



Headquarters  
New Zealand Defence Force  
Defence House  
Private Bag 39997  
Wellington Mail Centre  
Lower Hutt 5045  
New Zealand

OIA-2022-4561

30 March 2023

[REDACTED]  
[REDACTED]@rnz.co.nz

Dear [REDACTED]

I refer to your email of 14 November 2022 requesting what was documented at the time the New Zealand Defence Force procured the NATO Helicopter Industries NH90 helicopters. Your request has been considered under the Official Information Act 1982 (OIA).

As was explained in the email of 30 January 2023, the information you requested is contained within a Cabinet paper that required Ministerial approval to release. I apologise for the considerable length of time it has taken to receive that authorisation.

Enclosed is a copy of the Cabinet paper regarding the procurement of the NATO Helicopter Industries NH90 helicopters. The planning assumptions, fleet size drivers, and recommended fleet size are covered from paragraphs 26 - 33. Where indicated information is withheld in accordance with the following sections of the OIA: section 6(a); section 9(2)(b)(ii); and section 9(2)(g)(i).

You have the right, under section 28(3) of the OIA, to ask an Ombudsman to review this response to your request. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

Please note that responses to official information requests are proactively released where possible. This response to your request will be published shortly on the NZDF website, with your personal information removed.

Yours sincerely

**AJ WOODS**  
Air Commodore  
Chief of Staff HQNZDF

**Enclosure:**

1. Cabinet submission: New Zealand Defence Force Helicopter Capability Project

Office of the Minister of Defence

Cabinet Business Committee

## **NEW ZEALAND DEFENCE FORCE HELICOPTER CAPABILITY PROJECT**

### **Proposal**

1. This paper sets out a recommended fleet size and mix for the proposed New Zealand Defence Force (NZDF) replacement medium utility and training/light utility helicopters, along with an option for acquiring the NH90 medium utility helicopter, including an associated support package. The paper also seeks approval to provide a non-binding Letter of Intent to NATO Helicopter Industries (NHI) in order to hold production slots for the New Zealand fleet at current prices, and to commence negotiations with NHI in order to bring a final acquisition proposal to Cabinet for approval to commit funds.

2. I will report to the External Relations and Defence Committee with final acquisition proposals, as required by CBC Minute (05) 3/4, once negotiations have taken place with NHI and the Request for Proposal process for the training/ light utility helicopter (T/LUH) is complete.

### **Executive summary**

3. In March 2005 Cabinet agreed that the NH90 was the preferred Medium Utility Helicopter (MUH) for the replacement of the Iroquois fleet. It directed the Ministry of Defence to commence discussions with NATO Helicopter Industries (NHI) and/or Australian Aerospace for the supply of NH90 helicopters and an associated support package [CBC Min (05) 3/4]. Following discussions with NHI and the development of a case for the recommended fleet size, the Ministry of Defence is ready to undertake negotiations with NHI.

4. In order to preserve current prices and secure production slots for the New Zealand NH90 fleet, beyond the expiry of the NHI offer in mid-April, NHI requires a non-binding Letter of Intent for the purchase. Delays in forwarding a Letter of Intent to NHI could jeopardise New Zealand's place on the NH90 production schedule and may increase project costs. With the customer base rapidly increasing, including some countries with large potential fleet sizes, failure to secure production slots could cause a delivery delay of years rather than months. The risks this delay would import revolve around the Iroquois's ongoing supportability and limited operational usefulness.

5. Once negotiations have taken place with NHI, and provided they are satisfactory, I will report back to Cabinet with an acquisition proposal and final costs for the NH90. A Request for Proposal for the T/LUH will be issued shortly and, once complete, an acquisition proposal for the T/LUH will be forwarded separately to Cabinet.

6. The maximum number of helicopters that is affordable within the funding available through the LTDP, with the least disruption to other LTDP projects, is a phased purchase of eight NH90 helicopters and six T/LUH. This option meets policy



requirements with some risk. Defence recommends that eight NH90 and six T/LUH be purchased, with an initial delivery of six NH90 and four T/LUH and a later delivery of two NH90 and two T/LUH.

## **Background**

7. The Defence Statement of 2001 recognised that the Iroquois no longer meets the New Zealand Army's helicopter requirements. The Iroquois is insufficient to meet NZDF's capability requirements to deliver government policy objectives - it cannot lift a section of troops in one aircraft, and its capacity limits the range of options for a counter-terrorist (CT) response. In complex multi-dimensional operational environments, moreover, the Iroquois lacks the all weather capability, crew situational awareness tools and self-protection systems that allow the aircraft to be employed safely across the full range of operations.

