

Reference: 20150008

19 February 2015

Mr Brendon Mills thekiwiurbanexplorer@gmail.com fyi-request-2405-aec83e2c@requests.fyi.org.nz

Dear Mr Mills

Thank you for your Official Information Act request, received on 15 January 2015. You originally requested the following:

"Could you please forward me electronic (pdf) copies of any and all documents discussing the closing down/scrapping of New Zealand's railway network going back to 1990."

Following some correspondence with Treasury, you subsequently refined your request on 24 January 2015. Your refined request was for:

"Any and all advice to relevant Ministers investigating the closure/running down of New Zealand's railway network over the past 5 years."

# Information Being Released

Please find enclosed the following documents:

Item	Date	Document Description	Decision
1.	1 February 2010	Treasury Report: KiwiRail Group (KRG) Ltd: Long Term Strategy	Release in part

We propose to release the relevant parts only of the document listed in the above table, subject to information being withheld under the following section of the Official Information Act as applicable:

 personal contact details of officials, under section 9(2)(a) – to protect the privacy of natural persons, including deceased people,

> 1 The Terrace PO Box 3724 Wellington 6140 New Zealand tel. 64-4-472 2733 fax. 64-4-473 0982 www.treasury.govt.nz

I have decided to release the document listed above in full. Please note that this document is five years old and as a result most of the information included in it is now out of date.

### Information to be Withheld

There are additional documents covered by your request that I have decided to withhold in full under the following section of the Official Information Act, as applicable:

 section 9(2)(f)(iv) – to maintain the current constitutional conventions protecting the confidentiality of advice tendered by Ministers and officials.

In making my decision, I have considered the public interest considerations in section 9(1) of the Official Information Act.

This fully covers the information you requested. You have the right to ask the Ombudsman to investigate and review my decision.

Yours sincerely

Fiona Chan

Manager, Governance and Performance

# ORIGINAL



Treasury Repo	rt: KiwiRail G	roup (KRG) I	Ltd: Long	Term Strateg	У
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Date:	1 February 2010		Report No	72010/9	8
Action Sought	Actio	n Sought		Deadline	
Minister of Finance (Hon Bill English)	Note	recommendations	prior to	3 <sup>rd</sup> February 2010	
Minister for State Own Enterprises	ed Note meeti	recommendations ng 3 <sup>rd</sup> February 20	prior to	3 <sup>rd</sup> February 2010	
(Hon Simon Power) 'Associate Minister of I (Hon Steven Joyce)	Finance Note meeti	recommendations	s prior to 010	3 <sup>rd</sup> February 2010	
Contact for Tele	phone Discuss	ion (if require	•	lephone	1st Contact
Paul Goodhead	Senior Advisor, Sec	tor Monitoring	890 7215		. 1
James Cunningham	Sector Manager, Se	ector Monitoring	474 8222	(Withheld under 9(2)	(P))
Minister of Fina	nce's Office Ac	tions (if requi	red)		
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None.		•			
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Enclosure: No		08 FEB 2	96.55.574		

1 February 2010

Treasury Report: KiwiRail Group Ltd: Long term strategy

# **Executive Summary**

- 1. A meeting has been arranged between Ministers English, Power and Joyce and KRG at 9.30am on 3 February 2010 to discuss KRG's strategic plan and the funding implications of this. This report backgrounds KRG's plan and the other options available.
- 2. KRG is not financially viable without substantial Crown support. Various alternative scope and strategy options have been suggested, all of which would require some Crown funding to implement (even closure). No option would be likely to achieve a level of ongoing profitability sufficient to justify the cost of capital employed. We are faced with a series of 'least worst' options, rather than any financially attractive propositions. In addition, whilst KRG has progressively refined its information in response to requests from officials and improvements in its systems, the data is insufficient for comprehensive financial analysis. This situation is unlikely to change quickly.
- 3. KRG's preferred plan is for a ten-year \$4.1 billion capital investment plan to produce an enhanced national network that, once completed, ought to be capable of operating in a cash positive manner (including ongoing network and rolling stock renewal). This plan calls for \$1.323 billion of capital from the Crown (\$420 million of which is for investment in the two metropolitan networks), mostly to be employed in the first few years of the plan. The success of the plan is predicated on very ambitious freight revenue growth targets, and failure to achieve these targets will increase the risk of further Crown capital being needed in future years. This might be over \$700 million if freight volumes only matched National Freight Demand Survey projections (22% increase over 10 years) rather than KRG's projection (111%).
- 4. The most feasible alternatives to KRG's plan (see Table 1) are short lines options that sever the national link in one place (Short Line Option: closure of the rail ferry service) or two places (Short Line Option 2: closure of rail ferries and closure of the Te Kuiti to Marton section of the North Island main Trunk (NIMT)). These two elements are particularly costly to maintain and renew, and their commercial contribution is poor.
- 5. The short line options would forego significant freight volume (about 30% of current volume in the case of Option 1 and 40% in the case of option 2), which would transfer to other modes (mainly road). Both short line options would also include substantial capital expenditure (CAPEX) plans to renew and upgrade infrastructure and rolling stock and KRG would ask the Crown for funding, though at a lesser level than for its preferred plan.
- In deciding what to do, Ministers will need to balance the Government's competing interests in KRG's ownership, transport policy objectives and fiscal objectives.
- 7. If Ministers wish to make a decision based on purely commercial grounds, no further Crown capital should be invested, and the KRG Board expected to manage down the business. This may still require one-off Crown funding to assist with redundancy and make good/make safe obligations.
- 8. If Ministers wish to make a decision that takes into account broader transport outcomes/objectives, then a spectrum of options is available, including:

