Defence Capability Plan: Aerospace Domain

Partnering with Industry to deliver capability faster and with resilience

May 2025

The Aerospace Domain

Agenda

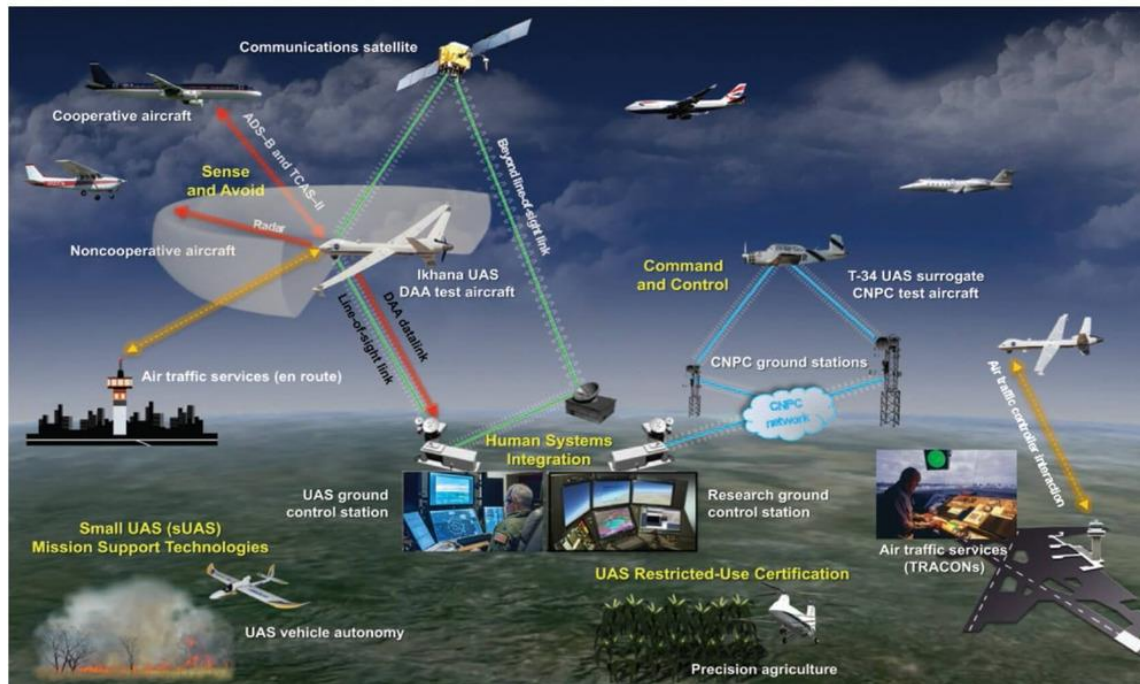- Challenges facing the Aerospace Domain

- Existing projects

- Demystifying the DCP UAS

- The next four years

- Longer term investments

Challenges for the Aerospace Domain

As a geographically remote country which deploys expeditionary forces, the ability to operate from the air is critical in order that we can achieve persistence, reach and concurrent responses.

Given our vast maritime domain, surveillance from the air and space plays a key role in understanding and responding to what is happening in our region. Air transport is the only way to deploy forces rapidly and over long distances.

In the next four years existing capabilities will be complemented by additional surveillance and transport investments.

Guaranteeing access to satellite communication and other systems that rely on space will also be critical to a range of new and existing technologies and systems used by the NZDF.

All of this will require personnel for projects, integration and, ultimately, to operate the capabilities.

Aerospace Domain Existing Projects

Replacing Maritime Helicopters

- Budget has been announced

- Preparing Detailed Business Case for later this year
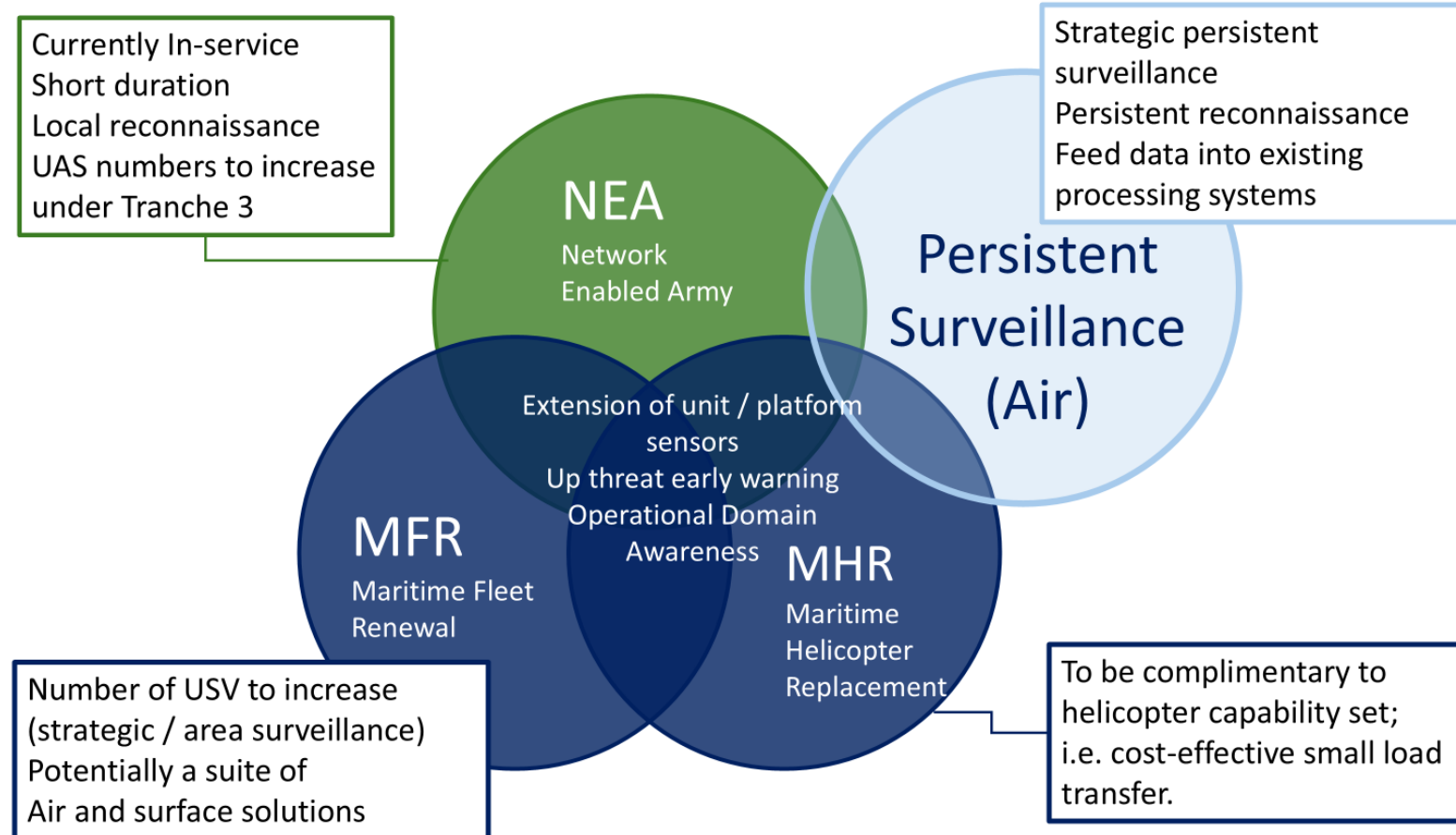
- Cost: $2BN   DBC due at Cabinet Q3 2025