8. The NZDF Iroquois are approaching 40 years in service. By 2007 the NZDF Iroquois fleet will be experiencing the effects of the closure of the US Army international logistic support arrangements and become progressively more difficult to sustain. Prolonging the life of the Iroquois would require the fleet to undergo a life extension at an estimated cost of \$123m plus project costs and integrated logistics support costs. Even so, this life extension would be only a stop-gap measure as the aircraft would not meet policy requirements, would continue to lack operational viability and would face growing obsolescence issues.

9. The transition to any new helicopter platform, however, will still require the NZDF to operate some of the Iroquois until at least the end of 2012. This can be achieved in part through a progressive reduction of the fleet to reduce the requirement for spares and to avoid costly repairs close to the end of the aircraft's service life. In the absence of US international logistics support the experience of other Iroquois operators can be drawn on to help attain such sustainability. An explanation of the NZDF transition plan is in paragraphs 34-36.

## **Policy drivers**

10. Government policy requires that the NZDF helicopter fleet support a modern, well-equipped, combat capable, deployable land force, is able to contribute to multilateral operations, and provides support for counter-terrorism operations within New Zealand. Policy shapes the primary requirement and tasks of the helicopter fleet and determines fleet size but a decision on numbers also needs to take account of the performance parameters of both the aircraft and crews.

### *Support to deployed land force*

11. The first major policy requirement of the NZDF utility helicopter fleet is support to deployed land forces. The support identified by the Army as essential to deployed land forces is the transport of a section of a minimum of eight soldiers in one aircraft and a platoon in one lift. Under current Defence Force structure, such a deployment would be required to be supportable for up to one year.

12. The section is the Army's smallest tactical combat element. The section is a complete and integral unit of a minimum of eight soldiers and equipment, known as field service marching order (FSMO). Delivery of a section to a location by more than




one aircraft increases operation time and the likelihood of separation, putting personnel at risk. The requirement to carry a minimum of eight fully equipped soldiers is therefore an important capability. The Iroquois cannot lift a section in one aircraft and the helicopter replacement project deliberately aims to rectify this deficiency.

13. Whilst the section is a self-supporting tactical element, the smallest manoeuvre force is the three-section platoon. To enable coordinated support, the elements of the platoon must be delivered to an operation simultaneously. Larger formations can be delivered by a series of platoon-sized lifts.

14. Through analysis of helicopter tasking to date, the Army has identified a number of important light utility tasks that are required in a deployed environment. For instance, a helicopter can rapidly transport a commander and staff throughout the area of operations or act as a link between ground units separated by difficult terrain, provide emergency search and rescue, small group insertion, intelligence, surveillance and reconnaissance, and aeromedical evacuation support. These light utility tasks can be more efficiently achieved by an aircraft much smaller and cheaper to buy and operate than a MUH. The same sort of light helicopter can also be used for helicopter training. This optimises the availability of the MUH for higher value tasks.

#### *Counter-terrorism operations*

15. The second essential policy requirement is support for counter-terrorist operations in New Zealand. s6(a)



#### *Other tasks*

17. Other tasks that are not considered essential concurrent policy requirements, but are important policy drivers affecting fleet size and capability, include humanitarian assistance and disaster relief in New Zealand and in the South Pacific. Offshore support for other governments is another important task of a helicopter fleet. For these roles a MUH would provide capacity and range that is not available elsewhere in New Zealand.

18. Domestically, NZDF helicopters are used by civil agencies for a number of high risk and high capacity tasks. Civil agencies' requirements include the transportation of people and equipment, support for search and rescue, fire fighting, humanitarian assistance and disaster relief, and casualty evacuation.

19. The NZDF provides the benefits of 24-hour response, operational security and coordination with other military elements. In large-scale civil defence emergencies and

catastrophes, the use of medium sized NZDF helicopters would be essential

s6(a)

#### Comment

20. In March 2005 Cabinet agreed that the NH90 was the preferred medium utility helicopter to replace the Iroquois. Both military and commercial helicopters were considered as candidates. The only other military helicopter offered by industry capable of meeting the wide range of New Zealand's domestic and deployed requirements, in the medium utility class, was the Sikorsky S70M Black Hawk. Due diligence visits were carried out to both companies, and the US Army Utility Helicopter Program management office.

s9(2)(g)(i)

23. Commercial aircraft alternatives of a comparable size would provide a cheaper alternative to the NH90 or the S70M but would present unacceptable operational risks in combat viability, survivability and durability. Military helicopters smaller than the NH90 or S70M are available and cheaper per unit but more aircraft would be needed to carry a platoon in one lift and none can carry a fully equipped Army section. There is no source of second hand helicopters that meets New Zealand's requirements.