- a. If the objective is to maximise New Zealand's long term inter-modal transport infrastructure options, then KRG's core plan should be adopted (following specific refinement of funding amounts and timing).
- b. If the objective is to preserve rail services in areas of greatest commercial usage, and at the same time minimise the Crown's exposure to financial risk, the short Lines Option 1 would seem to offer the best deal (particularly if a decision to proceed with Clifford Bay was made at the same time).
- c. If the objective is to preserve future transport options, but not provide a full commitment to KRG's plan or preserving the national network, then specific projects that are crucial to both KRG's plan and Option 1 could be identified and funded in the first instance. Funding for, say, three years could be provided to KRG, with an ultimate decision regarding national, short lines or other options dependent on achievement of agreed milestones.
- 9. We see value in keeping future options open, possibly through providing funding to KRG for specific projects that would be crucial for alternative options, and phasing the option-specific spending later in the plan.
- 10. We believe there is scope to revise both the quantum and the timing of the Crown's contribution to CAPEX, if KRG's plan is adopted. This would lower the risk to the Crown, and ease short term fiscal pressures. For example, the \$232 million sought for minor lines is not central to KRG's plan, and much of the \$420 million of metro investment should be sourced from the regions. If approval of the projects could be broken into tranches requiring commitments in the low hundreds of millions per Budget (this should be possible), this would ease the affordability issue from a Fiscal planning point of view.
- 11. We recommend that the meeting with KRG on 3 February should be used for the following purposes:
  - a. To explore ways to keep all the main options 'on the table' by identifying projects, funding and timing core to all options that could be funded by the Crown over the next 1-3 years.
  - b. To ask KRG to refine information about alternative options to its preferred plan.
  - To set a process and timetable for further work towards the decisions the Crown needs to make.
- 12. Because Crown capital would be required to execute any of the options, any decision would require Cabinet approval as part of Budget 2010. Consequently, we believe it would be inappropriate to give any commitment to KRG in the meeting on 3 February 2010.
- 13. The process we recommend for managing this issue is as follows:
  - KRG be asked to request funding for projects core to both its plan and the short lines options over the next 1-3 years;
  - A Cabinet paper should be drawn up by MoT seeking 1-3 year funding for agreed specific projects in Budget 2010;
  - A timetable of milestone achievements should be agreed with KRG, covering both project milestones and revenue growth targets; and

d. Subject to achievement of these targets, the Crown should consider making a final decision on scoping options at an agreed date (probably about three years from now).

# Recommended Action

We recommend that you:

- note that there are several options for the future of KRG, all of which would require Crown funding to execute;
- b note that no option would result in a business capable of returning its cost of capital;
- note that KRG's preference is to create an enhanced national network, and that this С option would require a (somewhat scalable) Crown investment of up to \$1,323 million over ten years;
- note that KRG's revenue projections assume a growth of 11% over 10 years, which d would require KRG to substantially increase its share of the national freight market. If KRG is unable to achieve this, there is a risk that the Crown will be asked to meet the resulting CAPEX shortfall, which may be over \$700 million;
- note that Treasury see value in an approach that keeps all scoping options 'on the table' by funding specific projects that are core to all the main options over 1-3 years, and setting a timetable for further decisions based on achievement of agreed performance milestones by KRG;
- note that any funding required to implement the selected strategy needs to be f approved by Cabinet as part of Budget 2010, and as such Ministers will be unable to give KRG certainty about the level of Government's commitment in the meeting on 3 February 2010, and
- indicate if you would like an oral briefing on Treasury's analysis. g

Yes/No/ Minister of Finance

Yes/No. Minister for **State Owned Enterprises**  Yes/No. Associate Minister of **Finance** 

James Cunningham Manager, Sector Monitoring for Secretary to the Treasury

Hon Bill English Minister of Finance Minister for

**State Owned Enterprises** 

Hon Steven Joyce Associate Minister of **Finance** 

Table 1: Comparisons of different options for KRG's future

Option	Required Crown Investment	Financial outcomes	Other factors
National network	\$1.323 billion	\$24.1 million annual cash flow positive by year 7 (though cash negative again in years 9 and 10 as an extra \$250 million needs to be sourced for	Preservation of modal options re port re- alignment Preservation of rail option if fuel prices surge
		replacement rail ferry	Projected volume is equivalent annually to 700,000 to 1 million truckloads now and
			double this in 10 years. Job creation in construction industry.
Short lines	Unspecified but	Immediate loss of	Some redundancles
Option 1 (NI	likely to be	\$108million of freight	will occur, and some
network	about \$1 billion	revenue	release of surplus land
unconnected		(21p)	in Wellington and
to SI lines		Creation of annual \$24.2	Picton will be possible
plus closure		million cash flow negative	
of minor		business in year 10 (based	
lines)	6	on KRG's figures) or up to	
	~ (S)*	\$10.4 million cash positive	1
	(6)	if optimistic growth	
	2/1/	assumptions are used)	000
Short lines	Unspecified but	Immediate loss of \$138	900 redundancies
option 2	likely to be	million of freight revenue, plus \$8.2 million from	200,000 additional truckloads pa on the
(unconnected regional lines	about \$1 billion	passenger, plus \$38 million	roads (rising as
plus closure	100	'churn'	demand rises), mainly
of minor		Creation of annual \$32.8	long distance
lines)	(	million cash flow negative	Likely closure of
11100%		business in year 10 (KRG)	Hillside engineering
1		or \$8.8 million negative if	unit (180 jobs)
	<b>,</b> ,	optimistic growth	on service Course Course Course
	Y	assumptions are used.	
		This option's prospects are	
		greatly inhibited by the	
		Initial loss of volume.	700,000 1 1 1111
Closure of all	Approximately	Adverse impacts on Metro	700,000 to 1 million
freight	\$180 million for	in terms of bearing the full	additional truckloads
operations	redundancies,	cost of maintaining and	of freight onto roading
1	make good,	upgrading its portion of the	system 4-4500 redundancies
	make safe and	network	Loss of rail expertise
	other		and construction and
	contractual		maintenance facilities
1	obligations.		- further impact on
	recoveries from		Metro.
	land sales?		11101101
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# Treasury Report: KiwiRail Group Ltd: Long term strategy

# Purpose

- 14. A meeting has been arranged between Ministers English, Power and Joyce and KRG at 9.30am on 3 February 2010 to discuss KRG's strategic plan and the funding implications of this. This report analyses the future options for KiwiRail Group (KRG), both in terms of its business scope and the implication for Crown funding. The report evaluates KRG's preferred business case, but also looks at plausible alternatives.
- 15. Because of the Budget implications, the final decision will need to be taken to Cabinet for approval.

