, and National Institute of Water and Atmosphere, for domestic incidents. It will also provide a capability supporting the Defence Force to meet a predicted increase in demand to respond to emergencies in the Pacific, as a result of a range of complex disrupters including climate change.

16. A replacement dive and hydrographic vessel will provide a ship with utility to support diving and hydrographic tasks and training. Its modern design and systems would provide improved capacity, speed, safety, and capability over the previous vessels. ■

s6(a)

■ This is a significant capability boost for Defence. As with all Navy vessels, it will also provide search and rescue, maritime patrol, and offshore installation protection.

17. There are some requirements that the dive and hydrographic vessel will not meet. Prior to the cost increases in the ANZAC Frigate Systems Upgrade project, Defence had planned to purchase a specially designed littoral operations vessel ■ s6(a) ■. The main differences are:

17.1. [Redacted] s6(a) [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

17.2. [Redacted] s6(a) [Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]

17.3. [Redacted] s6(a) [Redacted]
[Redacted]
[Redacted]
[Redacted]

17.4. [Redacted] s6(a) [Redacted]
[Redacted]
[Redacted]

18. [Redacted] s6(a) [Redacted]
[Redacted]
[Redacted]

Previous decisions

19. The project was first considered by the previous government in an indicative business case in 2015. At that time it was agreed that Defence investigate two options for the replacement vessel:

19.1. A dive and hydrographic vessel, which offered a contemporary capability based on a commercial vessel; and

19.2. A littoral operations vessel, which offered an enhanced capability [Redacted] s6(a) [Redacted].

20. In June 2016, a detailed business case recommended a littoral operations vessel as the preferred option for the project [EGI-16-MIN-0140 refers]. Capital funding of \$251 million was then provided for the project as part of Budget 2017.

¹ A davit is a small crane used to raise and lower small boats over the side of the ship.

21. In December 2017, Cabinet agreed to reprioritise \$148 million of this funding to address cost pressures in the Frigate Systems Upgrade, reducing the scope from a littoral operations vessel to a dive and hydrographic vessel [CBC-17-MIN-0037 refers].

22. Cabinet directed Defence to report back by July 2018 with costed options for a second-hand dive and hydrographic vessel.

Preferred Option – Second-Hand Commercial Vessel

23. Defence has identified that commercial offshore multi-purpose support vessels, used in the oil and gas industry, best provides the capability that the Defence Force requires in a dive and hydrographic vessel. The decline in oil and gas prices since 2014 has resulted in a halving of the cost of second-hand offshore support vessels. This is an excellent time to be in the market for a ship of this type.

24. Defence considered commissioning a new ship, leasing, and second-hand purchase as options to acquire a suitable vessel. The preferred option is the purchase and modification of a second-hand commercial offshore multi-purpose support vessel. This option is affordable and eliminates the risk of future increases in lease prices from current lows.

25. Leasing a vessel has been ruled out as it presents legal risk from the use in supporting military tasks such as mine counter measures, and risks future price increases if lease costs return to historic norms (which would see lease rates triple).

26. Commissioning a new ship was ruled out as it is not affordable within the current budget allocation, with an estimated initial capital cost of s9(2)(b)(ii). Detailed analysis of these options is provided in the attached Single Stage Business Case.

Preferred Ship – Edda Fonn

27. s9(2)(j)
[Redacted text block]

28. s9(2)(j)
[Redacted text block]

29. s9(2)(j)
[Redacted text block]

30. The analysis confirmed *Edda Fonn* as the preferred vessel. *Edda Fonn* is a Norwegian vessel, built in 2003. Norwegian vessels have a reputation for being well built and maintained. Procurement of a vessel of this origin significantly lessens risks associated with second hand purchase.

31. *Edda Fonn* has recently undergone a significant maintenance period, including a mid-life upgrade of its navigation and electronic systems, giving greater assurance of the condition of the vessel. *Edda Fonn* is estimated to have 15 years of life remaining.



Edda Fonn

Additional capabilities

32. No second-hand commercial vessels, including the *Edda Fonn*, meet all of the Defence Force's assessed requirements. Only a vessel built specifically for the New Zealand Defence Force would do so, and this would exceed the available capital budget.