24. The NH90 is a credible replacement helicopter, backed by sustainable technology and an expanding customer base. The NH90 will be supported for at least the next 30 years. An important factor in deploying aircraft overseas is their interoperability with other nations. It is expected that future multilateral operations will be built around NH90 capability and larger helicopters, whereas the Iroquois will be decreasingly acceptable as a coalition contribution.



25. The NH90 provides flexibility of capability in terms of its cabin capacity (up to 16 fully equipped soldiers vs the Iroquois's five); lift capacity (2.1 tonnes vs 0.8 tonnes); and its range (440nm vs 180nm) (Annex A outlines the comparative advantages of the NH90 and the current Iroquois fleet.). With better serviceability and additional light utility capability from the T/LUH, the combined fleet provides increased flexibility with fewer helicopters.

### ***Planning Assumptions***

26. In calculating the numbers of aircraft, crews and flying hours required, the proposed fleet size and mix is based on the following:

- Policy requirements have been assessed against concurrent deployed land forces and a counter-terrorist operation in New Zealand.
- Fleet size options must be considered against available funding within the LTDP. No additional funding is being sought.
- The manufacturer's quotes for NH90 costs are based on an engineering-design flying rate of 330 hours per aircraft per annum over thirty years. Although there is some flexibility in this design flying rate, operating more than 330 hours p.a. would increase the logistics costs and reduce the overall life of the fleet. This level of information is not yet available for the T/LUH due to the stage of this project.
- The minimum total NH90 crewing requirement of 12 crews will require 2,800 flying hours per annum to maintain the required skill levels, including conversion training. A total of eight NH90 would therefore be required to provide 350 hours p.a./aircraft. While this is above the engineering design flying rate it is assessed to be manageable.
- Four T/LUH will be fully committed to basic training of pilots and helicopter crews bound for the NH90 and Seasprite. There will be no capacity to train for domestic CT support from within a T/LUH fleet of only four aircraft.
- Six similarly configured T/LUH would cover basic training and provide a cost effective option for support to CT, and training for that support, along with providing additional domestic helicopter capability. Providing CT support from within the T/LUH pool improves short notice availability for CT aircraft because aircraft can be drawn from the total pool of at least six aircraft.
- More than six T/LUH would be required to provide the CT capability as well as provide a limited sustainable deployed T/LUH capability.
- In the long term sufficient flying crews and maintainers for the proposed fleets will be available from within current Air Force structures due to the reduction in the overall fleet size to be supported and the different servicing regimes of the more modern aircraft.
- Simulation has not been factored into calculations of required fleet sizes. Simulated hours will not make a difference to the number of aircraft required to meet policy but a small amount of simulation time will be required to



practice emergencies. A greater amount of simulation can reduce the annual flying hours required to maintain crew currency and therefore the flying rate of each aircraft. A simulator for the NH90 that might meet our needs has yet to be developed. Such a simulation package is expected to fall within the NZ\$10-35m. The acquisition of simulators will be recommended only if it is cost effective to do so. The current practice across the RNZAF is to purchase access to simulators overseas.

**Fleet Size Drivers**

27. Calculation of fleet sizes includes sufficient aircraft to account for scheduled and unscheduled maintenance, desirable concurrent tasks, management of fleet life, and the flying hours needed to generate and maintain crew flying skills across the full range of capability. No allowance has been made for attrition due to the small size of the proposed fleet but options for reducing attrition risk other than purchasing additional aircraft are still being investigated by NZDF.

28. Table 1 demonstrates that in a deployed context, for instance, with three medium utility aircraft deployed to provide a platoon lift, all three would be available only 51% of the time. The deployment of a fourth aircraft would provide 82% availability of the three required aircraft. Scheduled maintenance may be managed to provide a better probability of at least three aircraft being available at the required time, further mitigating this risk. Managing maintenance, however, would not significantly affect an availability deficit if only three NH90 were deployed and some risk would need to be accepted that platoon lifts in one wave could not be guaranteed on more than half of days.