# The determinants of KRG's future

16. Essentially the key determinant for KRG's future options rests outside KRG. The decisions that the Crown makes about funding will determine the scope of business available to KRG. This is because its ability to derive commercial revenue (under any scenario) is insufficient to cover both operating costs and the full costs of maintaining and upgrading its network, rolling stock and terry assets. It has no capacity to raise commercial debt, nor to service that debt if it could raise any.

# The primary choice point

- 17. Diagram 1 shows the current rail network, and its component rail lines/corridors. Further background on KRG's current business is given at Appendix 1.
- 18. The core decision about business scope is whether to:

retain a national rail network, or

establish several unconnected regional rail businesses.

- 19. The primary reason why this decision is core is because the national business is dependent on two costly connecting elements:
  - The North Island Main Trunk (NIMT), and specifically the stretch of rail over the central plateau between Te Kuiti and Marton. This link is a key enabler for two business units (Kombi and TransScenic's Overlander service) but is of limited importance to other trading units. The corridor does not earn sufficient revenue to cover the current level of CAPEX on infrastructure (about \$50 million pa), let alone make the improvements to reliability and transit times needed to make the corridor competitive with road (in excess of \$400 million).
  - The two rall ferries. Rail ferries are primarily needed for inter-island Kombi freight (and for the transportation of rolling stock between islands for service flexibility and maintenance/replacement). There are no longer any dedicated suppliers of

Kombi is the point-to-point domestic freight forwarding business. It essentially competes with trucking (and provides an overload capacity to truck operators). It is a significant loss-maker (see table 2), though its considerable contribution to shared infrastructure costs would need to be reallocated to other units if this business was discontinued. Overlander is the Auckland to Wellington passenger service (essentially a tourist service). This service operates at, or close to breakeven, but represents in insignificant contribution to group revenues.

rail ferries, so replacement (Aruhura is due for replacement in 2016, though KRG believes that this could be pushed out to around 2018) will be costly (estimated at \$180-\$250 million per ship). The passenger/vehicle ferry traffic would continue (as this is profitable).

- 20. Elimination of these two elements would conceivably improve the financial equation for the remaining trading units. The degree of improvement would depend on:
  - how much cost could be eliminated directly by removal of one or both elements;
  - how much additional cost would be transferred onto the remaining trading units by the loss of Kombi and Overlander services;
  - any loss of other revenue in remaining businesses through loss of the 'national' connections; and
  - any additional costs associated with the disruption to rolling stock movement between parts of the network once it is severed.

# Secondary decisions

- 21. There are a number of secondary decisions that, in effect, follow on from the core decision above. These decisions will contribute to the overall financial picture, but to a considerably lesser degree than the national versus regional core decision. These secondary decisions include:
  - retention or closure of selected minor/branch lines2; and
  - retention or closure of selected tourist rail services (Tranz Scenic).

<sup>2</sup> The minor lines are located in Northland, Stratford to Okahukura, North Walrarapa, Napler to Gisbome, and Ohai.

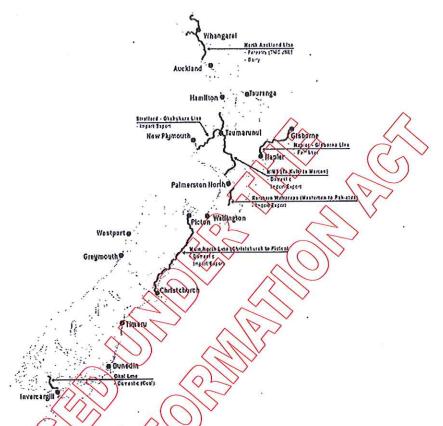


Diagram 1: The elements of the rail network

The main options for KRG's future

- 22. The main strategic options for KRG are as follows3:
  - a investment to improve the current national network to maximise commercial income (KRG's preferred plan).
  - b. Improved national network minus minor lines (also considered as acceptable by KRG, but not preferred).
  - c. Separate North and South Island rall operations (i.e. discontinuation of the rail fern service, and closure of Picton to Christchurch line) Short Lines Option 1.
  - d. Series of separate regional rail lines (i.e. closure of rail ferry service and severance of the North Island Main Trunk (NIMT) between Te Kuiti and Marton) Short Lines Option 2.
  - e. Provision of short-term 'survival' funding on an ad hoc basis to maintain an agreed scope of business (national or regional).
  - f. Closure of all rail services except Metro (passenger commuter services in Auckland and Wellington).
  - g. Closure of all rail services.

There is a further possibility, but this is more a risk to be avoided. This risk is that an underfunded, undisciplined or 'game-playing' KRG continues to muddle through but periodically seeks emergency financial support from the Crown to avert crises (e.g. catastrophic infrastructural failure, unsafe equipment etc) that threaten closure of key services.

- Of these options, a and b are considered acceptable by KRG in its business plan. It
  views all other options as value destroying and leading to the demise (sooner or later)
  of KRG.
- 24. Treasury's analysis below recognises the feasibility of options a and b. We also consider options c and d as plausible options. The closure options are not considered in any depth, and option e would in some way be the worst of all worlds requiring investment to keep the network and services functioning but without the certainty to attract long term commitment from major customers.

#### Comment on data

- 25. KRG has provided comprehensive descriptions and projections for its preferred solution, but insubstantial information regarding the other options. Various officials have repeatedly asked for more full information, but that provided has been selective and late.
- 26. Treasury has therefore done its own analysis and estimations, based on a variety of documents (various KRG plans and reports, commissioned research etc). But some of this information is inconsistent (because of differing dates, differing categorisation of costs and revenues etc), and some double counting (or omission) is inevitable because of the complex inter-relationships between parts of the rail business. Nonetheless, the data has been sufficient for us to draw broad conclusions.
- 27. In 2009, CCMAU, the Treasury and Mot commissioned Deloitte's to investigate and analyse available data on KRG's business plans and cost structures. Although Deloitte's work was based on older information than KRG's current proposal, we have found its report a useful input to our thinking and analysis. Deloitte's report helped to establish the cost components for KRG's various product lines to inform us about their individual contributions to the total business, and in particular:
  - The across the board under-pricing of services, and failure to recover their full costs.
  - The potential profitability of bulk and IMEX services.
  - The chronic under-performance of Kombi (which KRG believes to be fixable).
  - The sub-optimisation of Interislander performance brought about by the need to maintain rail decks (which contribute less revenue than vehicle space).
- 28. The benchmarking in Deloitte's report also confirmed that KRG does not appear to 'gold-plate' its safety, maintenance or renewal projects compared other rail operators around the world.
- Placed alongside KRG's line by line (geographic) approach to costing and revenue, this
  has improved our understanding of the dynamics of the business, and informed our
  views about available options.

