

AGENDA

PROJECT IREX – INTERISLANDER AND FERRY REPLACEMENT

**Wednesday, 9 June 2021
8:00am – 8:40am
7.6 Beehive Executive Wing**

KiwiRail Attendees:

Sue McCormack, Acting Chair
Greg Miller, Group Chief Executive
Angus Hodgson, Manager Policy and Shareholder

Items		Lead
1.	Project iReX Presentation (10 minutes) <ul style="list-style-type: none">• Project iReX is of value to New Zealand, KiwiRail and the ports• Total investment programme \$1.450b• Decisions sought by 28 June 2021• Additional investment sought• Retained insurance proceeds sought• Major transaction approval sought	KiwiRail
2.	Questions and Answers (25 minutes)	All
3.	Next steps (5 minutes)	Ministers

Attachments:

Ministerial Briefing – Project iReX
Detailed Business Case – Interislander Ferries and Terminals

Ministerial Briefing

To	Hon Grant Robertson, Minister of Finance and Infrastructure Hon Michael Wood, Minister of Transport Hon Dr David Clark, Minister for State Owned Enterprises	3 June 2021
Cc	Sue McCormack, KiwiRail Acting Chair Ngā āpiha o Te Tai Ōhanga o Te Manatū Waka o Te Waihanga	
From	Greg Miller, KiwiRail Group Chief Executive	

PROJECT IREX – INTERISLANDER AND FERRY REPLACEMENT

PURPOSE

1. This briefing seeks agreement to progress the renewal of the Interislander ferry fleet and build resilience into operational Picton and Wellington ferry terminals. This programme is known as Project iReX.
2. This is a response to your 8 April 2021 request to consider an updated detailed business case before further investment is released. The briefing is also intended to support the discussion with you on 9 June 2021.
3. In line with advice from the Treasury, KiwiRail seeks a decision (and a related shareholder resolution) before the letter of intent with the shipyard expires on 30 June 2021.

BACKGROUND

4. The Cook Strait crossing is a strategic national asset, extending State Highway One and the Main Trunk Railway between the North and South islands, and is a vital part of New Zealand's transport and tourism infrastructure.
5. On average each year, the Interislander operates around 3,800 services, transports about 850,000 passengers, 250,000 cars and up to \$14 billion worth of freight, and these numbers are forecast to increase.
6. The crossing is, however, at risk. Project iReX addresses that risk through a once-in-a-generation renewal of critical assets.
7. The current Interislander ships are nearing the end of their working lives and replacement is time critical. As the fleet ages, the ferries struggle to meet modern safety requirements, maintenance costs rise, carbon emissions are high, crew conditions are sub-standard, and capacity for growth and increased profitability is not met. KiwiRail entered a letter of intent with Hyundai Mipo Dockyard (HMD) in December 2020 to support new ferries arriving in 2025 and 2026. This expires on 30 June 2021.
8. KiwiRail has completed negotiating a shipyard contract that in the current disrupted market is very favourable in terms of price, technical specification, and legal and commercial terms.
9. The terminal infrastructure in Wellington and Picton is also in need of substantial upgrades to bring it up to modern safety standards and to be ready for new ferries. These connections are essential for New Zealand supply chains and are important to the Wellington and Marlborough economies.
10. As shareholder, the Crown expects improved commercial performance from KiwiRail. The new fleet will increase freight and passenger capacity in line with market growth, improve service

reliability, reduce operating and maintenance costs, and align the rail and ferry operations. The rail-enabled ferries allow an increased rail freight share which improves commercial performance and reduces overall transport emissions.