Replace B757

- Aircraft and engine RFP complete.

- Will issue RFP for through life support Q4 2025

- Preparing Implementation Business Case for investment decision.

Uncrewed Systems - Responsibilities

Currently In-service
Short duration
Local reconnaissance
UAS numbers to increase
under Tranche 3

Strategic persistent
surveillance
Persistent reconnaissance
Feed data into existing
processing systems

NEA
Network
Enabled Army

Persistent
Surveillance
(Air)

Extension of unit / platform
sensors
Up threat early warning
Operational Domain
Awareness

MFR
Maritime Fleet
Renewal

MHR
Maritime
Helicopter
Replacement

Number of USV to increase
(strategic / area surveillance)
Potentially a suite of
Air and surface solutions

To be complimentary to
helicopter capability set;
i.e. cost-effective small load
transfer.

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Aerospace Domain Next 4 Years (2025 – 2029)

- **Persistent Surveillance (Air)**

  - Described in DCP as long range UAS.

  - Key effect: a level of persistent surveillance within our vast primary area.

  - Improved persistent intelligence, surveillance and reconnaissance over long range, including Pacific and Southern Ocean.

  - Typically, uncrewed aircraft but likely a combination of assets (we are solution agnostic).

  - Potentially capable of response options.

 - Cost: $100-300M (as a service, lease or purchase)

Aerospace Domain Next 4 Years (2025 – 2029)

- **Enhanced Strike Capability**

  - Deterrent against vessels threatening New Zealand's territory or units on deployed operations.

  - Investigating potential to arm the P8.

  - Seeking enhanced interoperability with ADF and partners.

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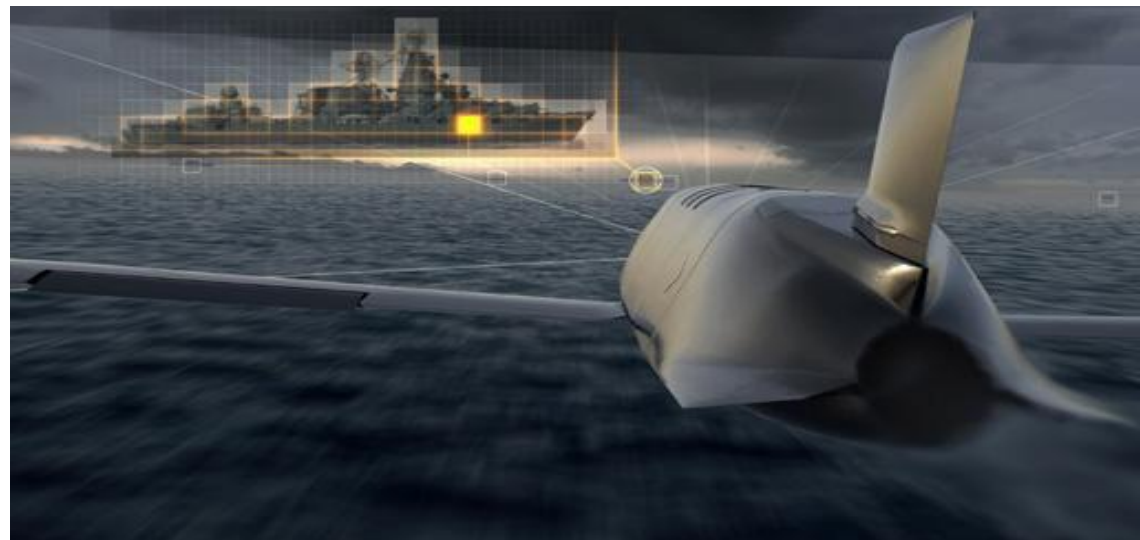
Aerospace Domain Next 4 Years (2025 – 2029)

- **Counter Uncrewed Aerial Systems**

  - Targeting Group 1-3 UAS rather than integrated area defence.

  - For Air Domain, point defence required for MOBs but also require deployable systems for FOBs.

  - Probably a range of sensor, kinetic and RF defeat technologies.