**Table 1: Helicopters at 80% availability**

Total Fleet Aircraft (n)	No. of Aircraft Required to be available(x)									
	1	2	3	4	5	6	7	8	9	10
1	80%									
2	96%	64%								
3	99%	90%	51%							
4	100%	97%	82%	41%						
5	100%	99%	94%	74%	33%					
6	100%	100%	98%	90%	66%	26%				
7	100%	100%	100%	97%	85%	58%	21%			
8	100%	100%	100%	99%	94%	80%	50%	17%		
9	100%	100%	100%	100%	98%	91%	74%	44%	13%	
10	100%	100%	100%	100%	99%	97%	88%	68%	38%	11%

s6(a)



s6(a)

**Recommended Fleet Size**

31. The recommended fleet size for delivering the basic policy requirements of concurrent platoon lift in an overseas deployment, and support for counter-terrorism operations in New Zealand is eight NH90 and six T/LUH. This fleet size would meet policy requirements with only some risk to availability and sustainability of flying hours and could be afforded within the available funding in the LTDP, but only as a phased purchase.

32. For LTDP capital cash flow and capability transition reasons the recommended fleet would be acquired as an initial purchase of six NH90 and four T/LUH, with an additional two NH90 and two T/LUH delivered in later years.

33. A total fleet of eight NH90 and six T/LUH would provide:

- Four deployed MUH and four for tasking in New Zealand (including for CT and training).

s6(a)

- Same number of aircraft as the current Iroquois fleet but greater airlift capability.

However,

- The annual minimum flying rate per aircraft is up to 10% in excess of the life of type parameters established by the manufacturer of the MUH, which is assessed to be manageable.
- Increases in flying rate would increase logistics costs, and could cause a marginal reduction in the manufacturer's expected life of type for the MUH.

**Transition plan**

34. Careful management of the transition to the new fleet is required in order to minimise the risk to critical capabilities such as CT coverage. To achieve this it is essential that Iroquois capacity is maintained while new capabilities are brought into service. Affordability issues (both capital and operating), and personnel transition also need to be managed so that the reduction in the deployed support capability is minimised and the transition is completed as quickly and efficiently as possible.

35. The transition period would run from mid 2008, when the first T/LUH could arrive, through to 2015 when the final NH90 would be expected. A general outline of the transition plan is shown below.

	2008	2009	2010	2011	2012	2013	2014	2015
Sioux								
UH-1H		14 down to 6 aircraft over this period						
T/LUH	4 T/LUH	Training				+ 2 T/LUH	Fully capable	
NH90		6 NH90		Training	CT Cap	Deployable (with risk)		+ 2 NH90



36. The critical milestones of this plan are:

- a. Mid 2008. Four T/LUH commence one-year operational testing and evaluation, introduction into service and initial crew training.
- b. Early 2009. Iroquois operations begin a progressive scale down as personnel transfer to the NH90.
- c. Mid 2009. First NZ NH90 completed. Commencement of acceptance testing. Training of RNZAF aircrew will follow. Sioux withdrawn.
- d. Early 2012. CT Capability transferred to NH90.
- e. Mid 2012. Additional T/LUH delivered.
- f. Start 2013. Support to deployed land forces transferred to NH90. Less than optimum support to deployed forces anticipated until 2015.
- g. Mid 2013. Additional T/LUH in service. T/LUH CT capable. Iroquois final phase out.
- h. Early 2015. Additional NH90 in service. Achievement of full operational capability (concurrent support for deployed land forces and CT operations).

37. The current level of Iroquois capability will be sustained until 2009. From then it will be reduced in phases. The reductions will progressively limit the options to support concurrent deployed operations and CT until 2012, when CT would be taken up by the NH90. There would be a decreasing capacity to support deployed operations over a twenty-month period from mid-2010 to early 2012.

38. Helicopter availability is an additional risk during the transition period. For example, with only six NH90 to conduct a concurrent three-aircraft deployment and support domestic operations this will create the situation where three NH90 in New Zealand would provide 90% availability [REDACTED] s6(a)

## Financial Implications

### Costs

39. On the available figures the total capital cost of the recommended helicopter fleet of eight NH90 and six T/LUH is approximately \$771m<sup>12</sup> (this figure incorporates the cost of all aircraft and associated support packages - see Annex B, for cost breakdown). Final costs for the NH90 aircraft will not be available until numbers are settled and negotiations are complete. Based on the information submitted in response to the Invitation to Register Interest for the T/LUH it is estimated that the light utility helicopter package cost of six aircraft and ILS is expected to be approximately NZ\$70m.