11. The Government has also established a zero-carbon objective by 2050. The new Interislander fleet will reduce the carbon emissions by 40%. The ferries will use hybrid technology to run on diesel and electrical power generated by batteries and shore power (the latter powering the ship for approximately 30% of the three-hour operation). The ferries' design and engines are future proofed in that the engines can accommodate alternative fuel sources, such as hydrogen, as they become available and the capacity of the batteries can increase.
12. The detailed business case confirms the best investment for KiwiRail and for New Zealand is:
 - a. Two large, rail-enabled ferries capable of meeting forecast demand and contributing to the national rail freight network.
 - b. Wellington and Picton port infrastructure developed in stages, meeting seismic and national resilience requirements, and capable of handling one-hour ferry turnaround operations at peak.
13. This is the last stage of an extensive multi-year process to enable KiwiRail to commit to new ships and terminals. KiwiRail has submitted four business cases for Ministers and officials to review on the Project, and the Crown has to date approved total equity investment of \$435 million. Each business case has reflected an improved quality of information.
14. The most recent update reflects the latest information following the final price negotiation for the ships, and a value engineering exercise to refine the scope of works at each port and reduce the costs associated with the investment, without compromising resilience and operational requirements. It also reflects updated revenue projections in line with the company's ten-year financial modelling, which supported a decision to increase debt levels.

RECOMMENDATION

15. Subject to any decisions taken by Cabinet and prior to the 30 June 2021 expiry of the letter of intent between KiwiRail and HMD, the KiwiRail Board recommend you:
 - a. **Approve** the Project iReX detailed business case supporting a total investment programme of \$1.450 billion delivering renewed infrastructure by 2025 and new ferries by 2026.
 - b. **Execute** the 'major transaction' special resolution under section 129 of the Companies Act 1993 (shareholding Ministers only).
 - c. **Approve** the appropriation of \$257 million in equity for KiwiRail to support Project iReX, including \$132 million in retained and repurposed Main North Line insurance proceeds, lifting the total Crown commitment to \$692 million.
16. In respect of specific requests in your 8 April 2021 letter, we recommend you **note**:
 - a. *Consider less capital intensive ship options:* The net-present value (NPV) of procuring two large rail-enabled ferries is \$207 million, \$123 million more than two medium ships (which would deliver less revenue and not meet freight market demand) and \$343 million more than three medium ships (which would be costlier to procure and operate).
 - b. *Confirm the port contributions:* The value engineering exercise has determined the contribution of the ports to deliver their assets to be [37] and [38]
 - c. *Consider further debt:* KiwiRail analysed options including \$320 million, \$350 million, \$380 million, and \$400 million. The Board has resolved to take on \$350 million in debt for the Project (an increase of \$30 million) which relies on increased earnings being met with sufficient headroom when the debt, and therefore annual debt servicing, is at its highest.

- d. *Consider external and whole-of-life costs:* External costs regarding Project iReX relate to land transport investments which have been included in Regional Land Transport Plans as high priorities. A business case has been developed jointly with Waka Kotahi for roading investments in Picton and the required costs incorporated. Initial modelling for Wellington has been completed for the impact of the new ships with minimal investment required. Longer term Wellington investments will be required but will be the subject of any multi-user ferry precinct business case developed by the Future Port Forum (i.e. these should be considered separately from Project iReX).

RISKS

17. In taking the decision to approve the release of the detailed business case, the Board identified specific risks:

- a. *Wellington infrastructure consents:* We do not have resource consent for the works therefore there is a risk consent cannot be obtained at all or in time to be ready for the ships, or that consent conditions impose punitive costs. To mitigate this risk, KiwiRail will seek to submit the consent through the fast-track consenting process and lodge by December 2021. We will continue to advocate for consenting infrastructure required for Day 1 operations (not the broader Future Ports Forum plans for a multi-user ferry precinct at Kaiwharawhara which can be addressed separately). Independent and external legal, resource management and engineering advice has identified the evidence required to support consent and likely conditions. They concluded that this is a “consentable” project.

[38]

- b. *Wellington commercial negotiations:* We do not have a signed development agreement therefore there is a risk that commercial agreements cannot be settled in respect of an acceptable return, development accountabilities and capital contributions. [38]

[38]

- c. *Picton commercial negotiations:* We do not have a signed development agreement therefore there is a risk that commercial agreements cannot be settled [38]

[38]

18. In respect of these risks, we note that the Interislander is the main (and long established) customer of both ports and that commercial incentives are in play for the ports, KiwiRail and the owners of each company to reach agreement. Negotiations in respect of both ports are now at a point of specific detail with strong agreement on the need to proceed with the investments. We therefore have confidence that commercial agreement will be reached.