# Note about financial analysis using net present value methodology

30. The most conventional way for businesses and/or their shareholders to determine the best financial option amongst several, is to compare the Net Present Values (NPVs)<sup>4</sup> of each option, and generally the option with the highest NPV is selected.

The NPV is obtained by taking all future cashflows and converting them into today's dollars, by using a an appropriate discount rate to reflect the time value of money. An NPV above zero creates value and one below zero destroys it.

- 31. However, in the case of KRG, we consider that all the options will have negative NPVs, demonstrating that the Crown would not invest in KRG for solely commercial reasons. The challenge is to minimise value loss, whilst achieving other objectives, such as:
  - Using the capacity of rail to manage freight congestion, safety etc of roads.
  - Ensuring modal flexibility to provide options re port re-alignment, fuel price shocks etc.
  - Supporting export-earning industries with a cost-effective transport medium.
- 32. The difficulty for KRG is that its NPV of options is solely about its own cashflows, not about the entire net position of the Crown. For example, under the closure option, it is almost inevitable that the Crown would need to spend more on roading infrastructure due to the extra freight volumes that the State Highways would need to bear. These cash outflows for the Crown are not, and cannot be, incorporated into any KRG NPV analysis.

# KRG's preferred solution: Enhanced national network

- 33. KRG submitted a new business plan to Ministers and officials in December 2009. This advocated retention of the national rail network, supported by a capital investment plan of \$4.110 billion over 10 years to improve reliability and transit times to a level needed to boost competitiveness. The investment would require \$1.323 billion of Crown capital injection<sup>5</sup> (front-loaded into the early years), with the remainder funded internally by KRG from the projected uplift in revenue (volume and price) from the improved services made possible by this investment.
- 34. Table 2 shows the funding source split.
- 35. Graph 1 shows the Intended timing of Crown capital.
- 36. Table 3 shows the highest priority areas for capital spending identified by KRG.
- 37. The main features of KRG's plan are as follows:
  - Preservation of the national network (less any mothballed or closed minor lines that could not prove their viability within a three year period).
  - A three-pronged set of steps:
    - o Improve the network and rolling stock and boost productivity within the business;
    - Build volume on the foundation of a more competitive service; and
    - Increase the yield from services via more realistic pricing and better commercial contracting.

<sup>\$420</sup> million of this funding is included in a separate bid concerning Metro services that share the network portion where this investment would be made. Consequently, the net rail freight funding from the Crown would be \$903 million. The fallure of either bid would have consequences for the other.

- Apply the Crown's capital to upgrade specified areas of the rail network (i.e. 'below rail') and employ KRG earnings from operations to fund network maintenance and (most) renewals, and all new rolling stock investment.
- Aggressive investment to renew and upgrade the network to establish competitive standards of reliability and transit times, particularly on the North Island Main Trunk (\$637 million would be spent on the Auckland to Christchurch corridor).
- The Crown's funding would be concentrated in the early years of the plan to create a network capable of competing for business on the key routes (in particular, the NIMT is seen by KRG as key).
- Freight revenue would be expected to increase by 111% over ten years (see table 4), based on a mix of volume and yield. Treasury's comment on the achievability of this sizeable uplift is covered in the comments section below.
- Overall, KRG would start to be cash positive from 2016, with the exception of 2018/19 when a \$250 million spike in investment would result from the need to replace the Arahura ferry. The cash surpluses would not be sufficient to cover the cost of capital needed by the business, however.

Table 2: KRG's business plan: CAREX breakdown

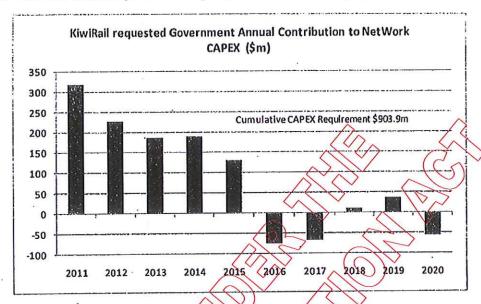
	\$m
Total CAPEX Identified in KRG's preferred Plan	4,110
Already Approved Crown Funding (excluding approved metro funding)	-55
CAPEX to be Funded	4,055
Funded by KRG's Earnings before Interest, Taxes, Depreciation and Amortisation (EBITDA)	-2,732
Less Metro CAPEX (covered by separate MoT paper and funding bid)	-420
Freight Network CAPEX Funding Required	903

Source: KRG and MoT

Note 1: The \$55 million above refers to the tagged contingency that was created in case KRG has a revenue shortfall this year. It is tagged in the between- Budget capital contingency, but would still require appropriation by Cabinet.

Note 2: KRG also has \$405 million of Crown debt, which it has not mentioned in its plan. Of this debt, \$170 million matures in the next twelve months and \$80 million in the following year. This debt either needs to be repaid (unlikely), rolled over (which will require Cabinet approval) or conversion to equity (which would also require Cabinet approval). This debt is at risk, irrespective of which future option is selected, but it is nonetheless a financial cost that needs to be accounted for in the Budget considerations.

Graph 1: KRG's business plan: Timing of Crown capital employment



Source: MoT graph based on KRG figures

Table 3: KRG's business plan: Priority areas for application of CAPEX

Project	Cost \$ millions
Improvements of the Auckland to Christchurch route (including the 'throats' at Wellington and Auckland	\$316
Catch up for the network (Crown's contribution)	\$600
Minor lines	\$232
Metro Network access (i.e. the gap between what is contributed for renewals by the regions, and what it costs)	\$310
Other (unidentified) projects	\$150 approximately

Source: KRG's business plan.

