



JOINT BRIEFING FOR THE MINISTER OF POLICE AND NGCC OVERSIGHT MINISTERS

Priority	<div><input type="checkbox"/> Urgent</div> <div><input checked="" type="checkbox"/> Time-Sensitive</div> <div><input type="checkbox"/> Routine</div> <p><i>This briefing is for the Minister of Police to provide to the NGCC Oversight Ministers as pre-reading prior to the NGCC Oversight Ministers meeting 15th December 2021 at 3.30pm.</i></p>		
Title	Next Generation Critical Communications (NGCC): Replacing Emergency Services Critical Communications		
Date	10 December 2021	Ref	BR/21/121

Recommendations

It is recommended that the Minister of Police:

- a) **Share** this briefing with the Next Generation Critical Communications (NGCC) Oversight Ministers (Minister of Finance, Minister for the Digital Economy and Communications and the Minister for Emergency Management), in preparation for the NGCC Oversight Ministers meeting on 15 December 2021.
- b) **Direct** your office to share this briefing with the Ministers of Health and Internal Affairs **after** the Oversight Ministers meeting.

It is recommended that the NGCC Oversight Ministers:

- c) **Note** the proposed solution for emergency services critical communications and the progress made by the Programme with vendor negotiations.
- d) **Discuss** any concerns with the proposed solution at the meeting on 15 December 2021.
- e) **Agree** to schedule the next Oversight Ministers Meeting for April 2022 to review the final Implementation Business Case for approval. Yes/No
- f) **Direct** the Programme to prepare a paper seeking Cabinet agreement that the Oversight Ministers have formal delegation to approve the NGCC Implementation Business Case and draw down of the NGCC: Replacing Emergency Services Critical Communications Operating Contingency [CAB-20-MIN-0155.26 refers]. Yes/No

Minister's comments and signatures

..... / / 2021
Hon Grant Robertson
Minister of Finance

..... / / 2021
Hon Poto Williams
Minister of Police

..... / / 2021
Hon Kiritapu Alan
Minister for Emergency Management

..... / / 2021
Hon Dr David Clark
Minister for the Digital Economy and Communications

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Next Generation Critical Communications (NGCC): Replacing Emergency Services Critical Communications

Purpose

1. This briefing provides an update on the NGCC programme to support the NGCC Oversight Ministers meeting on 15 December 2021 with Rob Fyfe, NGCC Board Chair, Steve Ferguson, Lead Entity Director and Senior Responsible Owner, Graham Mitchell, Crown Infrastructure Partners Chief Executive and Jevon McSkimming, Deputy Commissioner Strategy and Service. It also seeks decisions from Oversight Ministers.

The NGCC programme was established to modernise Emergency Services communications infrastructure

2. The current Emergency Services communications infrastructure is more than 30 years old, largely insecure, at the end of its useful life, and presents a growing risk of failure. Without investment in replacement infrastructure, all feasible measures to extend the life of the critical radio networks will be exhausted beyond 2024.
3. The current infrastructure is predominantly voice-centric radio networks with limited inter-operability between agencies. It greatly restricts Emergency Services ability to use data, such as video, imaging, maps, and real-time intelligence information. This is preventing responders and agencies from receiving the right information, at the right time, in the right place, and is constraining improvements to frontline services. Having this information easily accessible to Emergency Services at an incident will enable the sector to provide better outcomes to the New Zealand public, whilst also keeping our people safe.
4. In February 2020, Cabinet endorsed the NGCC detailed business case for Emergency Services [CAB-20-MIN-0032 refers]. The business case outlines the need for investment in a replacement critical communications capability which will allow Emergency Services to execute their responsibility to maintain law and order, keep people safe, protect life and property, and deal with medical events.