<sup>1</sup> The estimated costs of the recommended fleet are based on a flying rate of 330hrs per year per aircraft and a 30-year service life. The impact of changes to this flying rate is not precisely known but increases in the logistics costs are expected to be within operational funding allocations.

<sup>2</sup> The bulk of this figure has been derived from an evaluation of NHI's Best and Final Offer and will be further refined through contract negotiations. An indicative T/LUH figure of approximately \$70m will be refined through a Request for Proposal. An exact cost will be contingent on final contracts and other project-related costs, as well as a strategy for covering foreign exchange exposure.



40. Operating costs for the new fleet are expected to increase incrementally from 2009 as the new aircraft come on line. The total operating cost of helicopter fleets is estimated to be \$19m higher than current Iroquois and Sioux operating costs.<sup>3</sup>

41. The increase in operating costs for the helicopter fleets can be accommodated within the NZDF's indicative operating baselines, established through the Defence Funding Package (DFP). Annual increases in the baselines, together with some minor reprioritisation of other expenditure, will be used to fund the increased operating costs of the NH90 fleet. Depreciation funding for the replacement helicopter fleet has already been factored into the DFP. Personnel costs related to the helicopter capability are expected to remain unchanged.

### ***Management of LTDP Reprioritisation***

42. The publicly released version of the LTDP (2004) provides \$400-550m for replacing the helicopter fleets. This planning figure was developed before the NH90 entered production and actual costings for it were known. The LTDP can provide \$520m for helicopters without imposing risk on other LTDP projects that have yet to come forward for approval. The \$520m also assumes that revenue from the sale of the Air Combat Force is reinvested in the LTDP.

43. There is a \$250m difference between the planned cost of \$520m and the cost of the recommended fleet mix of \$771m. This is largely due to the greater than expected unit cost, the much higher logistics associated with a small fleet supported on a commercial basis, and the higher operating costs associated with a greater intended flying rate.

44. The helicopter project is one of the last very large projects to be funded from the June 2002 LTDP \$1b capital injection. LTDP capital expenditure has been predominantly taken up by approved contracts until 2010. There is therefore limited scope for flexibility in LTDP planning in the short term.

45. To meet the now-projected cost of the helicopter fleet some reprioritisation of LTDP projects which are not already committed to contract is required. The proposed changes, and the impact of them on the Defence Force, are shown in Annex C.

46. A replacement helicopter fleet of eight NH90s and six T/LUH will need to be acquired through a phased purchase. Six NH90 and four T/LUH could be purchased in an initial tranche, followed when additional capital funding becomes available by a second tranche of two NH90 and two T/LUH. This initial capital cost can be accommodated within the existing LTDP. Simulation may be acquired at a later date, but only if a cost effective solution becomes available.

47. Annex B outlines a likely payment spread for the acquisition along with the capital drawdown required. This spread is based on the payment pattern that the Ministry of Defence believes can be negotiated with NHI. The initial payment pattern proposed by NHI included a large and problematic upfront payment that requires a much larger capital drawdown for Defence in FY06/07. The company has confirmed

---

<sup>3</sup> This cost differential is based on current Iroquois operating costs but these will increase over time as the aircraft ages and supportability becomes more difficult. The more accurate cost differential in the longer term is likely to be around \$16m.



that the payment spread is negotiable but a final payment spread will not be known until negotiations are complete.