33. Offshore multi-purpose support vessels are built as generalist vessels. s6(a)

[REDACTED]

34. The vessels are designed to be modified to undertake a contracted task like diving, construction, or accommodation. There is an established and experienced industry to undertake these modifications.

35. To provide the Defence Force with a contemporary replacement for the retired hydrographic survey ship *Resolution* and dive support ship *Manawanui*, additional capabilities will be added to the *Edda Fonn* in two stages.

36. The first stage is installation of commercially available equipment, including a dive system, a hydrographic system, and a launch and recovery system for boats operating off the vessel. Defence will negotiate with *Edda Fonn*'s owner to supply the vessel with these first stage modifications incorporated within a fixed firm price. s9(2)(j)

[REDACTED]

37. [REDACTED] s6(a), s9(2)(j)
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Project Risks and Planned Mitigations

38. The Review of Defence Procurement Policies and Practices for Major Capability Projects highlighted Defence's approach to mitigating risk by procuring proven, in-service capabilities where possible. Offshore support vessels are widely used by companies in the offshore oil and gas industry.

39. The Edda Fonn is a proven, in-service capability. To further mitigate risks, Defence is undertaking the following actions.

40. In order to mitigate against the risk of purchasing an unsuitable or poorly maintained ship Defence undertook significant due diligence on prospective vessels. [REDACTED] s9(2)(j)

[REDACTED]
[REDACTED]
[REDACTED] This resulted in the selection of the *Edda Fonn* as the preferred vessel. The *Edda Fonn* has been used commercially for 15 years and has recently undergone a significant maintenance period, including a mid-life upgrade of its navigation and electronic systems.

41. Further due diligence will be conducted on the preferred vessel, including inspection of the hull by divers, before final contract signature.

42. Capabilities are often added to offshore support vessels when leased, depending on the task (for example, specialised diving systems). The first stage of capabilities to be added to the *Edda Fonn* are commercially available, designed to be fitted to this type of vessel, and require minimal effort to integrate into the ship.

43. To further manage the risks around these modifications they will be conducted under a fixed firm price contract along with the purchase of the ship. The current ship owner will use a commercial ship yard specialising in the building and modification of offshore support vessels. This greatly reduces the cost and risk compared with using a general or military shipyard without experience in this area.

44. The second stage modifications are routinely added and maintained on Navy vessels

[REDACTED] s6(a) . [REDACTED] s9(2)(j)
[REDACTED]
[REDACTED]
[REDACTED]

45. The current contingency held for the project is [REDACTED] s9(2)(j) . Contingency funding will be reassigned across the project as risks are realised. [REDACTED]

[REDACTED] s9(2)(j)
[REDACTED]
[REDACTED]

46. [REDACTED] s9(2)(j)
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]
 [REDACTED]

47. [REDACTED] s9(2)(j)
 [REDACTED]
 [REDACTED]

Next Steps

- 48. The commercial ship market is fluid. While the *Edda Fonn* is available for purchase now, this could change. Were that to eventuate Defence has identified other vessels that could meet its requirements within the same budget.
- 49. If Cabinet agrees to proceed with the project, Defence will conduct further detailed inspections of the vessel in order to confirm its material condition, refine the costs of modifications, and to inform negotiations with the owner. The outcome of negotiations will be a final fixed firm contract for approval.
- 50. The estimated cost of this pre-contract activity is \$5 million. I recommend that the Committee delegate authority to the Secretary of Defence to approve up to \$5 million to conduct further due diligence, negotiations and other pre-contract activities for the purchase of a vessel, to be funded from the overall project capital budget of \$103.416 million.
- 51. To minimise the capability gap from the decommissioning of the former dive support vessel, I also recommend that Cabinet delegate to the Ministers of Finance and Defence authority to commit additional capital funds of up to \$98.416 million for the purchase, modification and entry into service of a dive and hydrographic vessel.