There are three immediate challenges the NGCC programme is looking to address

- a) Police and Fire and Emergency New Zealand (FENZ) land mobile radios cannot be supported beyond 2024 due to equipment becoming obsolete and is significantly cost prohibitive. Ensuring we have a solution to replace this functionality is critical and the NGCC programme is looking to address this as we commence migration to the new network from late 2022 as this allows us to re-deploy equipment to support the areas not migrated.

- b) s9(2)(c)

- c) Emergency Services (including Police, FENZ, and ambulance services) cannot communicate cross-agency, but typically they attend incidents

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together. There are significant efficiencies to be gained from integrating the comms across the Emergency Services sector for incident management and cross agency response.

What NGCC have found

5. Based on NGCC's market engagement to date we are confident that vendors can deliver a solution to overcome the immediate challenges and technical constraints Emergency Services are currently experiencing and meets the investment objectives outlined in the Detailed Business Case.
6. Our discovery process has also determined that cellular critical communication technologies (such as Mission Critical Push to Talk) outlined in the Detailed Business Case are still emerging, require significant investment beyond our fiscal envelope and are not suitable as Emergency Services primary network for critical communications.
7. The NGCC Programme can deliver a necessary step forward for communications capability within the Emergency Services sector. The solutions that we can deliver will provide a solid communications platform for agencies, which can then be built on, evolved, and enhanced in collaboration with agencies over the coming years.
8. Vendors have demonstrated that they can provide a solution that is far more robust than what agencies use today, will provide the ability to share information securely between frontline staff, and provide a path toward accessing new cellular based technology that is evolving in the global market.

The Request for Proposals (RFP) evaluation process is complete

9. NGCC has completed the evaluation and due diligence process on all bids received in response to the RFP of 12 January 2021 to establish a 10 to 20 year partnership with providers of land mobile radio, personal alerting and cellular services and have elected to negotiate with the following providers:
 - Land Mobile Radio – s9(2)(b)(ii)
 - Personal Alerting – s9(2)(b)(ii)
 - Wholesale Cellular – s9(2)(b)(ii)
 - Commercial Cellular – s9(2)(b)(ii)

Due diligence of the current land mobile radio network

10. Police operates standalone radio networks which provide mission-critical communications for operational support. The network which supports areas outside of Auckland, Wellington and Canterbury is 35 years old and reached end of commercial life in 2009. All available assurance measures have been deployed to extend the operational life of this network to 2024. To extend past this date is significantly cost prohibitive, increasingly problematic in terms of sourcing parts and more costly than building a new network.

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11. As part of the initial design process for the LMR solution 117 site surveys of existing Police LMR sites were completed. These surveys have provided NGCC and Tait-Kordia New Zealand with an overview of the current state of the network.
12. The site surveys found that much of the existing network is no longer supportable due to obsolete components and requires full replacement. The assumption in the Detailed Business Case that up to 30% of site assets can be reused has been disproven. Site surveys for the remaining sites will be completed in the first quarter of 2022 however, based on the sites surveyed to date, the need to replace most of the network is unlikely to change.

Vendor Contract Negotiations

13. Following completion of the RFP process, the Programme has made significant progress with vendor negotiations. Below is a high-level outline of the solutions.

Land Mobile Radio – Tait-Kordia New Zealand

14. The Tait-Kordia joint venture will deliver a modern P25 Land Mobile Radio network, providing nationwide coverage for users, that is fully encrypted and enables interoperability between Emergency Services, caller ID and location services, and the ability to transmit simple data messages. These features provide a significant uplift on the existing radio network's capabilities and will enable interoperability between the Emergency Services.
15. The network is being designed as a "network of last resort" to support agencies in the event of a catastrophic magnitude 8 earthquake or similar scale event and will be dimensioned with sufficient flexibility to support the addition of other agencies and organisations that wish to utilise this network, with the introduction of appropriate investment.
16. The strategy to deliver enhanced communications for Emergency Services agencies, positions land mobile radio as the foundation of core communications. This aligns with peer organisations globally who are planning to transition to mission critical cellular networks circa 2030.

