



Cabinet Government Administration and Expenditure Review Committee

Minute of Decision

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Defence Force Enterprise Cloud and Enterprise Connectivity

Portfolio Defence

On 28 May 2020, the Cabinet Government Administration and Expenditure Review Committee:

- 1 **noted** that the Enterprise Cloud and Enterprise Connectivity investments are a Defence Force priority as existing in-house IT infrastructure is out-of-date and experiencing significantly slowed and degraded performance, which affects the Defence Force's ability to effectively and efficiently deliver core outputs;
- 2 **noted** that the Defence Force initiated the Communications and Information Systems Change and Transformation Project (CISCTP) to address the issues, and Enterprise Cloud and Enterprise Connectivity are the first of four planned ICT investments;

Enterprise Cloud

- 3 **noted** that as a first step in improving technology, Defence Force requires a modern trusted information platform, s.6(a) ;
- 4 **noted** that Hybrid Cloud has been identified as the preferred platform in the business case under GOV-20-SUB-0015, as it has the lowest cost of all short listed options, carries fewer risks and will deliver better services to the Defence Force;
- 5 **noted** that the Enterprise Cloud:
 - 5.1 seeks to align the Defence Force with the Government Cloud Acceleration Programme, which Cabinet endorsed in 2016 (SEC-16-MIN-0026);
 - 5.2 will establish an approach to Cloud migration for classified information, and provide valuable insights and lessons learned for other government agencies with similar security and classification requirements;
- 6 **approved** the Enterprise Cloud Single Stage Business Case, attached as Annex A under GOV-20-SUB-0015, and the Hybrid Cloud as the preferred way forward;

Enterprise Connectivity

- 7 **noted** that the Enterprise Connectivity Single Stage Business Case will recommend the Wireless Corporate Connectivity, to be provided through the All of Government Telecommunication-as-a-Service (TaaS) Panel, which will connect all Defence Force Camps and Bases to the broader Defence Force ICT environment;
- 8 **noted** that the use of TaaS Panel services carries a low risk of implementation, as the panel service providers were evaluated by the Department of Internal Affairs to confirm their capability and track record in delivering the required services;
- 9 **authorised** the Minister of Defence to approve the Enterprise Connectivity Single Stage Business Case without further reference to Cabinet, given the low risk of the recommended option and no requirement for new funding;

Financial Implications of the Enterprise Cloud Investment

10 **noted** that the preferred option for Enterprise Cloud has a whole-of-life cost of \$118.27 million over a five-year period commencing in the 2020/21 financial year s.9(2)(i)

11 s.9(2)(i)

12 s.9(2)(i)

13 s.9(2)(i)

s.9(2)(i)

s.9(2)(i)

14 s.9(2)(i)

Proactively Released by the Minister of Defence

15 s.9(2)(i)

Financial Implications of the Enterprise Connectivity Investment

16 **noted** that the preferred option for Enterprise Connectivity has a whole-of-life cost of \$64.3 million over a five-year period commencing in the 2020/21 financial year, consisting of:

16.1 s.9(2)(i)

16.2 s.9(2)(i)

16.3 s.9(2)(i)

17 **noted** that the Defence Force can meet the entire cost of the recommended option for Enterprise Connectivity through reprioritisation of its operating baseline (including replacement of current expenditure) and therefore no additional funding is required;

18 **noted** that the contractual agreements for the services covered by the Enterprise Cloud and Enterprise Connectivity business cases are expected to fall under the threshold for delegations of the Chief of Defence Force.

Rachel Clarke
Committee Secretary

Present:

Rt Hon Winston Peters
Hon Chris Hipkins (Chair)
Hon Stuart Nash
Hon Kris Faafoi
Hon Ron Mark

Officials present from:

Office of the Prime Minister
Officials Committee for GOV

Office of the Minister of Defence

Chair, Cabinet Government Administration and Expenditure Review Committee

DEFENCE FORCE ENTERPRISE CLOUD AND ENTERPRISE CONNECTIVITY

Proposal

1. This paper seeks:
 - 1.1. approval of the New Zealand Defence Force (Defence Force) Enterprise Cloud business case; and
 - 1.2. agreement to delegate authority for the approval of the Enterprise Connectivity business case to the Minister of Defence.