19. [33]

TOTAL INVESTMENT PROGRAMME

20. The detailed business case has confirmed a total investment programme of \$1.450 billion. This relies on a KiwiRail component comprising \$692 million in Crown equity investment, \$350 million in ship debt financing, [37] in fleet sale proceeds, and a [37] enterprise stretch to address any residual risk. The other components are contributions from the ports totalling [37]. The Project carries a [37].
21. The \$692 million from the Crown comprises the existing commitment of \$435 million (of which \$52m has already been invested in KiwiRail for the Project) and an additional contribution of \$257 million sought through this paper. Of this, we are requesting approval to retain \$132 million in surplus Main North Line insurance proceeds¹ to reduce the Crown's capital allowance impact to \$125 million. This will be the Crown's final commitment in Project iReX.
22. This investment will provide the KiwiRail Board with sufficient confidence to approve KiwiRail entering the ship build contract, lending agreements and other material contracts. This investment will enable the infrastructure projects to proceed.

¹ \$132m represents the surplus cash held by KiwiRail after deducting the cost of re-instating the Main North Line following the Kaikōura earthquake from the aggregate funding received through (a) KiwiRail's final insurance settlement; and (b) Crown funding for earthquake reinstatement.

23. The investment costs and funding arrangements can be understood as follows:

ITEM	NZD
KiwiRail investment	
Purchase of new ships	[37]
Picton Terminal – KiwiRail assets	
Wellington Terminal – KiwiRail assets	
Programme costs	
Total KiwiRail investment	\$1,140m
Funding identified	
Ship financing	\$350m
Crown funding committed	\$435m
Sale of existing fleet	[37]
Enterprise stretch	
Total funding identified	\$883m
Funding sought	
	\$257m
Main North Line insurance proceeds	\$132m
Net funding sought (impact on Crown capital allowance)	\$125m
Other party investments	
Port Marlborough for assets for KiwiRail benefit	[37]
CentrePort for assets for KiwiRail benefit	
Other parties	
Total other party investments	
Total programme costs	\$1,450m
Total contingencies and escalation included	[37]

MAJOR TRANSACTION

24. The value of the KiwiRail transactions alone (\$1.140 billion), including both the ship build programme and KiwiRail's portside assets, exceeds 50% of the KiwiRail total asset value (\$1.771 billion, audited 30 June 2020). Allowing for the long-term lease commitments that KiwiRail will enter for use of the new wharf facilities sees that threshold exceeded further still. The KiwiRail Board therefore consider the entry of material contracts for the Project to be a major transaction under the Companies Act 1993, requiring approval by shareholders via special resolution. KiwiRail seeks agreement from shareholding Ministers to approve and sign the special resolution before any material contracts for the Project are entered.
25. The key transactions are described in a special resolution. They include the ship build contract, lending agreements, development of portside assets, and long-term leases of new wharf facilities.
26. Approval of the special resolution by the shareholding Ministers will not constitute the Crown (or Ministers) assuming any liability owed to any third party in connection with the approved transactions.
27. We have provided Commercial Performance officials at the Treasury with a draft special resolution for review. We anticipate that shareholding Ministers will be provided with the final for execution by the Treasury following their review.

TEN YEAR MODEL IMPLICATIONS

28. KiwiRail has undertaken a detailed review of its 10-year financial forecasts at an enterprise level to underpin our selection of the appropriate level of external debt to finance the ship procurement. This covers the period during which the vessels will be constructed and the first five years post-delivery. Appropriate consideration and allowance in these forecasts have been made for potential downside scenarios (e.g. significant business disruption due to weather related events or loss of a major freight contract). KiwiRail is satisfied that it has the ability to withstand these events and maintain the ability to service both annual debt obligations throughout this period and generate sufficient cash flow to begin wholly funding ongoing above rail core capital requirements within the next five years, without reliance on Crown equity funding. This 10-year model has been reviewed by KiwiRail's senior executive team and Board.
29. Treasury has been provided with a summary of the ten-year model implications.