***Proposed acquisition***

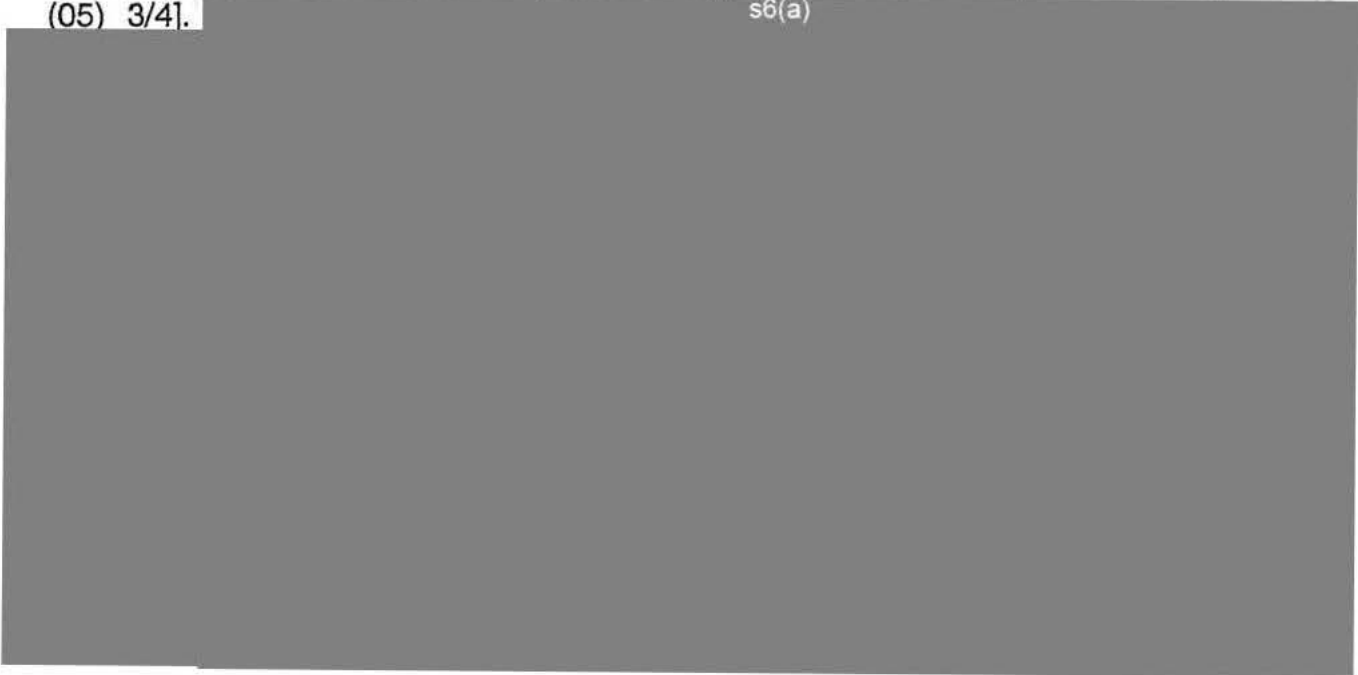
48. With Cabinet approval, Defence officials will commence negotiations with NHI on the basis of an intended, long term purchase of eight NH90s through an initial purchase of six aircraft and a negotiated option for an additional two at a later date. A final acquisition proposal for the NH90 will be presented to Cabinet once preliminary negotiations are complete.

49. The negotiated option would be to determine final prices and down payment requirements, to secure delivery dates, to agree on configuration and to establish the costs, modalities and potential timing of the second tranche. This second tranche option would be non-binding, to be exercised after subsequent consideration and at the sole discretion of the Government. There would be no costs incurred unless and until the option were exercised. This sort of option is common in acquisition practice and is usually straightforward to negotiate. We understand NHI has around 100 similar options for other nations on its books.

***Australian Assembly***

50. The negotiations will also provide the detailed information to inform New Zealand's decision on the best assembly location. In March 2005 Cabinet noted, mindful of possible relationship benefits, that the planned Australian Aerospace NH90 assembly line in Brisbane was a potential supplier of the New Zealand aircraft [CBC (05) 3/4].

s6(a)



s6(a)



s6(a)

55. To ensure that Ministers have the best information on which to base their decision, NHI will be asked during negotiations about possible assembly locations including Brisbane. In addition, officials are also continuing to explore opportunities with Australia to maximise the benefits of operating the same brand of helicopter, particularly for through life support and training cooperation.

#### **Consultation**

56. The Department of Prime Minister and Cabinet, the Treasury, the Ministry of Foreign Affairs and Trade, Customs, Police, the Department of Conservation, the Rescue Coordination Centre New Zealand, the Fire Service, the Ministry of Economic Development and the Ministry of Civil Defence and Emergency Management have been consulted.

#### **Human rights, legislative and other implications**

57. There are no human rights, gender, disability or legislative implications. No regulatory impact and compliance cost statement was required.