Table 4: Projected freight revenue increases

\$000s	Year 1 of plan	Year 10 of plan	% change
Bulk freight	125,201	221,896	77%
	72,547	174,469	140%
IMEX IMEX	92778	213,130	130%
	290,526	612,849	111%
revenue			

Source: Based on figures in KRG's business plan.

**Note:** The National Freight Demand Survey (NFDS) published in October 2008 predicted that the total tonnes of freight moved by all modes in New Zealand would increase by about 2% pa, or by 75% over a 25 year period from 2006.

#### Comment

38. KRG is confident that this option represents the best plan. Its plan identifies the enhanced national network as delivering the best outcomes in terms of revenue generation, operating profits and asset value retention. Its figures (see Table 5) support that view, but not compellingly. Considering the additional investment (and its associated risks), the national network does not appear to deliver markedly superior

returns. KRG's argument is that the cumulative build of profitable scale from the national network option will enable it to become cash positive, whereas it does not believe the other options will become cash positive.

Table 5: KRG's comparative figures for alternative options (Year 5 figures)

Option	Revenue (\$ millions)	EBITDA (\$ millions)	CAPEX (\$ millions)	Net cash (\$ millions)	Asset write off (\$ billions, total)
National network	953.1	225.4	391.9	(166,5)	
Short lines Option 1 (NI network unconnected to SI lines plus closure of minor lines)	726.4	215.1	309.2	(94.2)	1.6/
Short lines option 2 (unconnected regional lines plus closure of minor lines)	676.6	177.3	269.3	<b>∖</b> (92.0)	2.2

Source: KRG business plan

Note: The write-down of redundant assets is regarded by KRG as a significant consideration. Treasury's view is that these write-downs represent assets that are unsellable (e.g. bridges, tunnels, locomotives) except to someone buying the rail business. Consequently they represent sunk costs where the dollar value of the 'loss' is of accounting interest only.

- 39. KRG feels confident that the sizeable revenue projections (in excess of 100% over 10 years considerably in excess of general market growth) can be achieved. An unspecified proportion will be contributed by price changes, but, presumably the majority of the uplift is from volume.
- 40. KRG's Bulk and IMEX projections are based on known plans/projections of major customers. With Kombi, KRG feels that the business has considerably under-performed its potential, and that it can right that underperformance. KRG believes it will achieve this via a mix of business focus, service improvement (reliability and transit times enabled by investment), more commercial pricing, and collaboration/partnership with freight forwarding customers. KRG also sees rail and the national network well placed to take advantage of any re-alignments of the nation's ports.
- 41. KRG places a high (but unquantified) national-interest value on the preservation of the national rail network to retain future options for a national alternative mode of transport to road (and one that is less vulnerable to fuel price volatility). With the transport sector contributing significantly to both the domestic and the export sectors, it argues that rail is important to the national economy as well as to its own organisational fortunes.

#### Comment

- 42. We believe KRG's projected volume uplift is very ambitious, and the downside risk is significant. Recently, volumes have declined (due to the economic downturn and eroding service performance). KRG and its Crown-owned predecessors do not have a good track record of delivering to financial plans.
- 43. Similarly, we accept that yield uplifts are possible (based on current rates being 42% below the equivalent depot to depot road rates), aided by the extra value of greater reliability and speed, and the reduced costs associated with improved reliability. However, rail's primary advantage is lower price, so it is possible that there would be significant customer resistance to price increases, and any increase in vield may be partly offset by reductions in volumes.
- 44. Table 6 represents Treasury's estimates of the consequences for KRG's plan if revenue does undershoot KRG's projections.

Table 6: Consequences on KRG's plan if revenue uplift is not achieved

		/		1111	/	
Revenue	Total	freight	BBITDA	available	Shortfall in	
assumption	revenue .	7/1	for CAPEX	(years 1-	for	CAPEX
a	(years	1-40	10 aggrega	ate)	compared	to plan
	aggregate)	111	\$ million	100	(years	1-10
	\$ million	$\circ$	(M)	<i>&gt;&gt;</i>	aggregate)	
				> .	\$ million	
As per KRG plan	4,588,935		2,183,598		,	
Plan less 20%	3,671,148		1,724,705		458,893	
	3,181,180	1	1,479,721		703,877	
growth at NFDS levels						

Source: Treasupy calculations based on KRG figures

Note: Assumed non-freight revenues, costs and CAPEX are unchanged and therefore excluded from this table.

Note: Assumed variable costs associated with revenue is the same as currently (i.e. direct costs are 40% for Bulk and IMEX and 60% for Kombi; indirect costs average 5%)

- 45. From the last column in Table 6, it is evident that an undershoot by KRG on its revenue projections could conceivably lead to funding shortfall for CAPEX of perhaps \$4-700 million. Given that the Crown's contribution to CAPEX is directed towards the early years of the plan (before any undershoot may be fully realised), this means that the financial risk to the CAPEX programme falls primarily on the Crown. It is likely that, in the event of a revenue undershoot, KRG will approach the Crown for further funding to complete its programme.
- 46. In passing, we note that KRG does not give a clear indication of the regional breakdown of where the large uplift in revenue will come from. Based on current patterns (refer Appendix 1: Tables), we may infer that a high proportion of this growth will occur away from the NIMT (e.g. in areas such as the Golden Triangle<sup>6</sup>, particularly for non-Kombi growth). Whereas this does not invalidate the value of the national network, it suggests that, with equivalent managerial attention, a similar uplift rate in revenue could be achieved in the short line options, without need for capital investment in NIMT and/or the InterIslander. KRG's presentation of other options does not include such optimistic uplifts in revenue.

<sup>&</sup>lt;sup>6</sup> The area between Auckland, Hamilton and Tauranga.

## **Clifford Bay**

- 47. KRG believes that the long-talked about Clifford Bay development (approximately \$180 million to implement) would further enhance KRG's profitability, by cutting Wellington to Christchurch transit times and costs, and enabling more ferry crossings with the current ferries. Clifford Bay has been left out of KRG's current proposal as a potential distraction. But it believes the business case is compelling and could later attract funding from the Crown or commercial sources.
- 48. Treasury's National Infrastructure Unit believes that the Clifford Bay proposal has significant strategic benefits for New Zealand as well as for KRS, through lowering of transit times and costs and the stimulation of inter-island commerce. It would entail construction of the Clifford Bay terminal and CAPEX on the road between Clifford Bay and Christchurch. The question of who pays would need to be resolved, but It is possible that the Interislander Line (either within KRG or as a separated entity) could justify the Investment in its own right.

