WAKA KOTAHI NZ TRANSPORT AGENCY

Will be considered to be released with redactions

MINISTERIAL BRIEFING NOTE

Subject	Ohmio Autonomous Vehicle Demonstration (Hoe ki angitū – Innovation Fund Recipient)
Date	26 January 2023
Briefing number	BRI-2691

Contact(s) for telephone discussion (if required)				
Name	**Position**	**Direct line**	**Cell phone**	**1st contact**
Deborah Hume	National Manager Multi-modal and Innovation	Section 9(2)(a)		✓
Lee McKenzie	Manager Future Transport		Section 9(2)(a)	

Action taken by Office of the Minister

- ☐ **Noted**
- ☐ **Seen by Minister**
- ☐ **Agreed**
- ☐ **Feedback provided**
- ☐ **Forwarded to**
- ☐ **Needs change [please specify]**
- ☐ **Withdrawn**
- ☐ **Overtaken by events**

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26 January 2023

Hon Michael Wood – Minister of Transport

Ohmio Autonomous Vehicle Demonstration (Hoe ki angitū – Innovation Fund Recipient)

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Purpose

1. This briefing provides you with information about the Ohmio autonomous shuttle project that has received funding from Hoe ki angitū - Innovation Fund. You will be hosting a media stand-up to open a public demonstration of this autonomous vehicle on Monday, 13 February 2023 from 10.00am to10.45am.

Project funding and costs

2. Ohmio was awarded $151,111 in funding from the first round of Hoe ki angitū- Innovation Fund.

Project features

3. Key features of the Ohmio project include:

    - Waka Kotahi NZ Transport Agency and Ohmio working in partnership to develop a new testing and approval process that is better able to handle novel vehicles, including autonomous vehicles. The new process will enable Ohmio to operate its Autonomous Vehicle (AV) shuttle safely and legally on New Zealand roads.

    - The outputs from the project will be a new approvals process under the existing exemptions powers in the Land Transport Act 1998. The work will contribute to the development of the long-term regulatory framework that would enable an autonomous on-demand first-last-mile public transport solution to operate in New Zealand. Currently, such a framework does not exist.

    - To achieve the project's outcomes, Waka Kotahi will work in partnership with Ohmio and other stakeholders as necessary, to establish performance-based requirements for the safe operation of the AV on public roads. Ohmio will use part of the innovation funding to modify the AV to meet these requirements. A large proportion of the funding will cover the costs for the time needed to work with Waka Kotahi to develop, test and refine the new performance-based requirements and then trial its vehicle on a public road at the conclusion of the project.

Project benefits

4. Key benefits of the Ohmio AV shuttle project include:

    - Once a new framework is developed for enabling AV shuttles and other novel vehicles to operate safely on public roads, there is significant potential for AV shuttles (which can transport up to 15 people) to play a role in our public transport system, particularly as a

solution to the first-last-mile gap. They would provide another option for people to travel to and from public transport without the need for a private vehicle.

- The Emissions Reduction Plan sets a target for New Zealand to reduce the number of kilometres travelled by our light vehicle fleet by 20 percent by 2035. As fully electric vehicles, the Ohmio AV shuttles provide a low emission alternative to private motor vehicles for the first-last-mile.

- In developing Hoe ki angitū, it was found that navigating government regulations can be a significant barrier to innovation, especially for small companies. As a result, one of the objectives of Hoe ki angitū is to "Accelerate innovation by breaking down barriers and providing support across the transportation ecosystem". This project directly meets that objective.

Project context

5. Ohmio is one of 24 recipients awarded funding through the first round of the Hoe ki angitū – Innovation Fund.

6. Launched in June 2022, Hoe ki angitū makes available $15 million over two years to help private and non-government organisations develop and accelerate innovative solutions to challenges facing the land transport system.

7. A total of $4.2 million was awarded in the first funding round to applicants developing innovative solutions to three specific challenges:

    - Accelerating the use of recycled materials and sustainable practices in the construction, operation, and maintenance of transport infrastructure.

    - Integrating low emission first-last-mile travel solutions into the public transport system.

    - Providing under-served communities with greater access to safer low emission transport options other than private motor vehicles.

8. The second funding round for Hoe ki angitū was announced on 1 December 2022. It invites solutions to three different challenges:

    - How can we make roadworks safer and smarter to protect workers and other users of the road network?

    - How can we reduce the impact of our rapidly growing urban freight task and door-to-door delivery on our urban environments and people?

    - How can we improve the safe and efficient movement of people and goods that are using different modes of transport in the same space, by making better use of new technologies and data?

9. Applications for round two will open on Monday, 20 February 2023 and close on Friday, 24 March 2023.

Key messages

10. Key messages of the Ohmio AV project include:

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- Through the funding awarded via Hoe ki angitū, Waka Kotahi is working with Ohmio to develop a new testing and approval process better able to handle novel vehicles, including autonomous vehicles. The new process will enable Ohmio to operate its AV shuttle safely and legally on New Zealand roads.