Project schedule

52. The project has estimated the following timetable following a Cabinet decision:

Table 2: Project schedule

Description	Start date	End date
Contract negotiations	July 18	Aug 18
Joint Ministers approval to enter into contract	Aug 18	Aug 18
Norwegian Sales Form submitted 10% deposit paid	Sep 18	Sep 18
Survey and modifications commenced on vessel	Sep 18	Jan 19
Vessel delivery	Jan 19	Mar 19
[REDACTED] s6(a)		
Initial operating capability	July 2019	

Financial Implications

53. The estimated capital cost of the project is up to \$103.416 million, as shown in Table 1. This capital cost can be met by a capital injection of \$103.416 million funded from the Defence White Paper 2016 Capital Tagged Contingency established at Budget 2017.

Table 1: Estimated capital costs

Item	Estimated Cost (NZD million)	
Purchase of ship	s9(2)(b)(ii), s9(2)(j)	
Vendor Modifications		
New Zealand modifications		
Project Management		
- Salaries		
- Travel		
- Consultants (diving specialist, vessel surveyors etc)		
- Legal		
- Crew costs and training		
- Ship delivery		
Integrated Logistics Support	s9(2)(b)(ii), s9(2)(j)	
- Spares, Publications etc		
- Initial outfit (bedding, catering equipment, Navy safety equipment etc)		
Capability Integration (Infrastructure/ New Zealand test team resources, simulation)		
Project Management Contingency		
TOTAL		103.4

54. The estimated operating cost of the Dive and Hydrographic Vessel is \$6.62 million per year. This is affordable within Defence's current indicative funding track, which was set following approval of the Defence White Paper 2016.

Consultation

55. This paper has been prepared by the Ministry of Defence and New Zealand Defence Force. The Treasury, Department of the Prime Minister and Cabinet (Policy Advisory Group, Security and Intelligence Group, Ministry of Civil Defence and Emergency Management), New Zealand Customs Service, Ministry for Primary Industries, Ministry of Foreign Affairs and Trade, Ministry of Business, Innovation and Employment, Department of Internal Affairs, New Zealand Police, Maritime New Zealand, Department of Conservation, Land Information New Zealand, and National Institute of Water and Atmospheric Research were consulted in the preparation of this paper.

Other Implications

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

Publicity

57. A press release will be issued following final contract signature for the purchase of the vessel.

Recommendations

58. I recommend that the Committee:

1. **note** that the Royal New Zealand Navy's dive and hydrographic capabilities are important for both military and other tasks carried out around New Zealand and in the South Pacific, including disposal of underwater explosive ordnance and improvised explosive devices, humanitarian assistance and disaster relief, maritime explosive ordnance disposal, and search and recovery;
2. **note** that the Strategic Defence Policy Statement 2018 identified an increasing demand on the Defence Force to respond to emergencies in the Pacific, and an ongoing role in supporting other government agencies;
3. **note** that with the retirement of the previous hydrographic survey and dive support vessels there are no suitable vessels in service to support dive and hydrographic capabilities;
4. **note** that, as part of the reprioritisation of funding to the Frigate Systems Upgrade project, Cabinet agreed to a reduction in scope for the replacement of these vessels from a littoral operations vessel to a dive and hydrographic vessel [CBC-17-MIN-0037 refers];
5. **agree** to the purchase of a second-hand commercial offshore support vessel to provide continued support for the New Zealand Defence Force's dive and hydrographic capabilities;
6. **note** that no additional capital funding is required for the project beyond the \$103.416 million set aside at Budget 2017 for the purchase of a littoral operations vessel;
7. **authorise** the Secretary of Defence to conduct further due diligence, inspections and negotiations for the purchase of a second-hand commercial offshore support vessel with a cost up to \$5.000 million;
8. **direct** Defence to report back to the Minister of Finance and Minister of Defence with finalised contracts for the purchase and modification of a second-hand commercial offshore support vessel;
9. **authorise** the Minister of Finance and Minister of Defence jointly to commit and draw down from the tagged contingency "Defence White Paper 2016 (DWP 2016) – Contingent Capital Funding", established at Budget 2017, additional capital funds of up to \$98.416 million, for the purchase, modification and entry into service of a dive and hydrographic vessel;