#### Minor lines

- 49. KRG accepts that there is no good commercial sense in spending \$20 million pa (the current spend) on CAPEX to maintain/renew minor lines which bring in only \$10 million of revenue and lose \$37 million pa (see Appendix 1: Tables). KRG has until now sought to preserve the future option value of these lines, and it sees untapped potential in some of them.
- 50. KRG proposes to carry out minimal investment in minor lines for 3 years, during which it will work with local communities to try to establish a viable traffic base. At the end of 3 years, those lines which do not pay their way will be closed or mothballed.

## Treasury comment

51. Although a minor piece in the puzzle, we do not have confidence that new volume will suddenly appear. We believe these lines (unless there are compelling tactical reasons to keep open) should be run to failure or mothballed now, without further investment. They represent poor investment opportunities and distract KRG's management and financial resources from the more core lines.

# Budgetary considerations

- We are advised that it would be plausible to accommodate a Crown investment of around \$1 billion if necessary, provided the approval of projects could be broken into tranches requiring commitments in the low hundreds of millions per Budget. Business cases could be approved in tranches, with Ministers retaining discretion on what to approve and when.
- KRG's CAPEX plan could accommodate this staging of funding (see Graph 1) provided its Board and customers felt sufficiently confident in the Crown's ongoing commitment to plan their investment decisions. We also believe that the amounts of the CAPEX outlay could be reduced by KRG, as described elsewhere in this report in discussion of all the options.

KRG cites past examples where the option value has later been rewarded (eg West Coast line when Solid Energy signed up).

Short lines option 1: North Island network separated from South Island network

54. This option would see closure of the rail ferry services, closure of the Picton to Christchurch line (which becomes unviable once it loses the Auckland to Christchurch traffic that comprises 74% of its volume), closure of TranzCoastal tourist service (which runs on the Picton to Christchurch line) and closure of minor lines. The ferries would be converted to carry extra passenger/vehicle traffic, lifting their revenues. Arguably, the ferry operation (which would be profitable in its own right) would no longer need to be part of the rail business. Some rail land in Wellington and Picton could be sold.

Table 7 Projections for Short line Option 1

All figures \$ millions	Year 1 of plan	Year 10 of plan  Based on 82% cumulative growth (as assumed in KRG's calculations for this option)	Based on assumption of the same growth rate as NFDS (+22% over 10 years)	Based on assumption of the same growth rate as KRG's business plan (+111% over 10
Freight revenue	243.4	444.3	296.9	513.6
EBIT	93.4	298.5	120.2	333.2
Net cash after CAPEX	-400.3	-24.2	-202.5	10.5

Source: Adapted from KRG figures

#### Comment

- 55. This option still requires substantial (\$2.74 billion) CAPEX to bring the services to a competitive level, and it is likely (though not stated) that KRG would seek about \$1 billion of this from the Crown.
- 56. The loss of volume from the closed elements (\$103 million) would not be significantly offset by removal of expenses. KRG's projections suggest that the loss of scale economies means that KRG would not achieve cash surpluses within the 10 year planning period.
- 57. However, we note that KRG has applied a more pessimistic forecast of growth than it applied to its preferred solution. If this more optimistic forecast is applied, then a business results which can generate cash surpluses (though not enough to return its cost of capital).
- 58. We believe this option is as feasible as KRG's preferred solution. At the same time, the removal of the rail ferry services (and conversion to the more profitable passenger/vehicle services) would enhance the profitability of the InterIslander service by \$5-10 million per year.
- 59. We note also that there are no longer any dedicated manufacturers of new rail ferries, so this option would avoid an expensive eventual replacement (Arahura is due for replacement in 2016-18). It is possible that if the national network plan was selected, then the ferry replacement date could be used as a good point to review how well that adopted strategy was working, and if necessary switch to a short line option at that point.

60. We note that this option could be positioned more positively than a simple closure of the rail ferry services. The opportunity for the Interislander to become a stand-alone profitable entity (which could potentially also be sold to help fund other projects) could be further enhanced by the Clifford bay proposal. Although we have insufficient information to quantify the benefits, we believe the case for this option may be significantly stronger than KRG's figures suggest.

# Short lines option 2: unconnected regional networks

- 61. This option would close NIMT between Te Kuiti and Marton, the rail ferries, Picton to Christchurch line, closure of TranzCoastal and TransScenic passenger services and closure of the minor lines.
- 62. Essentially, the two most costly bits of the national network (Te Kulti to Marton link and the Cook Strait rail ferries) would be severed leaving four disconnected regional operations (Golden Triangle, Central North Island, West Coast, and South of Christchurch). Data on these lines is shown in Appendix 1. Tables 11 and 12.
- 63. Superficially this option would be disposing of the worst bits of the network and keeping the best bits. According to KRG, all these lines are currently unable to fully fund capital infrastructural renewals. However, poor pricing has been an issue and all of these lines have significant volume growth potential. They could all be reasonably expected to improve profitability in future under any of the scenarios.
- 64. KRG's viewpoint is that this option would forego 40% of the potential freight revenue that the national network could achieve, yet still necessitate 67% of the capital investment (\$3.13 billion)
- 65. All income would be lost from the Auckland to Christchurch corridor (currently worth \$110 million of revenue plus \$12 million from the Picton to Christchurch segment, plus passenger revenue of \$8.2 million. There would be some benefits (eg from enhanced Interislander vehicle capacity) but overall \$137.9 million would be immediately lost from revenue
- 66. In KRG's view, apart from the direct loss of business from the closed bits, there would be a progressive consequential churn of up to 20% of all remaining freight business as national customers such as Fonterra withdrew business from the sub-national KRG. The logic for this is:
  - 1. If KRG's owner is not confident to invest in KRG, then KRG has no long term tuture. Therefore companies would not tie their supply chain to rail.
  - 2. If KRG cannot service all of a company's business, then the company may choose for it to service none of it.
  - If the NIMT is severed, then there is no option to transfer mid- lower North Island freight to Ports of Auckland or Tauranga if other North Island ports were no longer served by major shipping lines (in this regard, KRG feels particularly vulnerable to Fonterra's trade that currently moves from Taranaki to Napier).
- 67. Table 8 shows KRG's comparison of the projections for the short lines option 2 with the enhanced national network.