s9(2)(b)(ii), s9(2)(j)

17. s9(2)(b)(ii), s9(2)(j)

18. s9(2)(b)(ii), s9(2)(j)

19. s9(2)(b)(ii), s9(2)(j)

Priority Cellular – Hourua

20. The Vodafone-Spark joint venture, Hourua, will deliver a range of cellular-based services within scope to provide greater voice resilience, via nationwide multi-network roaming; Quality of Service, priority and pre-emption providing Emergency Services staff with priority access to commercial cellular networks and development of data-rich applications that enable Emergency Services to have enhanced data based interactions.
21. The cellular network will provide a platform for enabling data enhanced decisions and outcomes and provide an additional layer of resilience to support the land mobile radio network.
22. The cost to harden the cellular network for all voice and data interactions and the maturity of mission critical cellular technologies mean a cellular network is not suitable as a network of last resort.

Commercial Cellular – Spark and Vodafone

23. Hourua provides the current Emergency Services products through the existing retailers being Spark or Vodafone. These products can be included in the existing rate card of services being made available with no impact to the current contracts.

Key risks and issues as we look towards implementation

24. Global supply and shipping issues resulting from COVID-19 may cause unmanageable delays in sourcing materials to build and commission the network infrastructure. This may impact network development timeframes once a contract has been awarded if hardware is required from overseas and/or unable to move efficiently through national and/or international ports.
25. If implementation of and transition to the new network is delayed for a period of more than 2 years beyond 2023, there may be additional cost pressure funding required to support the existing network for longer until transition is complete.
26. If assumptions around re-use and the fitness for purpose of existing radio sites (to be surveyed the first quarter of 2022) are incorrect, there is a risk that the costs and time to implement the land mobile radio network will increase.

Stakeholder engagement

27. The Programme continues to engage with a wide range of stakeholders as we progress towards finalising contract negotiations and develop our Implementation Business Case for approval, including the Treasury, Public Service Commission, National Emergency Management Agency, and the Government Chief Digital Officer.

Wider sector engagement

28. Other agencies that sit within the Emergency Services sector or support the sector have already indicated they are keen to engage with NGCC in the future to further leverage the investment that NGCC will deliver initially for the four core agencies.

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29. NGCC's immediate focus will be to deliver the core network infrastructure for the key four agencies, whilst maintaining a future focus lens to ensure what's build has the potential to service other agencies across the sector in the future.

Assurance Activities

30. Programme assurance activities are underway over the next few months to provide independent assurance that appropriate activities have been taken to ensure integrity of the programmes' activities and processes, governance arrangements and, risk and issue management:
- a. Independent Quality Assurance Review – Ernst and Young – 10 January 2022
 - b. Treasury Final Business Case Clinic – 3 February 2022
 - c. Gateway Review – week beginning 28 February 2022

Next Steps

31. **Finalisation of the Tait-Kordia contract negotiations** - Final components of the contract negotiation process with Tait/Kordia New Zealand will be concluded in the first quarter of 2022, in preparation for approval in April 2022.
32. **Confirmation of Priority Cellular offering** - The Programme will continue to negotiate with Hourua to agree a way forward for priority cellular services (roaming and priority access and deployable coverage).
33. **Finalisation of Implementation Business Case** - Work is underway to draft the ImBC. Once it has undergone stakeholder consultation the final Implementation Business Case will be provided to the NGCC Oversight Ministers (or agreed decision-making body) for approval in April 2022.
34. Following the necessary Ministerial approvals, the implementation of the solution will begin from 1 July 2022.

s9(2)(a)

Rob Fyfe CNZM
Chair
NGCC Executive Governance Board

First contact	Rob Fyfe Chair, NGCC Executive Governance Board	s9(2)(a)
Second contact	Steve Ferguson Director, NGCC Lead Entity NGCC Senior Responsible Owner	s9(2)(a)