#### **Publicity**

58. No publicity is proposed until approval to commit to contract has been made by Cabinet.

#### **Recommendations**

59. I recommend that the Committee:

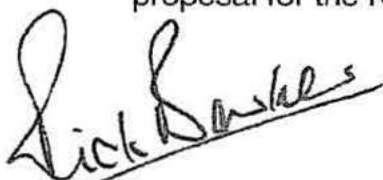
- a. **Note** that a helicopter capability is essential to meet New Zealand's current and future needs to support concurrently deployed land forces and counter-terrorism operations, as well as to conduct a range of tasks in support of civil agencies, disaster recovery and support to foreign governments.
- b. **Note** that the NATO Helicopter Industries' (NHI) NH90 was selected by Cabinet as the preferred medium utility helicopter for the NZDF and

s6(a)



remains the most appropriate aircraft to meet New Zealand's wide range of military, government and civilian tasks.

- c. **Note** that the recommended fleet size to meet New Zealand's basic policy requirements for helicopter operations is eight NH90 and six T/LUH.
- d. **Note** that for capital cash flow and capability transition reasons the recommended fleet would be acquired by an initial delivery of six NH90 and four T/LUH, with two T/LUH and two additional NH90 delivered in later years.
- e. **Note** that the acquisition of six NH90 and six T/LUH is affordable within available capital funding and that the additional two NH90 delivered in later years (beyond the time frame of the current LTDP) are also considered to be affordable by current projections.
- f. **Note** that NZDF expects to consider the acquisition of, or access to, simulation at a future date if cost effective solutions become available.
- g. **Note** that New Zealand is unable to conduct discussions directly with Australian Aerospace for assembly of the NH90, as the company is a subsidiary of a NHI partner.
- h. **Note** that during negotiations NHI will be asked to confirm the anticipated costs and likely delivery schedule for assembly in Australia, as well as confirm its preferred assembly location for the New Zealand NH90 fleet.
- i. **Agree** that Defence officials should begin negotiations with NHI on the basis of an intended fleet size of eight NH90 aircraft with an initial purchase of six NH90 and a negotiated option for an additional two at a later date.
- j. **Agree** that Defence officials should forward a non-binding Letter of Intent to NHI, which sets out New Zealand's intention to acquire six NH90 aircraft with a negotiated option for an additional two at a later date, to preserve the current price and production slots for the New Zealand fleet.
- k. **Note** that Defence officials will continue a Request for Proposal process for the T/LUH and will advise the Government of the outcome.
- l. **Direct** that Defence officials report back to Cabinet with a final acquisition proposal for the NH90 once negotiations with NHI are complete.



Hon Phil Goff  
Minister of Defence



ANNEX A

Points of Comparison: Status Quo (14 UH-1H and 5 Sioux) and 8 NH90 + 6 T/LUH

Point of Comparison	Status Quo (14 UH-1H and 5 Sioux)	8 NH90 + 6 T/LUH
<b>Government Policy</b>	<ul style="list-style-type: none"> <li>• Does NOT meet current policy requirements</li> <li>• Cannot carry Army section in one aircraft (only carries 5 equipped troops)</li> <li>• Cannot lift platoon in one wave (6 deployed aircraft as per Purchase Agreement, can only lift between 20-30 in one wave (based on aircraft availability))</li> </ul> <p>s6(a)</p> <ul style="list-style-type: none"> <li>• Basic Aeromed: 4 stretchers plus 2 attendants, per aircraft.</li> <li>• Decreasing desirability as coalition contribution</li> </ul>	<ul style="list-style-type: none"> <li>• Meets policy requirements with some risk to design life of aircraft.</li> <li>• Army section (minimum of 8 pers) can be carried in one aircraft (max 12 FSMO per aircraft for reasonable range, though capacity for up to 16)</li> <li>• 3-aircraft platoon-lift in one wave from a pool of four aircraft. 80% expected availability.</li> </ul> <p>s6(a)</p> <ul style="list-style-type: none"> <li>• Aeromed capacity increased through greater helicopter fleet size. Single aircraft capacity - 9 stretchers plus 2 medical attendants and equipment.</li> <li>• Mixed fleet and increased platforms further increases range of response.</li> <li>• Greater range of options open to Government for effective participation in UN and coalition operations.</li> <li>• Common aircraft type providing high degree of inter-operability with Australia and European coalition partners. As the number of customers in our region increases this will expand further.</li> </ul>
<b>Aircraft Capability</b>	<ul style="list-style-type: none"> <li>• Passenger seating – 9</li> <li>• Equipped Troop seating - 5</li> <li>• Lift capability (27nm radius) – 820kg</li> <li>• Max Cruise Speed – 110kts</li> <li>• Max Range (internal fuel) – 180nm</li> <li>• Very limited night capability</li> <li>• Not all weather capable</li> <li>• Limited performance at high altitude and in high temperatures</li> <li>• Limited floor and pilot seat armour</li> <li>• No aircraft self protection systems</li> <li>• Not marinised for use in maritime environments</li> </ul>	<ul style="list-style-type: none"> <li>• Passenger seating – 19</li> <li>• Equipped Troop seating – 12-16</li> <li>• Lift capability (27nm radius) – 2115kg</li> <li>• Max Cruise Speed – 160kts</li> <li>• Max Range (internal fuel) – 440nm</li> <li>• New Technology enabling new capabilities – better systems, two engines, longer range</li> <li>• Full night/all weather capability</li> <li>• Effective at high altitudes and temperatures</li> <li>• Full cabin and cockpit armour available</li> <li>• Integrated self-protection system</li> <li>• Marinised for operations in maritime environments</li> </ul>
<b>Personnel</b>	<ul style="list-style-type: none"> <li>• Personnel neutral</li> </ul>	<ul style="list-style-type: none"> <li>• Personnel neutral</li> </ul>
<b>Sustainability</b>	<ul style="list-style-type: none"> <li>• Increasing risk of fleet-wide technical failure.</li> <li>• No support from US Army through FMS as case closed 2005.</li> <li>• Support post-2007 increasingly problematic and expensive.</li> <li>• However, still widely operated internationally so some support avenues will exist.</li> </ul>	<ul style="list-style-type: none"> <li>• Supportable for at least 30 years.</li> <li>• Purchased by 14 nations, predominantly European but including Australia, with more considering, including New Zealand. Provides wide support base.</li> </ul>