Table 8 Projections for Short line Option 2

A COUNTY OF THE PARTY OF THE PA	Year 1 of plan	Year 10 of plan	Year 10 of plan	Year 10 of plan
millions		Based on 82% cumulative growth (as assumed in KRG's calculations for this option)	Based on assumption of the same growth rate as	rate as KRG's business plan (+111% over 10 years)
Freight revenue	208.5	391.9	254.4	439.9
EBIT	63.6	251.7	86.5	179.3
Net cash after CAPEX	-402.9	-32.8	-197.9	-105.1

Source: Adapted from KRG figures

#### Comment

- 68. As with Short Lines Option 1, we believe that KRG has been more pessimistic than it was for its preferred option. Applying the same forecasts as for KRG's preferred option, improves the financial picture for option 2, but not to the extent that it becomes cash positive in the 10 year period. Essentially it seems that without the foregone volume there are insufficient economies of scale to make the business viable.
- 69. KRG also argues that a fragmented business model will lead to loss of flexibility for moving rolling stock between lines for capacity flow and maintenance. A further danger of a disconnected business is the potential for duplication, divergent interests, etc leading to loss of scale economies and loss of cooperation/synergy. The viability of Hillside would also be questionable (why have a workshop in Dunedin if you have to barge most rolling stock to/from it). Coupled with the likely loss of confidence from customers, this is likely to lead to a 'slow decline' for the rail business over time (we agree that this is quite possible). What may emerge eventually is a situation where only one or two successful portions of the business survive and the rest founder. For example, it seems possible that the Golden Triangle, which currently handles a high proportion of the network's freight (24% of NTK's and over half of the network's tonnage) could thrive independently. Similarly the West Coast line could become a dedicated Coal route (which already makes up 96% of its volume). But it is not possible to model such outcomes, based on current information.
- 70. We note that a 'sink or swim' approach to each discrete business unit has some merits from an economic theory point of view, but pragmatically it leads to a slow erosion of the one-company business. The disconnected business option also surrenders any national benefits of port flexibility and fuel price hedging.

### Governance

71. KRG's business plan has the support of the current board of KRG. It is worth noting that the 'crunch time' when commercial income needs to be significantly increased in order for KRG to fund its share of the capital programme (rather than come back to the Crown for additional funding) is likely be after the terms of current board members are finished. This does not in any way invalidate their support for KRG's plan, but it does raise the risk that new board members will not support the same course of action. It also influences the skills set needed by future board appointees.

72. The current Board make up is as follows:

Name	Position	Start	Current term end
Rt Hon Jim Bolger	Chair	1 Oct 2008	30 June 2010 ·
Paula Rebstock	Deputy Chair	1 July 2009	30 April 2012
Linda Constable	Director	1 April 2003	30 June 2010
Bob Field	Director	·1 July 2009	30 April 2012
Mark Franklin	Director	1 Oct 2008	30 April 2012
Bryan Jackson	Director	1 Oct 2008	30 April 2011
Mark Tume	Director	1 July 2009	30 April 2011

- 73. The Board is limited by statute to a maximum of seven members.
- 74. The terms of Rt Hon Jim Bolger as Chair, and Linda Constable as a director, expire at the end of June 2010 and a process is underway with the Minister for SOEs to consider any changes to the Board this as part of a wider process covering 17 positions across 11 boards.
- 75. While no final decisions have been confirmed by the Minister we are working on the assumption that both Rt Hon Mr Bolger and Ms Constable will retire, and therefore a new Chair and director will be required.
- 76. At this stage, while Rt Hon Mr Bolger is aware the process is underway, we have not yet engaged with him formally on the skills required in any new directors or whether he considers any of the incumbent directors are suitable Chair successors. Our preliminary view is that the next Chair is likely to come from outside of the current board, and that the Board would benefit from a new director with specific rail experience, with particular skills in managing projects and upgrades of the magnitude currently facing KRG. Commercial and business-to-business negotiation skills would also be valuable.

# Conclusion

- 77. All of the options available for the future of KRG would require Crown capital. None of them would generate adequate commercial returns to justify the investment. The choice is therefore for the best of a set of less than ideal options.
- 78. Because Crown capital would be required to execute any of the options, any decision would require Cabinet approval. Consequently, we believe it would be inappropriate to give any commitment to KRG in the meeting on 3 February 2010.
- 79. Rail is inherently a high fixed-cost business, dependent on scale to improve its economic performance. KRG's preferred solution (the enhanced national network) maximises that scale, but the economic performance of other short line options is not appreciably inferior if similar growth assumptions are employed.
- 80. All options depend heavily on achieving substantial growth and the consequence of not achieving that growth is that there will be a greater risk that the Crown will be called on for capital, beyond the initial 'planned' amounts.

# Appendix 1: Background information on KRG's current business

# Recent history

- 81. The previous Government bought Toll Holdings NZ's rail and ferry operations and in October 2008 merged these with ONTRACK to form a Crown-owned single rail entity, now known as KiwiRail Group (KRG). Shareholding Ministers in this Government have communicated to KRG's Board their expectations that KRG should maximise its commercial performance.
- 82. However, under its current business model, KRG is not viable without Crown subsidy, nor does it have the realistic prospect of becoming financially self-sufficient in the foreseeable future. Presently, the Government has given no commitment to funding beyond the 2009/10 year (apart from specific funding for Metro services)
- 83. Consequently, if KRG continues on the path described in its 2009/10 Statement of Corporate Intent (SCI), its earnings in 2009/10 will be insufficient to even cover safety-critical maintenance work on the rail network (a \$17.6 million shortfall) let alone carry out work to maintain current service levels.
- 84. Furthermore, KRG's SCI is based on an assumption that current service levels need to be maintained to uphold its current level of competitiveness so both maintenance and renewal work is essential. In effect, to 'stand still', it will run annual deficits of \$85-100 million per annum, assuming it invests sufficiently into maintenance and renewal to maintain safety standards and hold service standards to current minimum levels). In addition, KRG has identified \$1.06 billion of 'unfunded' capital expenditure that it believes it needs to spend over the next five years to lift capability to achieve the revenue it has budgeted into its income projections. Although the business cases for these items of capital expenditure apparently 'stack up', KRG has no capacity to fund this expenditure from retained earnings, nor the ability to service interest payments if it could raise debt. In out-years, further capital needs would also arise (e.g. for ferry replacement).