SHIP BUILD CONTRACT

30. KiwiRail entered a letter of intent with HMD in December 2020. This followed a competitive tender process which found HMD offered the highest quality ship build and lowest whole-of-life costs. The letter of intent has secured the build slots needed to deliver the new ships on time and a competitive price that is unlikely to be secured if the process were restarted now. The letter expires on 30 June 2021.
31. The ship programme is valued at [37] representing [37] of the total Project iReX cost. Of that, [37] is the cost of the ship build including contingency and [37] in FX headroom following hedging.
32. The decisions sought through this paper ensures Project iReX can proceed with confidence. They enable the ship build contracts to be entered before the letter of intent expires on 30 June 2021. If this cannot be met, the cost to procure the same ships would increase by at least [37] due to steel plate commodity price increases, with additional costs including a potential ship lease if an existing vessel fails or loses 'safety of life at sea' SOLAS compliance, supply obsolescence of materials further impacting prices and market share loss. The cost to procure different ships would be considerably higher as the market engagement process would start again. This risks compromising arrival times and impacting supply chains and services.

SHIP OPTIONS ANALYSIS

33. KiwiRail revisited 2019 analysis supporting the decision to procure two large rail-enabled ferries to confirm whether this remains an appropriate investment. The 2019 analysis supported the Crown's decision as shareholder to invest \$435 million in Project iReX and enabled KiwiRail to complete an international competitive tender process which concluded in December 2020.
34. The 2021 assessment found two large rail-enabled ferries presents a net-present value (NPV) of \$207 million. This exceeds the \$84 million NPV for two medium rail-enabled ships and the -\$136 million NPV for three medium-rail enabled ships. The lower NPV for these options are due to two medium ferries delivering less revenue and not meeting projected market growth and three medium ferries being costlier to procure and operate.
35. Two large rail-enabled ferries are the right investment decision for KiwiRail and for New Zealand. This will enable an efficient operation that is capable of meeting projected freight, vehicle, and passenger demand, can support mode shift to rail by aligning the ferry and rail operations, and is less capital intensive than procuring three medium ships. Additionally, KiwiRail has confirmed that the existing ship price presents high value for money given steel plate commodity prices have increased by 10% since December 2020. Any delay beyond the letter of intent would add at least [37] to the cost of procurement, while a change to a different size or ship specification would result in the process commencing again.
36. The NPV increase to \$207 million is due to:
 - a. KiwiRail confirmed its updated enterprise revenue projections in May 2021 to support its long-term financial and commercial modelling. This found that the Interislander business is capable of increased total revenue [37]
 - b. KiwiRail found that the operating expenses to achieve higher earnings also increased by [37] which presented a net increase in the EBITDA position of [37]
 - c. KiwiRail delivered reduced capital expenditure requirements due to the value engineering exercise undertaken since March 2021 [37]

- d. KiwiRail adjusted the earnings multiplier to be aligned to the likely scenario, as the previous assessments assumed a conservative scenario.
37. To put it simply, the preferred ship procurement option presents the best investment decision as the return on the asset far exceeds the costs of procurement, maintenance and operating. The December 2020 price presents significant value for money compared with current market rates.
38. The net-present value of the three lead options are as follows:

Net Present Value (NPV) Breakdown	NZD (\$m)		
	2 Large Rail Ships	2 Medium Rail Ships	3 Medium Rail Ships
Revenue	[37]		
Operating expenses			
EBITDA			
Programme capital expenditure			
Future BAU capital expenditure			
Ship sale proceeds			
Total Capital Expenditure			
Net Present Value (5% discount rate)	207	84	-136
Difference from 2 Large Rail Ships	-	-123	-343

39. We note that officials have, this week, questioned whether a benefit-cost ratio (BCR) could be provided. KiwiRail has not undertaken BCR analysis as this is typically done for non-commercial investment decisions, such as roads. NPV is the selected assessment tool as it measures the value of revenue from an asset less the cost to procure and operate the asset. The NPV for this investment is significant and is therefore in the commercial interest of the company and the Crown as shareholder. This commercial value will be supplemented by broader economic, social, and environmental benefits including employment, supply chain certainty, transport network utilisation, resilience, and reduced emissions.