Executive Summary

2. The New Zealand Defence Force is one of the last remaining Government agencies with its own in-house physical IT infrastructure. This IT infrastructure is out of date and experiencing significantly slowed and degraded performance. This is impacting the Defence Force's ability to effectively and efficiently deliver core outputs and comes with increased costs and resource requirements, increased security and data integrity risks, limited resilience and business continuity and low adaptability and long-term sustainability, including for protection against evolving Cyber threats. Investment to improve. It is therefore a priority for investment.
3. In 2015, the Defence Force initiated the Communications and Information Systems Change and Transformation Project (CISCTP) to develop a future operating model to better support the Defence Force. The future operating model predicates significant people, process and technology change. CISCTP initially focused on people and process change and is now ready to undertake modernisation of key aspects of Defence Force ICT infrastructure. Enterprise Cloud and Enterprise Connectivity are the first of several planned investments for the CISCTP.
4. Modernising our infrastructure and services requires establishment of a new enterprise Defence Force information platform. The Enterprise Cloud business case recommends the Hybrid Cloud as the preferred platform. The Hybrid Cloud represents the best of cost, benefit, and risk for the Defence Force compared to the other shortlisted options. The Enterprise Cloud proposal aligns Defence Force with partners and with New Zealand Government policy ('Cloud first' and the Cloud Acceleration Programme).

5. s.6(a)

6. The Defence Force recognises the importance of carefully managing data sovereignty, security and privacy in the use of the cloud platform – and particularly when considering offshoring data. Any migration of systems and services that process Restricted and below material to the public cloud platform will be done on a case-by-case basis. This process will balance operational benefits, service performance (domestically and on deployment), cost, risk and security.
7. The anticipated whole-of-life cost of the recommended option for Enterprise Cloud is \$118.27 million over a five-year period. s.9(2)(i)
8. I seek Cabinet's approval of the Enterprise Cloud Single Stage Business Case, s.9(2)(i) and the recommended way forward.
9. Alongside the Enterprise Cloud business case, I am seeking delegated authority to approve the Enterprise Connectivity Single Stage Business Case. Enterprise Connectivity aims to address a number of issues with the current provision of connective capability, through use of the All-of-Government (AoG) Telecommunications-as-a-Service (TaaS) Panel. The Enterprise Connectivity Single Stage Business Case recommends the Wireless Corporate Connectivity as the recommended way forward, which will connect all Defence Force Camps and Bases to the broader Defence Force ICT environment.
10. The whole-of-life cost of the recommended option for Enterprise Connectivity is \$64.3 million over a five-year period, which would require Cabinet approval. However, the Defence Force can meet the entire expenditure of the recommended option through reprioritisation of its operating baseline, and the use of the TaaS panel carries a low risk to the successful implementation. Defence Force fixed costs for telecommunications make up the bulk of funding for this business case. Given the low risk associated with procuring connectivity through the TaaS panel and no requirement for new funding, I am seeking delegated authority to approve the Enterprise Connectivity Business Case. This approach is supported by the Treasury and the Government Chief Digital Officer.

Background

11. The nature of modern warfare is changing, with new military capabilities expected to generate vast amounts of data. The full benefits of investment in new military capability can only be realised if the Defence Force can effectively capture, store, integrate and disseminate data and insights generated by new capabilities, including having the ability to integrate with our allied partners where necessary.