  - Numerous lower value procurements

- Cost: up to $50M
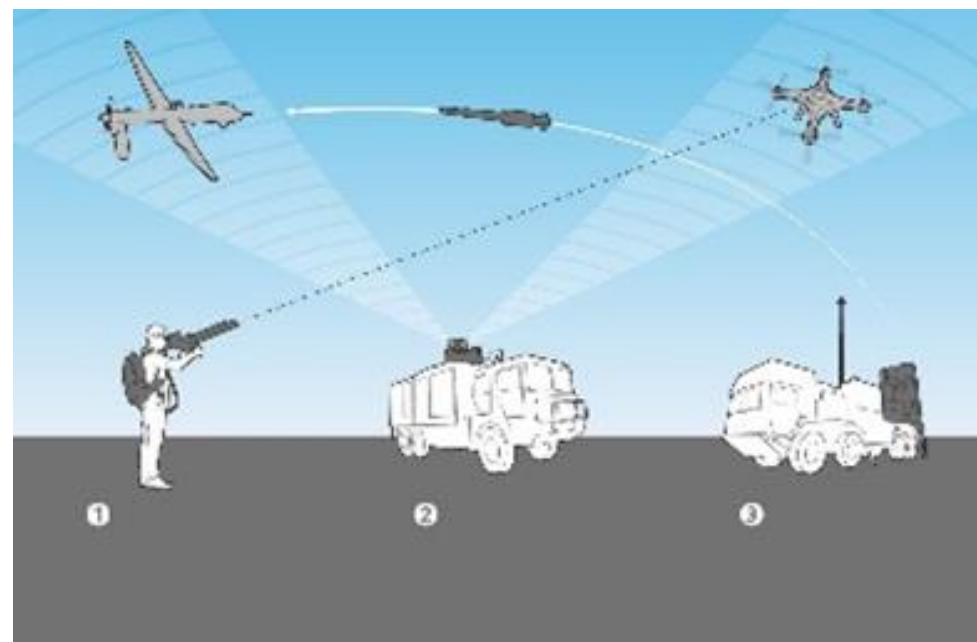
Aerospace Domain Next 4 Years (2025 – 2029)

- **Future 42**

  - Work is underway regarding options to renew or replace King Air functions post the current lease arrangements

  - Capabilities may include: multi-engine training, mission system training, VIP transport, intelligence, surveillance and reconnaissance

Aerospace Domain Next 4 Years (continued)

Space Capabilities (Cost: $300-600M)

- Space is critical for modern operations. This includes services provided from space systems, such as communication, surveillance, and navigation.

- Investment will be made in systems that plug into partner networks to understand what is happening in space

- Investment will be made to increase NZDF's access and resilience across such systems, including ground stations to access partner satellite systems.

Aerospace Domain Future Indicative Investments
(2029 – 2039)

- Maritime Uncrewed Systems and Support to Helicopters

- C130J Upgrades

- P8 Poseidon Aircraft Upgrades

- Uncrewed Aerial Systems (UAS)

- Space Capabilities

- Utility Helicopter Fleet

Defence Capability Plan: Information Domain

Partnering with Industry to deliver capability faster and with resilience
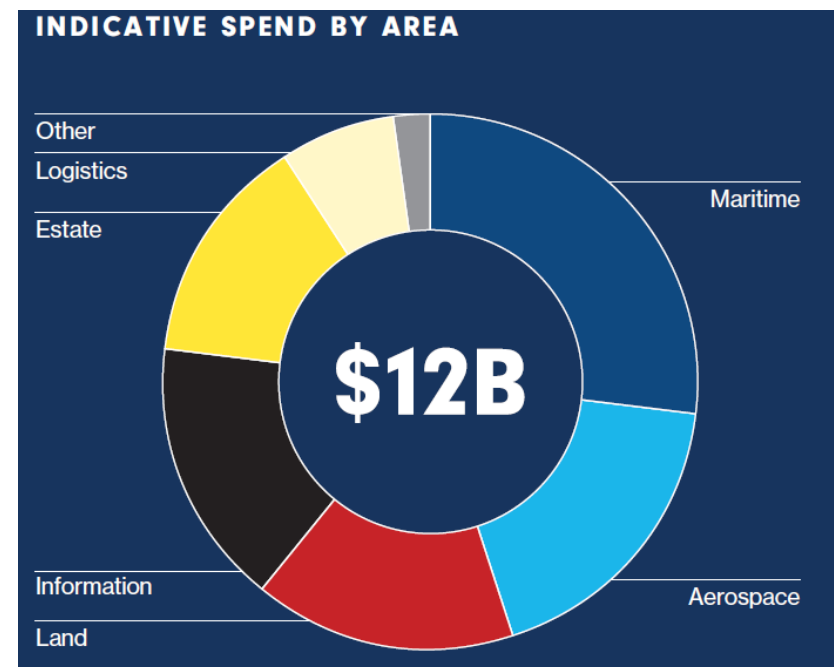
May 2025

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Information Domain

- Focus on the critical investments in the next four years

- Proposed Defence led and key NZDF led projects.

INDICATIVE SPEND BY AREA

$12B

Maritime · Aerospace · Land · Information · Estate · Logistics · Other

Future Information capability is a combination of skilled personnel, modern and resilient networks, and data, that will improve the NZDF's ability to respond to various threats, provide greater response options, and improve the NZDF's ability to make more informed and faster decisions in an increasingly complex environment.

" A plan not a purchase order.

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Information Domain Investments

- Investments broadly prioritised by:
    - Improving our foundational data and its security
    - Modernising our networks
    - Uplifting our intelligence functions

Strengthened cyber and information capabilities to protect the NZDF's networks and systems, and provide defensive cyber, electronic and information warfare effects.