PORT INFRASTRUCTURE

40. KiwiRail has led a value engineering process and engaged the ports in Wellington and Picton. The ports have accepted the need to deliver affordable investment solutions in both centres, recognising the critical need to renew the infrastructure to maintain the economic connection between the North and South Islands.
41. This exercise has confirmed an infrastructure delivery time that provides approximately 200 days of completed infrastructure before ship arrival in Wellington and approximately 80 days in Picton.
42. KiwiRail has confidence it will reach commercial agreements with the ports to deliver the infrastructure. We note that all parties depend on one another to achieve commercial return from their assets.

Port of Marlborough – Picton Port

43. We are confident that the Port of Marlborough [37] . The investments have already received consenting through the fast-track consenting process. Picton will receive a new wharf, linkspan, rail and road marshalling, new terminal-ship connection, roading upgrades and preserved future growth options. This investment will also secure the Interislander as a long-term tenant and, in so doing, secure the future of Picton as the key land and maritime transport gateway of the South Island. Alternative options, such as Clifford Bay, have been discounted due to prohibitive costs. This decision is beneficial to the Marlborough economy.

44. The Port has requested an annual return with an asset beta of [37]. An asset beta measures the market risk of a company without debt. The Commerce Commission establishes appropriate asset beta ranges and their methodology would suggest a 0.5 asset beta is more appropriate. The Port is seeking a return on its [37] investment through an initial fee of [37]. The Commerce Commission methodology suggests a more appropriate initial fee would be [37].
45. [37] and [38]
- a. [37] and [38]
- b.

CentrePort Limited – Wellington Port

46. [37] and [38] Wellington will receive a new wharf, terminal building, linkspan, rail and road marshalling, utilise the existing road connection, preserve future growth options, and alignment with the master plan for a multi-user ferry precinct.
47. [37] and [38]
- 48.
49. KiwiRail is a member of the Future Ports Forum in Wellington and is advocating the need to lodge consents through the fast-track consent process by December 2021. This timeline is required to ensure the infrastructure is operational when the ships arrive. CentrePort's preference is to seek consents for the long-term Future Ports Forum investments, however KiwiRail is concerned that this may delay the process due to its broader impacts. Instead, KiwiRail has recommended that we lodge consents for the ferry terminal investments only to separate these processes and streamline the immediate infrastructure needs.

DEBT FINANCING

50. KiwiRail can finance a significant proportion of the ship procurement. This is due to the company approaching a self-sustaining above rail operation, an increased earnings profile, and support from the Crown and other parties for the balance of the Project.
51. KiwiRail analysed options including \$320 million, \$350 million, \$380 million, and \$400 million. The Board has resolved to take on \$350 million in debt (an increase of \$30 million above the debt level identified through Budget 2021) which relies on increased earnings being met with sufficient headroom when the debt servicing is at its highest. [38]
52. Each debt level was modelled based on the terms offered from the lending syndicate against the financial forecasts and benchmarked against forward looking debt sizing measures.
53. The Debt Service Cover Ratio (DSCR) is the most relevant debt sizing measure when considering the final debt quantum. DSCR measures annual net available cash flows divided by annual total

58. In the likely scenario, the Interislander market share increases [37] This is achieved by meeting the projected annual freight growth of 1.4% [37] and [38]

. In simple terms, the overall freight pie gets larger and the Interislander share increases in large part because mode shift to rail can be achieved.

59. KiwiRail's market share could be significantly greater if we were procuring three large ships. We are not. If this were needed, the letter of intent secures an option for a third ship at the same price.
60. KiwiRail is supportive of competitive markets and is working to the expectations of the shareholder to improve its commercial return by achieving mode shift to rail. Project iReX is a necessary component to achieving mode shift.