12. The importance of integrated tools, technology, and timely information are recognised in the Government's priorities and key strategic documents for the Defence Force, including the Strategic Defence Policy Statement, the Defence Capability Plan and Strategy 2025.
13. The Defence Force currently operates a traditional, on-premises IT model (i.e. Defence Force owned infrastructure). The traditional on-premises model is coming under increasing strain and the software and platforms are now considerably out of date. This significantly impacts the Defence Force's ability to effectively and efficiently deliver core outputs and comes with:
 - 13.1. increased costs and resource requirements to maintain existing poor performing services;
 - 13.2. increased security and data integrity risks;
 - 13.3. limited resilience and business continuity in the case of emergency; and
 - 13.4. low adaptability and long-term sustainability, including for protection against evolving Cyber threats.
14. In 2015, the Defence Force initiated the Communications and Information Systems Change and Transformation Project (CISCTP) to develop a future operating model to better support the Defence Force. The future operating model predicates significant people, process and technology change. The people change required is underway and expected to be completed within the next 18 months, and consideration is now being given to progressing the technology change required.
15. The Enterprise Cloud and Enterprise Connectivity Single Stage Business Cases are the first of four technology business cases that aim to address current risks and issues with Defence Force ICT infrastructure and services, and better position the Defence Force to support operational effectiveness.
16. The delivery of the Enterprise Cloud and Enterprise Connectivity Single Stage Business Cases is to be supported by requisite independent assurance as part of a wider programme level assurance plan developed in conjunction with the Treasury and the Government Chief Digital Officer.

Enterprise Cloud Proposal

17. Modernising our infrastructure and services requires establishment of a new enterprise Defence Force information platform. The Enterprise Cloud business case recommends the Hybrid Cloud as the preferred platform. Hybrid Cloud is a computing environment that leverages the benefits of public cloud computing whilst still enabling an organisation to host services locally to meet data sensitivity, system performance, and security and risk requirements. ^{s.6(a)}

18. The Hybrid Cloud offers environments that would enable Defence Force choices about how to adequately protect its information s.6(a)

The Hybrid Cloud represents the best of cost, benefit, and risk for the Defence Force compared to the other shortlisted options.

19. The preferred way forward will largely remove the need for the Defence Force to own all of its IT infrastructure, as services can be provided over externally secure networks (including servers, storage, databases etc.). This results in lower effort to maintain and upgrade systems, more rapid updates, and higher levels of security.
20. The Defence Force recognises the importance of carefully managing data sovereignty, security and privacy in the use of the cloud platform. s.6(a)

21. The other shortlisted options were:

- 21.1. **Do-minimum:** The Defence Force would retain ownership and management of all infrastructure investments through a combination of Defence Force and New Zealand Intelligence Community (NZIC) assets hosted at Defence Force and NZIC locations, with external provider support for the Unclassified Domain. This option was not selected as the preferred way forward as it carries a high risk to the delivery of Defence outputs at a higher cost than Hybrid Cloud; and
- 21.2. **All of Government Infrastructure as a Service (AoG IaaS):** The AoG IaaS option comprises similar arrangements as the Status quo option with the exception that infrastructure supporting the Restricted and Unclassified domain would be managed and supported through All of Government agreements, on behalf of the Defence Force. This option was not selected, as it would not deliver the same level of benefits as Hybrid Cloud (particularly at Restricted and Unclassified classifications). s.9(2)(i)

Market Capability to Deliver

22. Defence Force has validated the ability of the market to supply the requisite core services, through a Proof of Concept (PoC) carried out in 2019. The PoC tested a proposed solution s.6(a)

which together would be able to supply all of the information protection requirements of the Defence Force.

23. All procurement activity will comply with the Government Rules of Sourcing. In establishing the PoC, Defence Force went to market. s.9(2)(i)

23.1. s.6(a)

23.2. s.6(a)

24. s.6(a)

Indicative Delivery Timeline and Post-Implementation Review

25. Should Cabinet approve the Business Case, s.9(2)(j)

work to implement the proposals will begin in July 2020, and will be operational (core capabilities in place and running as business-as-usual) by February 2023. Following completion of the project a Post Implementation Review will determine if the preferred option implemented has delivered its anticipated benefits.