Data > Networks > Intelligence & Insights

Defence Led

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Enhancing cyber security capabilities

The NZDF will further develop defensive cyber capabilities to ensure that it can defend deployed assets and people against cyber threats posed by adversaries. *Indicative cost: $100-300m*

- **What**

    - Security Information and Event Management (SIEM) system (ROI for SIEM Issued April 25)

    - Includes: a Threat intelligence platform; Cyber configuration management solution; and Cyber response and planning management system

    - NZDF Personnel uplift – Cyber Teams and Engineering Resources

    - Specialist contracted resources

    - Security and Cyber Training

"

If it's smart it's vulnerable

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Updating Classified Digital Services

Continued investment (the next phase in an existing project) to update the systems that deliver classified digital services will ensure the NZDF's information and classified intelligence is protected, at home and during operations, its personnel can communicate securely with one another and with partners when conducting joint operations, and NZDF continues to have the ability to receive critical intelligence.
Indicative cost: $100-300m

- **What**

  - Specialist Technical Resources

  - Hardware, software and communication solutions as determined by the current phase

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Intelligence and Information Warfare Academy

Establishment of an information warfare academy to strengthen and consolidate the training for personnel operating in the information domain.
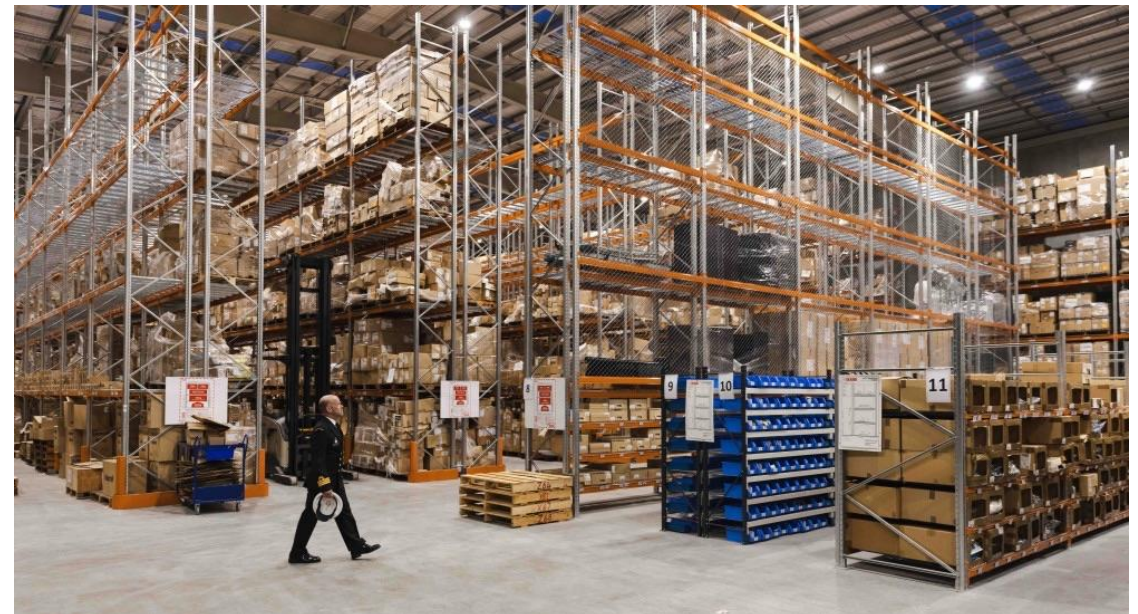
- **What.**

  - Training solutions

  - Training facilities

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Enterprise Resource Planning

Investment in modern military enterprise resource management software, which integrates multiple processes such as workforce management and payroll, logistics, supply and asset management, finance, and engineering by creating a single source of trusted organisational data (the next phases in an existing project). *Indicative cost: More than $1b*

- **What.**
  - Managing Partner
  - System Integrator
  - Business Integrator
  - Specialist Resources
- **When.**
  - Underway.

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Improved Intelligence Functions

- **What.** The NZDF will enhance its intelligence function. Investment includes training people, improving systems, and increasing the ability of the NZDF to process information that support operations across the spectrum of conflict. Indicative cost: *$50-100m.*

  - **What.**

    - Almost entirely a NZDF personnel uplift

NZDF Led

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Smaller Investments

- **Total Learning Architecture**
  - Replacing the current learning management system with a new fit for purpose solution.
- **Tactical Satellite Modernisation**
  - To replace current NZDF land terminals to support operations
- **Veterans Support System**
  - To replace an aging paper system with a fit for purpose digital solution to support VA and our veterans.
- **Tactical Datalinks**
  - Domestic training and operational capability for Link 22 and Variable Messaging Format
- **Information Warfare Branch**
  - Personnel for Open Source intelligence and
  - Information Warfare planning.
  - This is almost entirely a people uplift.
- **Navigation Warfare**
  - Adoption of new GPS standard and alternate
  - timing systems

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Digital Modernisation

Investment to enhance mission planning and execution, intelligence operations, organisational capabilities and distributed training, and simulation capabilities. *Indicative cost: $100-300m*

- **What.**
  - Uplift in personnel and development of 'First of type' digital platforms using modern open approaches and standards
  - Modern Software
  - Cloud and Containerised capabilities
  - Integration
  - Includes some personnel uplift. Initial market approach for hardware and ICT skilled people.

DCP INVESTS IN BUILDING OUT THE DIGITAL ECOSYSTEM

- People Capability
- Frontline Digital Enablement
- Core Digital Platforms
- Modern Technologies
- Data, Analytics & Information Management Capabilities
- Security