10. **approve** the following changes to appropriation for the Ministry of Defence to commit to the pre-contract costs required to undertake due diligence, inspections and negotiations associated with the dive and hydrographic vessel project:

Vote Defence Minister of Defence	\$ million – increase/(decrease)				
	2017/18	2018/19	2019/20	2020/21	2021/22 & Outyears
Non departmental Capital Expenditure Defence Equipment	-	5.000	-	-	-

11. **note** that these costs are offset by a capital receipt from the New Zealand Defence Force;
12. **approve** the following capital injection to the New Zealand Defence Force to give effect to the policy decision above, with a corresponding impact on debt:

s9(2)(f)(iv)

13. **agree** that the proposed changes to appropriations for 2018/19 above be included in the 2018/19 Supplementary Estimates and that, in the interim, the increases be met from Imprest Supply;
14. **agree** that the capital expenditure above be a charge against the Defence White Paper 2016 (DWP 2016) – Contingent Capital Funding tagged-contingency, established as part of Budget 2017.

Authorised for lodgement

Hon Ron Mark
MINISTER OF DEFENCE

Dive and Hydrographic Vessel



Capability to support New Zealand and the Region

Disaster Relief



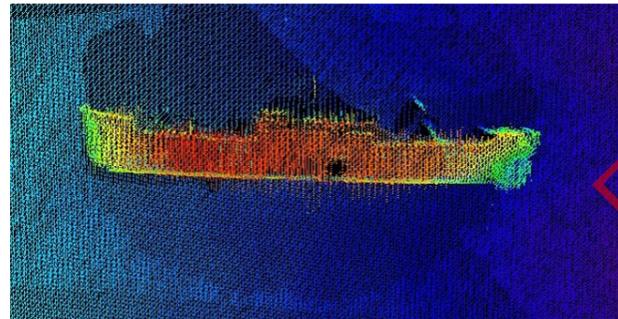
The capabilities supported by this vessel allows the Defence Force to survey coastline and port facilities following natural disasters, including the Christchurch & Kaikoura Earthquakes and Cyclone Winston in Fiji.

Explosives Disposal



The vessel will support the Navy's ability to clear explosives, including sea mines and unexploded ordnance, and provide specialist maritime counter explosives support for major events.

Hydrographic Survey



The vessel will be equipped with a survey system and small boats allowing it to survey from 450 metres to the high tide mark. Outside of main shipping channels charts in the Pacific are generally of a low quality and out of date.

EDDA FONN - THE PREFERRED VESSEL



A Dive and Hydrographic Vessel will provide the New Zealand Government with the ability to conduct a range of specialist tasks both at home and in the Pacific.

The vessel will be a key complement to the multi-role vessel HMNZS *Canterbury*, surveying coastlines to allow *Canterbury* to land supplies, equipment and personnel safely following a natural disaster.

It will provide valuable support to government agencies including Police, Customs, Ministry for Primary Industries, and Ministry of Civil Defence and Emergency Management.

These capabilities were previously supported by two ships:

- HMNZS *Manawanui*, a dive support vessel which was retired in February 2018 at 23 years of age; and
- HMNZS *Resolution*, a survey ship which was retired in 2012 at 39 years of age.

Search and Recovery



The Defence Force is the only government agency that has the capability to dive below 30 metres. It provides search and recovery support to other government agencies an average of 11 times a year.

Maritime Presence



As with all vessels in the Navy fleet this ship will provide search and rescue, maritime patrol, offshore installation protection, and support to other government agencies including fisheries and boarder patrols.

Naval Training



The vessel will provide valuable training places while the new tanker is built and frigates are upgraded. Around 250 new sailors and officers join the Navy every year, requiring both initial training and ongoing development.

Released under the Official Information Act 1982

Dive and Hydrographic Vessel



PICTURES ARE INDICATIVE ONLY

Capability being added to the vessel

Why is it needed?

Stage One
s6(a)

Stage Two



PICTURES ARE INDICATIVE ONLY