GOVERNANCE

61. KiwiRail established an iReX Programme Office to manage procurement activities for the ship and terminal workstreams. While procurement of ships is not a regular occurrence, KiwiRail is experienced in large-scale infrastructure projects, including the award-winning Main North Line reinstatement, and large-scale procurement through rolling stock renewals.
62. These disciplines are transferable provided the differences are understood and suitable specialist advice is obtained. KiwiRail obtained specialist services to engage the market for the ship procurement and to provide quality assurance regarding the infrastructure value engineering exercise.
63. The KiwiRail Board has been heavily involved in Project iReX. They receive regular reporting on programme performance, approve all major transactions, approve all strategic procurement plans, approve the detailed business case, and are responsible for approving all terms of supply contracts.
64. The Board is involved at a detailed level in Project iReX through the:
- Board Capital Committee* – responsible for recommendations to the Board on whether to accept or reject capital investment proposals based on detailed capital project and asset management reporting. The Capital Committee has general powers of inquiry into any aspect of Programme delivery including commissioning audit and assurance reports. This Committee is chaired by Noel Coom with senior executive experience in international shipping and rail industries.
 - Board Risk Assurance and Audit Committee* – responsible for assessing management recommendations for the financing of the Project, including related strategies for FX and interest rate hedging. This Committee is chaired by Bruce Wattie, a former PriceWaterhouseCooper partner with significant corporate finance expertise.
 - iReX Programme Governance Board* – responsible for strategic direction and monitoring of the iReX programme, including key achievements against plan, key future deliverables, programme schedule, major risks, programme actual financial spend and forecast. The PGB is chaired by former KiwiRail director Paul Harper who brings significant expertise in the shipping industry, with input by former KiwiRail director John Leuchars who brings engineering expertise.

EXTERNAL ADVISORS

65. Project iReX has benefited from independent advice and assessment along with in-house expertise. The value engineering exercise involved more than 15,000 hours of engineering and quality assurance expertise.
66. The financial and economic model was developed and internally assured by Deloitte and then independently reviewed by Ernst & Young to confirm its structure was effective and the integrity of its calculations. Economic advice has been received to support the modelling of Port charges aligned to the Commerce Commission methodology.
67. The ship build programme has benefited from a range of international experts in design and fitout, market intelligence and legal through international naval architects and ships interior

designers (from Denmark), ships brokers (from Switzerland) and international maritime lawyers (from the UK).

68. The infrastructure and construction activity has involved engineering, architectural, geo technical, cost estimation, traffic modelling and other expertise to establish the design, cost estimates, appropriate contingencies, and construction timeline.
69. The debt financing process has gone through several stages. Ernst & Young have been advisor for KiwiRail management through the debt raising process. A capital structure evaluation was undertaken to determine an appropriate debt level. A market sounding to gauge interest and options for funding the new vessels prior to a more targeted finance request-for-proposal was released to align with the signing of the letter of intent with HMD. In addition to Ernst & Young, Mafic Partners completed a peer review of the RFP process and responses to provide confidence that all reasonable financing options had been explored by KiwiRail. The detailed business case provides a table of all external advisors involved in Project iReX.

CONCLUSION

70. Project iReX represents value to KiwiRail and to New Zealand. The Board is prepared to enter contracts but requests confidence from the shareholder through an additional investment of \$257 million (of which \$132 million is intended as retained insurance proceeds). In return, the Crown's investment will deliver KiwiRail assets with an NPV of \$207 million.
71. In 2025 and 2026, new Interislander ferries will arrive to renewed, resilient and operable ports in Wellington and Picton. These ferries and port assets will ensure the Cook Strait connection contributes to secure supply chains for New Zealand and the economic growth of the Wellington and Marlborough regions. The flow of freight and people will continue with projected growth in demand met.
72. The KiwiRail Board has recommended that Project iReX proceed with further and final support from the Crown as shareholder.