NZDF Led

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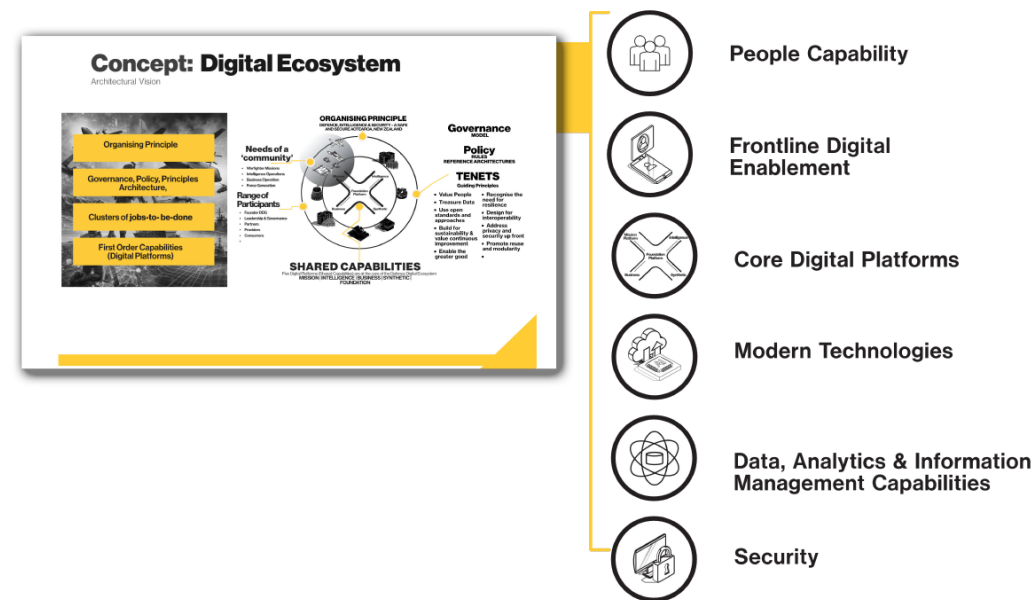
Information Management

The programme will improve the NZDF's ability to store and retrieve information, and to share information with its military ally and partners and with other government organisations. It will allow for the growth of data, analytics, and information management capabilities. *Indicative cost: $100-300m*

- **What.**

Digital Foundations Phase 2 projects cover:

- **Digital Workplace:** modern intranet, document and content management, workflow and process automation, collaboration tools, self-service for hubs.

- **DAIM Automation:** enterprise search, enterprise digital archive, automated data governance, AI/machine learning.

- **Data and Analytics Capability:** enterprise analytics platform, data fabric, data catalogue, analysts' workbench, advanced analytics.

- **External Channels (later in Phase 2):** optimised platform, digital asset management, content management and publishing, extranet capability.

- **When.**

  - Initial Market Approach 2024

  - Phase 1 Specialist Resource

  - Phase 2 Requirements

The procurement of new hardware, software, and skilled personnel, will improve the NZDF's ability to respond to threats, provide greater response options to government, and improve the NZDF's ability to make more informed and faster decisions in an increasingly complex environment.

" Data is our foundation

Defence Capability Plan: Land Domain

Partnering with Industry to deliver capability faster and with resilience

May 2025

Presentation Agenda

- Land Background

- Land Procurement Considerations

- Major Projects Summary

- NZLAV Obsolescence

- Future Manoeuvre Systems (NZLAV Replacement)

- Land Based Strike (Offensive Support)

- Network Enabled Army (NEA)

- Protected Mobility Capability Project (PMCP)

- Garrison and Training Support (GATS)

- NZDF Projects

Land Background

- Future land capability will be increasingly combat capable, interoperable with our partners, able to act as a force multiplier with Australia, and make the most of innovation which allows us to be more effective.

INDICATIVE SPEND BY AREA

$12B

Other
Logistics
Estate
Information
Land
Maritime
Aerospace
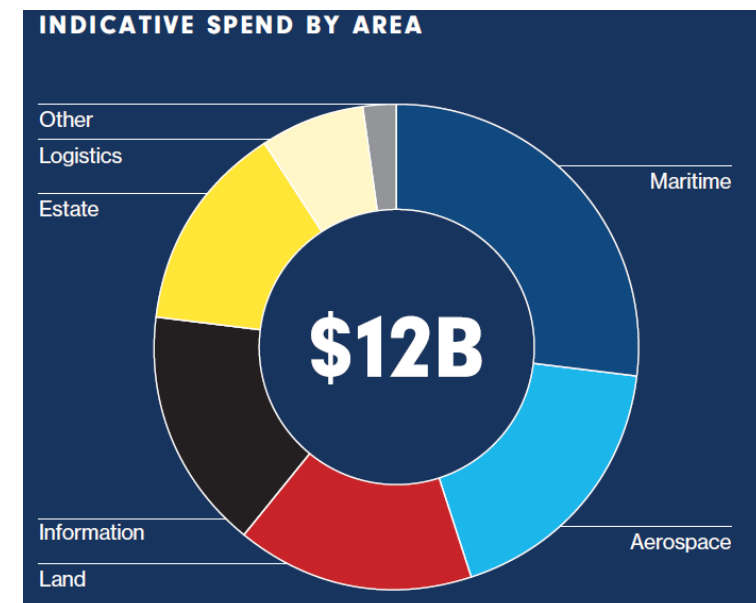
A plan not a purchase order.

Land Domain Procurement Considerations

- We have been asking industry about their ability to provide:
  - NZ industry opportunities
  - Supply chain resilience
  - MOTS
  - Through life support model
  - Interoperability
  - Integration with in service capability (e.g. C4)
  - Common platforms / systems across the domain
  - Assistance in developing our requirements
  - Bespoke NZ specific white papers and approaches

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Industry have a role in developing our requirements

Defence Led

Current Investments

- Network Enabled Army
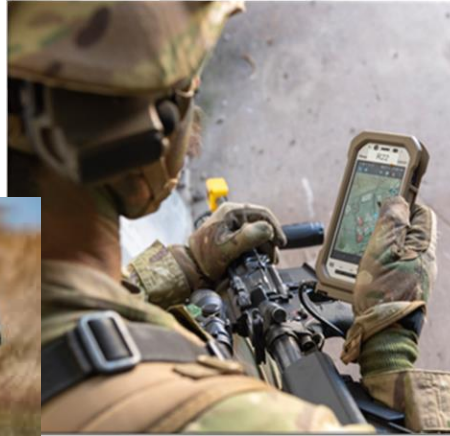
- Vehicles for the NZDF

PMCP: Utility Vehicle

Garrison and Training Support Vehicles

Key Project Start Ups

- NZLAV Obsolescence

- Future Manoeuvre Systems (NZLAV Replacement)

- Land Based Strike: Offensive Support (Fires)

NZLAV Obsolescence

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- What do we need to do to manage obsolescence in the LAV Capability to 2035?