26. s.9(2)(j)

Alignment with Five Eyes (FVEY) Partners and the Cloud Acceleration Programme

27. The Enterprise Cloud proposal aligns Defence Force with partners and Government policy. The use of Cloud technology is becoming more prevalent overseas. Our major strategic partners and allies are investing heavily in Cloud technology. In particular, the United States is investing approximately \$10 billion USD into new Cloud services to handle Unclassified to Top Secret data. The Defence Force needs to explore adopting similar technologies to remain interoperable with key strategic partners and to keep pace with the rate of their technological change.

28. Cabinet's Government Cloud Acceleration Programme and the 'Cloud first' approach were endorsed by Cabinet in 2016, to encourage all Government departments to accelerate the adoption of Cloud based services across the public sector (CAB-15-MIN-0148.01 refers). The Defence Force is looking to align itself to the Cloud Acceleration Programme through the proposed investment. The Defence Force investment in Cloud technology will provide a pathway for other Government agencies to utilise Cloud services, particularly for classified information.

Enterprise Connectivity Single Stage Business Case

29. The Enterprise Connectivity Business Case aims to address a number of issues with the current provision of connective capability through use of the All-of-Government (AoG) Telecommunications-as-a-Service (TaaS) Panel.
30. The Enterprise Connectivity Single Stage Business Case recommends the Wireless Corporate Connectivity as the recommended way forward, which will connect all Defence Force camps and bases to the broader Defence Force ICT environment.
31. The TaaS panel offers the Defence Force the opportunity to deliver integrated, secure, flexible and 'evergreen' telecommunications and connectivity services, in line with the direction set by the Government ICT strategy. All Panel members have a proven track record in delivering the required connectivity services and have been evaluated by the Department of Internal Affairs.
32. The whole-of-life cost of the recommended option for Enterprise Connectivity is \$64.3 million over a five-year period, which would require Cabinet approval. Given the low risk associated with procuring connectivity through the TaaS panel and no requirement for new funding, I am seeking delegated authority to approve the Enterprise Connectivity Business Case.

Consultation

33. The Treasury and Government Chief Digital Officer (Department of Internal Affairs) were consulted, and their comments have been incorporated into this paper.
34. The business case underwent a Treasury end-point clinic on 28 January 2020, attended by officials representing Government Chief Digital Officer and the Government Communications Security Bureau. The clinic confirmed support for the business case, with feedback addressed in the final version of the business case.
35. The Government Chief Digital Officer at the Department of Internal Affairs were consulted ^{s.6(a)}
36. The Treasury, Government Chief Digital Officer and the Department of Internal Affairs were consulted on the approval pathway for the Enterprise Connectivity Single Stage Business Case, with their recommendation to seek approval by Minister of Defence reflected in this Cabinet paper.

Financial Implications

Enterprise Cloud

37. The preferred way forward for the Enterprise Cloud business case has a whole-of-life cost of \$118.27 million over a five-year period commencing in the 2020/21 financial year. ^{s.9(2)(i)}

37.1. s.9(2)(i)

37.2. s.9(2)(i)

38. s.9(2)(i)

39. s.9(2)(i)

s.9(2)(i)

Enterprise Connectivity

40. The recommended option for Enterprise Connectivity has a whole-of-life cost of \$64.3 million over a five-year period commencing in the 2020/21 financial year. This consists of:

40.1. s.9(2)(i)

40.2. s.9(2)(i)

40.3. s.9(2)(i)

41. The Defence Force can meet the entire operating expenditure of the recommended option for Enterprise Connectivity through reprioritisation of its operating baseline (including replacement of current connectivity expenditure).

Legislative Implications

42. This paper has no legislative implications.

Impact Analysis

Regulatory Impact Statement

43. This paper has no legislative or regulatory implications.

Climate Implications of Policy Assessment

44. The proposals in this paper are not designed to affect (either increase or decrease) greenhouse gas emissions, and are not likely to have any direct impact on emissions.

Human Rights

45. The proposals in this paper are not in any way inconsistent with the New Zealand Bill of Rights Act 1990 and the Human Rights Act 1993.