**ANNEX B**

**SUMMARY OF HELICOPTER COST AFFORDABILITY MODELS**

Treasury supplied rates	0.575	0.55	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53			
Scenario	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	Total	5 Yr Cap	8 Yr Cap	
s9(2)(b)(ii)														
LTDP Injection Draw down Required	280.171	154.092	78.947	41.123	19.908	54.107	25.701	0.000	0.000	0.000	654.049	70.677	29.039	

## ANNEX C

## OPTIONS FOR MANAGEMENT OF LTDP PROJECTS

In order to accommodate the higher than anticipated costs of the helicopter project, various project bids, some as yet not yet formally published but under active consideration, have had to be moved from their original bid timings or expenditure plans within the LTDP:

## 1. Movements Prior to 2010

There are options for minor changes in project timings or manipulating financial risk through the Capital Projects: Minors (CP Minor), slippage and the NZDF cash reserve, to a potential total of \$250m.

•	Defer bulk of works on Ohakea Taxiways	\$15m
•	Delay OHAKEA spending commencement 1 year (published)	\$35m
•	Delay Army Land ISR project 1 year	\$15m
•	The ANZAC Self Defence Upgrade not advanced before 2010	\$75m
•	Constrain CP Minor spending (published)	\$15m
•	Factor in normal rate of project 'slippage'	\$50m
•	NZDF Cash Reserve	\$30m

## 2. Impact to 2015

None of the projects in the period 2010 to 2015 have yet been committed to contract. Further, additional items and changes can be expected as circumstances and technology develop. Therefore, some flexibility exists in the placement of projects on the LTDP. Broad options for either management or Government direction at the appropriate time include:

•	Timing of the Army General Service Vehicle replacement	Slips 2 yrs
•	Timing of Army Night Vision goggles	Slips 1 yr
•	Progression of Naval Tanker replacement	(no current start date)
•	Timing of the Army Indirect Fire Support replacement	(no current start date)
•	Timing or progression of LAV systems upgrade	(no current start date)
•	Timing or progression of Navy Diving Tender replacement	Slips 2 yrs
•	Timing or progression of the ANZAC Self Defence Upgrade	No advance

3. Air Force, Navy and Army have been consulted on the impact of these proposed adjustments. The effect of project slippage for all three Services will be associated delays to respective Service development. The major impacts are: potential extension of Ohakea consolidation; reduction in range of employability of ANZAC frigates in high threat environments, increasing support costs for outdated ship systems including maintenance on the Sea Sparrow missile and the Combat Management System to keep them in service until the Self-Defence Upgrade is completed; some delays to the Land Intelligence, Surveillance and Reconnaissance capability development and the replacement of the General Service vehicle fleet.