- Expect engagement from late 2025.

- For consideration (not exhaustive list):

- Gunnery Trainer
- Thermal Sight
- Enhanced Situation Awareness kits

- Armour
- Laser Warning System
- Power generation Systems

- Infrastructure
- GPS System
- Communications Systems
- Engine

- Display Units
- Winch
- Suspension
- Laser Range Finder

Future Manoeuvre Systems *("NZLAV Replacement")*

- What capability (not necessarily vehicle) replaces NZLAV ?

- Army currently working on Future Fighting Concept which will drive requirements.

- Likely to result in desire for more agile, potentially lighter and more lethal capability requirements.

- Compatibility with ANZAC principles, not mirroring. Able to fight alone and integrate with AUS. Commonality of platform may, and systems certainly, will be factors.

- Expect industry engagement in 2026.

Land Based Strike: Offensive Support

- Upgrade of the joint fires capability to deliver a tactical and potential operational (deep fires) capability.

- Expect industry engagement in 2026.

DISCLAIMER: The above is indicative of a potential solution and does not represent a preference.

Network Enabled Army – Tranche 3 (Multiple Investments)

- Army able to deploy a Multi Role Battalion Group with digital network extended to the tactical edge.

- This will include C4 and ISREW capabilities, largely based on 'baseline' capabilities introduced into service in Tranches 1 and 2.

- Ongoing commercial support from existing partners, with some opportunities for ISREW capabilities as part of Tranche 3 Investment 2.
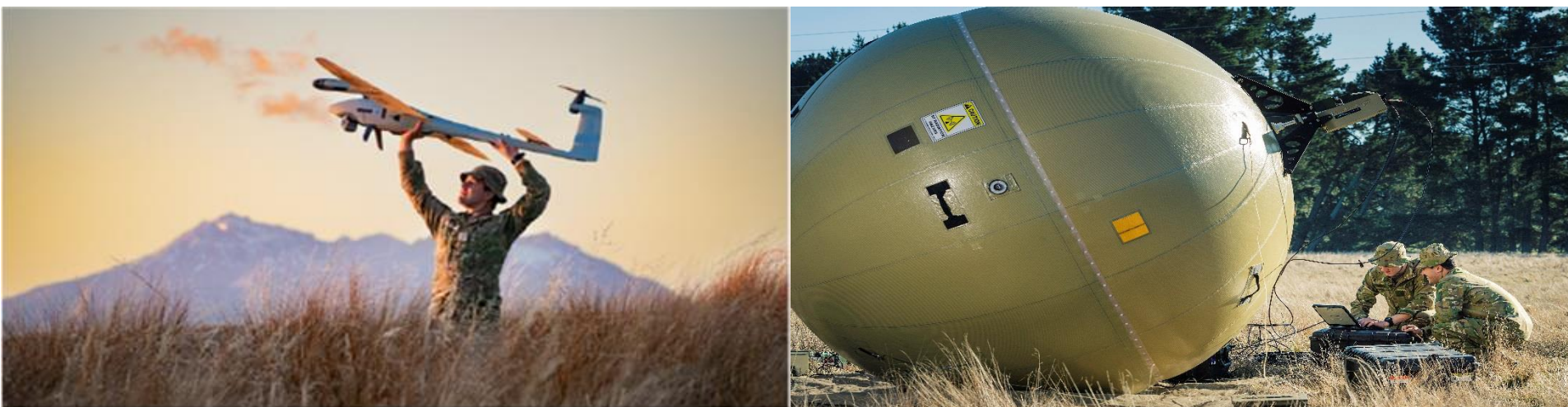
Protected Mobility Capability Project – Continued Delivery

- Continued roll out of the Utility Vehicle work stream to replace operational Unimog and Pinzgauer fleets across tranches.

- Dependency with NEA for vehicle C4.

- Multiple variants.

Garrison &Training Support Project

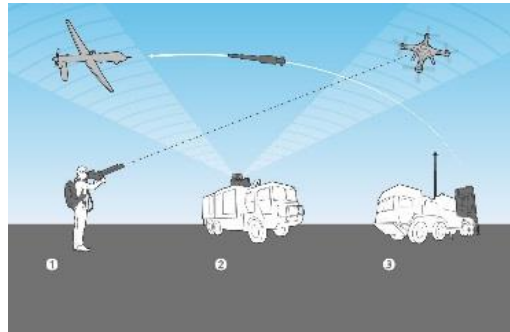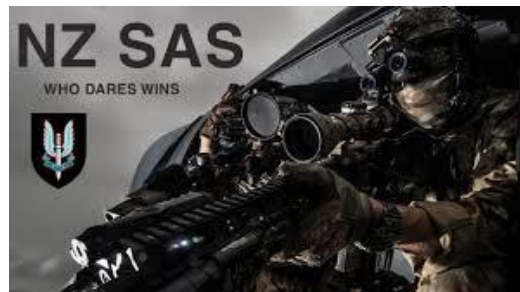|	Utes	Vans	Class 2 Trucks	Class 4 Trucks	Domestic Emergency vehicles
Phase 1	●	●	●		
Phase 2	●	●	●		●
Phase 3	●	●	●		
Phase 4	●	●	●	●	●

NZDF Led

Major Investments

Javelin anti-tank missile upgrade

Counter Uncrewed Aerial Systems

Special Operations Sustainment

Other Investments

- NZDF Visual Augmentation Systems
- **Mission Command Training Facility**
- Counter Explosive Hazards Rolling Capability Refresh (RCR)
- Medium Recovery Vehicle
- Soldier Personal Protective Equipment
- **Logistics Systems Sustainment**
- Health sustainment
- **Tactical Mobility (Engineers)**
- Battle Training Facility (Ardmore)
- Army Museum
- CBRN RCR
- Less lethal Programme

- Our outcome. An army that can operate independently, integrate with Australia, has improved strike capabilities, and is fully networked.