- There is huge potential for autonomous shuttles to form part of New Zealand's public transport system, making public transport a more viable option for New Zealanders and reducing car use and vehicle emissions.

- Autonomous vehicles like the Ohmio AV shuttle could provide an innovative low emission alternative to private cars for New Zealanders to get to and from public transport, helping to bridge what is known as the first-last-mile gap.

- The first-last-mile gap is a known barrier to people using public and shared transport options.

- This project is a great example of the public and private sectors working together to harness innovative technologies that will ultimately create more transport options for New Zealanders.

- Ohmio are a New Zealand company. They are the only producer of autonomous public transport in the southern hemisphere and have already commenced deployment of these vehicles in the Korean city of Sejong.

- It's exciting that this event allows the public the opportunity to interact with the Ohmio autonomous shuttle and try out this innovative technology for themselves.

11. Key messages about Hoe ki angitū – Innovation Fund include:

- Round one of Hoe ki angitū asked applicants to respond to three challenges:

    - Accelerating the use of recycled materials and sustainable practices in the construction, operation and maintenance of transport infrastructure.

    - Integrating low emission first-last-mile travel solutions into the public transport system.

    - Providing under-served communities with greater access to safer low emission transport options other than the private motor vehicle.

- The funding has been awarded to a wide range of projects run by small community groups, iwi, and start-up technology companies, as well as large research organisations. The funding ranges from $30,000 to $500,000.

- Hoe ki angitū – Innovation Fund is supporting the private and non-government sectors to develop and accelerate innovative solutions that will help to solve some of our biggest transport challenges. It provides $15 million in funding over two years.

- Round two was announced earlier in December 2022. It invites innovative solutions to three challenges geared towards making roadworks safer and smarter, reducing the impact of increased urban freight and improving the safe and efficient movement of people and goods.

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- Applications for round two will open on 20 February 2023 and will close on 24 March 2023.

Other matters

12. This event on the waterfront allows the public the opportunity ride in the AV. A survey will be conducted to gather their views before and after their ride. Once all the testing requirements are met, the intention is to host a demonstration of the AV shuttle on a public road.

13. Hosting an event in Wellington will also allow government regulators and policymakers including those from Waka Kotahi, Te Manatū Waka and other organisations such as local government to see the shuttle in operation.

You have received the following briefings on this subject:

1. BRI-2628 - Announcement of Hoe ki angitū Innovation Fund Grant Recipients, 26 October 2022

Ministerial event launch

14. The event will be located on the Wellington waterfront, Cable Street, Circa Theatre/Te Papa entrance.

15. The autonomous vehicle demonstration event is scheduled to take place over two days from Monday, 13 February 2023 to Tuesday, 14 February 2023. The vehicle will be operating for several hours each day driving a short course, with the public able to take a ride on the waterfront.

16. You are scheduled to attend the event from 10am to10.45am on Monday, 13 February 2023 to open the event and host a media stand-up.

17. Key media are being invited to the event opening. You will provide a short statement to media, followed by Mohammed Hikmet, Executive Chairman of Ohmio. on matters relating to the vehicle. Following this, the Minister will answer journalists' questions supported by Waka Kotahi staff (Deborah Hume, Manager Multi-modal and Innovation, Lee McKenzie, Manager Future Transport, and Delaney Myers, Manager Public Transport) on operational matters and Mohammed Hikmet on matters related to Ohmio and the autonomous vehicle.

18. Waka Kotahi invites you to take a short ride the Ohmio autonomous vehicle with Ohmio and Waka Kotahi representatives, completing the short course set up on the waterfront.

Key attendees at the event

19. The key attendees invited for the vehicle demonstration include the following:

    - Mohammed Hikmet, Executive Chairman, Ohmio Automotion
    - Dean Zabrieszach, CEO, Ohmio Automotion
    - Mahmood Hikmet, Head of Research and Development, Ohmio Automotion
    - Deborah Hume, National Manager, Multi-Modal and Innovation, Waka Kotahi NZ Transport Agency
    - Emma Speight, Director Regional Relationships, Greater Wellington and Top of the South

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- Lee McKenzie, Manager Future Transport, Waka Kotahi NZ Transport Agency
- Delaney Myers, Manager Public Transport, Waka Kotahi NZ Transport Agency
- Representative from Te Manatū Waka Ministry of Transport

Media

20. We expect some national media interest.

21. The announcement of the recipients of Hoe ki angitū was covered by several national media outlets earlier in December 2022 including RNZ National and Stuff, though these stories did not focus on the Ohmio AV project.

22. An article on Newsroom in October 2022: *'Wait and see' approach to self-driving cars* presented regulation as a barrier to innovations such as autonomous vehicles and featured comment from Mahmood Hikmet, Ohmio Head of Research and Development.

It is recommended that you:

1. **Note** the contents of this briefing.

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Deborah Hume

National Manager, Multimodal and Innovation

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Hon Michael Wood, Minister of Transport

Date: 2023

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