Gender Implications

46. The proposals in this paper are concerned with updating technology in the New Zealand Defence Force. Modernisation of technology within Defence Force could reduce barriers to entry into Defence Force ICT workforce, by ensuring that Defence Force does not operate bespoke systems which are only to be able to be operated by those trained in-house. It is expected that this may have a positive impact for gender equity.

Disability Perspective

47. Advancements in modern technology tend to encourage better accessibility. Modernising the technological environment within Defence Force is expected to have a positive impact from a disability perspective.

Publicity

48. The proposals in this paper are not likely to be controversial, and no publicity is planned. The Defence Force CIS CTP (as an overall Defence ICT transformation) has some public interfaces which are being managed as part of the overall transformation, and this may include providers publicising some of their own public offerings which are determined to be suitable for Defence Force requirements.

Proactive Release

49. Parts of this Cabinet paper and both Single Stage Business Cases will be withheld under the Official Information Act 1982, Section 9 (2, b, ii). The release of these documents may undermine the Defence Force's commercial position during negotiations with potential suppliers. These documents will be released shortly after the conclusion of commercial negotiations, with an anticipated release date in late 2020.

50. Parts of this Cabinet paper and the Single Stage Business Cases will be redacted under the Official Information Act 1982, Section 6 a. The release of this information may undermine the security or defence of New Zealand or the international relations of the Government of New Zealand.

Recommendations

51. The Minister of Defence recommends that the Cabinet Committee:

1. **note** that the Enterprise Cloud and Enterprise Connectivity investments are a Defence Force priority as our existing in-house IT infrastructure is out of date and experiencing significantly slowed and degraded performance. This affects the Defence Force's ability to effectively and efficiently deliver core outputs;
2. **note** the Defence Force initiated the Communications and Information Systems Change and Transformation Project (CISCTP) to address these issues, and Enterprise Cloud and Enterprise Connectivity are the first of four planned ICT investments;
3. **note** that as a first step in improving technology, Defence Force requires a modern trusted information platform, ^{s.6(a)};
4. **note** that Hybrid Cloud has been identified as the preferred platform. It has the lowest cost of all short listed options, carries fewer risks and will deliver better services to the Defence Force;
5. **note** the Enterprise Cloud seeks to align the Defence Force with the Government Cloud Acceleration Programme, which the Cabinet endorsed in in 2016 (CAB-15-MIN-0148.01 refers). This will establish an approach to Cloud migration for classified information, and provide valuable insights and lessons learned for other government agencies with similar security and classification requirements;
6. **note** the Enterprise Connectivity Single Stage Business Case recommends the Wireless Corporate Connectivity as the recommended way forward, which will connect all Defence Force Camps and Bases to the broader Defence Force ICT environment;
7. **note** that the use of TaaS panel services carries a low risk of implementation, as the panel service providers were evaluated by the Department of Internal Affairs to confirm their capability and track record in delivering the required services;
8. **approve** the Enterprise Cloud Single Stage Business Case and the Hybrid Cloud as the preferred way forward;
9. **authorise** the Minister of Defence to approve the Enterprise Connectivity Single Stage Business Case, given the low risk of the recommended option and no requirement for new funding;

Financial Implications of the Enterprise Cloud Investment

10. **note** the preferred option for Enterprise Cloud has a whole-of-life cost of \$118.27 million over a five-year period commencing in the 2020/21 financial year s.9(2)(i)

11. s.9(2)(i)

12. s.9(2)(i)

13. s.9(2)(i)

s.9(2)(i)

s.9(2)(i)

14. s.9(2)(i)

15. s.9(2)(i)

Proactively Released by the Minister of Defence

Financial Implications of the Enterprise Connectivity Investment

16. s.9(2)(i)

a. s.9(2)(i)

b. s.9(2)(i)

c. s.9(2)(i)

17. s.9(2)(i)

18. s.9(2)(j)

Authorised for lodgement

Hon Ron Mark
Minister of Defence

Annexes:

A. Enterprise Cloud Single Stage Business Case

B. A3 - NZDF Forthcoming Technology Business Cases

[Annexes A and B are withheld under s.9(2)(b)(ii) and s.9(2)(j) of the OIA.]