Maritime

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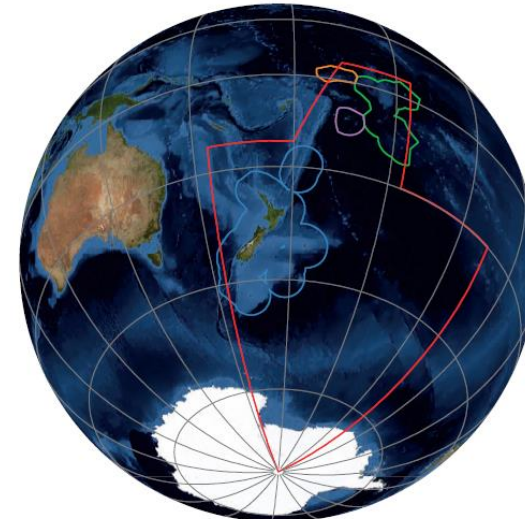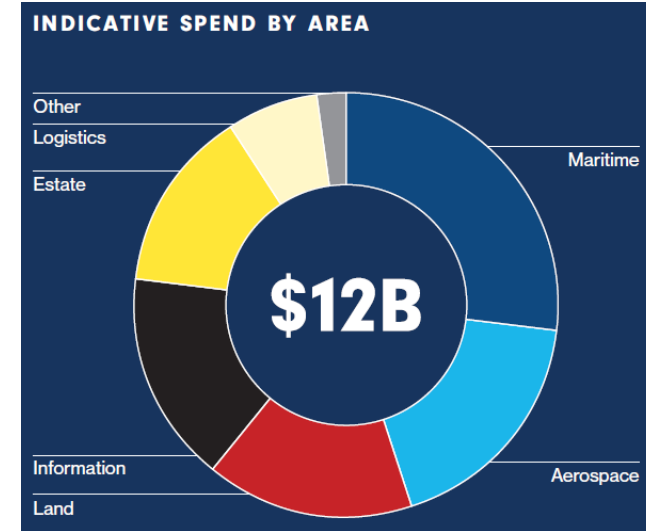
May 2025

UNCLASSIFIED

Maritime Key Topics

- Frigate Sustainment Programme.

- Capability upgrades.

- NZDF-led Initiatives.

- Maritime Fleet Renewal Programme.

UNCLASSIFIED

Frigate Sustainment Background

- Defence Capability Plan (DCP) 2019 deferred replacement of the Naval Combat Force beyond ship End of Life (26/28).

- DCP 2019 balanced that with a commitment to invest in a Life Extension Programme to extend the viable capability through to a new end of life in the mid 30s.

- Phase 1 of this Programme was approved in 2023, and the 8 projects associated with Phase 1 are now in the delivery phase.

UNCLASSIFIED

Frigate Sustainment

- 2025 Defence Capability Plan invests in the Frigate Sustainment Programme (FSP) to retain combat capable ships.

- Phase 2 Business Case currently being developed.

- Fundamental to this case is the asset management strategy, plan, and capability management plans for the Anzacs.

- All work will be aligned with existing scheduled maintenance periods.

- Will use a mixture of BAU In Service Support, MoD Technical Support Services Panel, and focused direct contracts.

- Trending towards a consolidated capability management team construct.

Frigate Sustainment Projects

- **Phase 1 (In Delivery)**
  - Integrated Platform Management System (IPMS) Obsolescence
  - Reverse Osmosis Plant Replacement
  - Stability Correction
  - Steering Unit Control System
  - Toplite & Mini Typhoon Refresh
  - Bilge Keel Replacement
  - Link 22 Tactical Data Link Refresh
  - Sewage Treatment Plant Replacement
- **Phase 2 (In Definition)**
  - Capability uplift stability remediation
  - Major System OEM obsolescence updates
  - Engineering Change in support of obsolescence
  - Spare holding review and rebalance
  - Corrosion remediation
  - Compliance upgrades
- **Follow on Phases**
  - Dependent on Asset Management Plan
  - Maritime Fleet Renewal timing

Frigate Capability Insertions

- Defence Capability Plan 2025 has signalled a range of possible capability upgrades investments. This could be managed under the Frigate Sustainment Programme due to the dependencies.

  - Strike Missile, Helicopter, Communications. Early definition phase.

  - Helicopter ship integration (Increasing partner and allied interoperability).

  - Communications enhancements beyond Frigate Sustainment – Communications.

NZDF Led Projects

- Potential Training/Safety Case and other supporting assurance and integration activities associated with:

  - RHIBS and Boat Cranes

  - Littoral Warfare Sustainment and advancement

    - Littoral Manoeuvre Craft

    - Dive Systems

    - Autonomous Underwater Vehicles

- Autonomous Experimentation and Outputs (closely linked to other uncrewed capital projects).

Existing Fleet Sustainment

- Investment in a range of support and upgrade options for the remainder of the fleet in existence.

- HMNZS CANTERBURY,
  HMNZS AOTEAROA and Offshore Patrol Vessel sustainment programmes.

- HMNZS CANTERBURY,
  HMNZS AOTEAROA and Offshore Patrol Vessel Capability Insertions.

- Uncrewed and Littoral Systems Sustainment.

Maritime Fleet Renewal
Background

- Previous Defence Capability Plans (DCP) articulated specific numbers of vessels to be acquired for the fleet. DCP 25 has articulated capabilities that need replacement, but the exact fleet configuration will be confirmed through the Maritime Fleet Renewal business cases.

- The Maritime Fleet Renewal Programme is looking at all components of a future fleet to identify the best mix of vessels and transformational change.

- This mix will look to optimise operational outputs and availability within the fiscal and supporting element constraints.

- The enablers to capability including personnel and training, support, digital and infrastructure are being addressed through a transformation programme.

Transformation

DISCLAIMER:
The following are indicative of potential innovative solutions, the outcome may include many of these. What we know is that status quo is not working.

Training and Personnel

- Aim is to move much of the on the job training and certification ashore to maximise workforce generation.

- Extensive use of simulation, Computer Based Training, Virtual Reality, Artificial Reality.

- Collective shore based training.

- Significant step up in terms of the Ship 0 concept.

Transformation

Operational Support

- Maximising shore based operational support.

- Reduced crew systems rely on operational support.

- Database and library support requirements growing exponentially.

- Alignment with partners (exchanges etc).

- Mission rehearsal.

- Workup in Simulation/Ship 0.

> While Transformation is part of Maritime Fleet Renewal, it would be needed irrespective of new platforms

Transformation continued

Technical Support

- Delivering more sea days.

- Fresh approach to our Usage Upkeep Plan.

- Focussed intense maintenance periods.

- Use of Ship 0 to allow "kit setting" of Engineering Change.

- Back to the Future with ability to contract to allow local manufacture of componentry.

- Support contracting.

- Follow commercial lead and move back towards on board Intermediate and Depot Level Maintenance.

- Embarked Original Equipment Manufacturer (OEM) and industry support technical Subject Matter Experts.

- Tiger Teams or OEM support to Operator Level Maintenance.

Transformation Operations

- Squadron crewing.

- Mission specific crewing.

- Deployment crew swaps.

- Intelligence based deployment planning.

- Process development maximising effect of uncrewed.

- More Intelligence, Surveillance Reconnaissance (ISR) capability on non combat platforms.

- Better balance of outputs between other maritime agencies and Defence.

- Reliance on shore based Operations Centre for more data analysis and Operational Support.

- Partial uncrewed.

Transformation

Uncrewed

- Experimentation and iterative build up of Capability.
- Critical look at roles of Maritime and risk vs reward of uncrewed.

Infrastructure

- Aligned with Future Naval Base (FNB) Programme and Defence Estate Regeneration Programme (DERP).
- Infrastructure with direct dependency on Maritime Fleet Renewal.
- Infrastructure in support of Maritime Fleet Renewal transformation.
- Schedule critical to ensure supporting infrastructure in advance of platforms
- Docking and maintenance facilities.
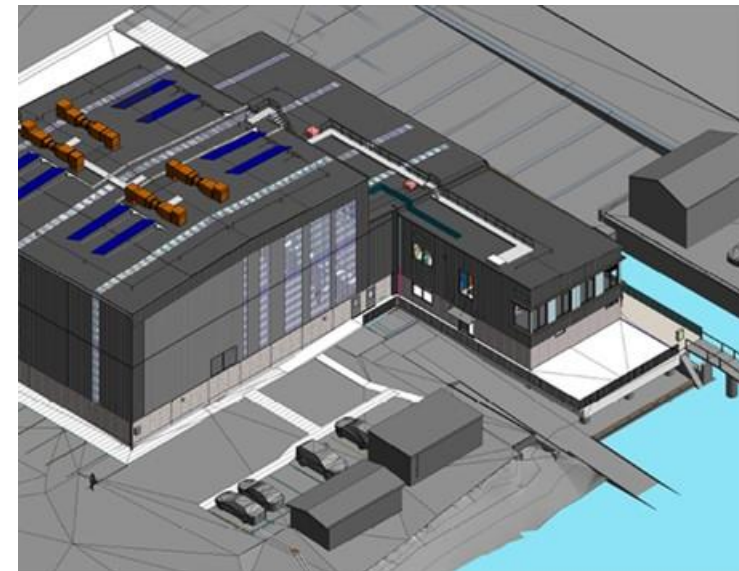
Transformation

Digital

- Increase in need for remote access to ship data.

- Increased data transfer in support of Maritime Domain Awareness.

- Increased protection from cyber threats.

- Multilayer security
  - Defence
  - Other Government Agencies (OGA)
  - Partners
  - Industry.

- Ability to operate in satellite and GPS denied environment.

- Transition upward of security requirements.

- More need for partner data exchange in near real time at classified levels.

- Resilience.

Maritime Fleet Renewal
Options

- Minimise number of ship classes.

- Leverage existing polar capabilities (HMNZS AOTEAROA) for southern ocean patrol, including uncrewed systems and upgrade of ship's boats for boarding.

- How much of the role of Dive and Hydrography can be undertaken by uncrewed systems.

- What does combining combat and patrol into a single platform look like.

- Investing in Other Government Agency platforms (NZ Built) for inshore and Economic Exclusion Zone patrol.

- How is projection undertaken
  - Scale
  - Logistics Over the Shore (LOTS)
  - Access (South West Pacific).
- Ship based Uncrewed for sensor extension.
- Land and Ship launched uncrewed for persistent patrol.

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What Now

- Options analysis complete.

- Programme Business Case being drafted.

- Submission to Government detailing broad scope and cost of Programme in late 25.

- Programme will support a number of consolidated capability management teams that will be formed progressively from early 26.
    - Each Platform Class.
    - Uncrewed.
    - Major Transformation components.

- Each consolidated capability management team will develop Detailed Business Cases (DBCs) for progressive submission to Government from late 26 through the following 4 years.

- DBCs are followed by a market approach and then a Project Implementation Business Case. Alternative arrangements for rapid technology investment, e.g. uncrewed systems, may be developed.

A focused and combat capable Navy with a mixture of combat, patrol, and multirole ships.

How to contact Defence

- NZDF:
  - industry@nzdf.mil.nz or
  - external_engagement@nzdf.mil.nz

- Ministry of Defence:
  - industry@defence.govt.nz

  The NZDF and Ministry of Defence will work together to facilitate your request, meaning you won't need to complete two separate requests to meet.