85. Table 9 shows the financial projections for KRG based on its current SCI.

Table 9- KRG Current and Projected Financial Results and Cash Flows 2009 – 2016

-Group(Sm) ( )	2009. .(A)	2010 fi (B)	2011	2012	2018	2018	2015	2016
External revenue	682.6	655.1	710.1	750.4	780.5	812.4	841.2	871.3
Internal revenue	172.2	181.4	216.1	222.0	233.5	237.2	241.0	244.9
Total revenue	854.8	836.6	926.2	972.4	1,014.0	1,049.6	1,082.2	1,116.2
Direct operating costs	518.3	519.0	556.3	578.4	5887	604.8	624.9	639.0
Indirect operating costs	62.4	65.7	58.0	59.4	58.8	60.7	62.7	64.7
Other internal charges	187.4	194.2	196.6	201.1	213.8	218.6	223.4	228.3
Total costs	768.0	778.9	810.9	838.9	861.3	884.1 /	911.0	932.0
EBITDA before renewals	86.8	57.7	115.3	133.5	152.7	165.5	7713	184.2
Network renewals safety critical	67.81	75.3	130.7	148.5	117.3	115.6	95.9	99.7
EBITDA after safety critical renewals	19.0	(17.6)	(15.4)	15:0	35.4	49,9	75.4	84.5
Network renewals service level	33.41	37.2	41/1	41.3	42.4	42.4	49.0	50.9
EBITDA after total renewals	(14.4)	(54.8)	(56.5)	(26.4)	(6,9)	7.5	26.4	33.6
Interest <sup>2</sup>	25.4	29.5	41.9	63.5	86.8	105.0	114.7	132.5
Earnings after network renewals, before depreciation	(39.8)	(84.3)	(98.4)	(89.9)	(93.7)	(97.5)	(88.3)	(98.9)
Total unfunded capital expenditure	76.3	139.4	333.3	246.9	220.2	119.3	134.4	363.5
Net cash flow	(116.1)	(223.7)	(43/1.7)	(336.8)	(313.9)	(216.8)	(222.7)	(372.5)

Renewals split based on 2010 (B) split Interest expense from KRG business plan - assumes un-funded capital expenditure is debt funded.

Source: Adapted from Deloitte review for joint Ministries, November 2009

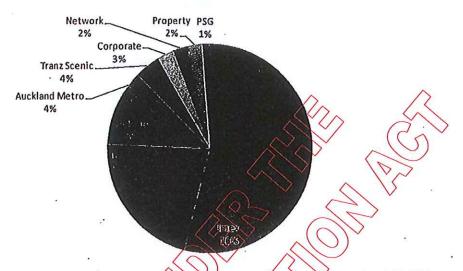
Note: These figures do not include any Crown subsidies or capital grants.

- 86. One consequence of this capital plan that includes 'unfunded' projects is that KRG's spending continues to outstrip its sources of cash (even in the current year, in which the Crown has committed to pay \$90 million in operating subsidy, in addition to 'funded' capital projects). KRG argues that many projects have multi-year lead times, so it needs to commit to some projects ahead of secured funding in order to safeguard continuity of business long-term. But, as a result of this approach, KRG will face a cashflow deficit by March/April 2010.
- 87. The net cash flow figures in Table 9 indicate the cash funding gap between KRG's original business plan and its available funding. Crudely, this row of figures represents what the Crown would need to fund, either as subsidy or as capital injection, if KRG were to continue on its current course (i.e. as described in its SCI, rather than its preferred business plan).

## KRG's product/service mix

- 88. Diagram 2 shows a breakdown of the sources of external revenue for KRG. This diagram shows the dominance of freight within the rail business.
- 89. Because numerous services share the same operating resources (track, some rolling stock etc) it is difficult to establish the profitability of each service type in isolation. The work commissioned from Deloitte by CCMAU, The Treasury and MoT in 2009 attempted to establish the components of profitability, and Table Y summarises Deloitte's conclusions (KRG does not accept the validity of this approach)

Diagram 2: KRG's sources of external revenue



Source: KRG-provided figures in the Deloitte report. Figures are for 2008/09 year

Table 10: Contributions from each business line of KRG in 2008/09

Source: Deloitte report for joint Ministries, November 2009

FY 2009	(\$m) Actual	Bulk	Kombi	IMEX	Interislander	Tranz Scenic	Tranz Metro (Wgtn)	Auckland Metro Support Services	Total of Operating Business	Property	Other	Cion
	External revenue	139.7	99.7	108.0	120.5	27.2	57.0	29.1	572.2	15.6	93.4	<b>630</b> (4)
	Internal revenue	6.7	4.8	3.6	30.0	0.7	0.3	•	46.1	1.2	126.1	1653
	Total	146.5	95.5	111,6	150.6	27.9	57.3	29.1	618.3	16.8	219.6	8/67(
	Direct operating costs	69.0	59.4	52.8	123.2	17.0	29.8	22.8	374.0	9.6	133.5	48611
	Indirect	67	6.0	3.8	9.2	0.6	2.3	-	27.6	-	34.7	852
	Track access charge	29.5	20.8	15.8	-	3.2	5.9	-	75.2	-	•	152
	Other Internal charges	23.5	45.5	16.0	1.4	2.4	8.9	0.4	98.1	1.2	13.1	113.4
	Total costs	127.6	131.7	88.4	133.7	24.3	47.0	23.2	574.9	10.8	181.3	759.9
	EBITDA before renewals	18.7	(36.3)	23.2	16.8	3.6	10.4	5.9 ·	43.4	6.1	38.2	86.8
	Network renewals	33.2	26.2	18.6	-	4.4	14.4	4.3	101.1		ļ.	101/2
	EBITDA after renewals	(14.5)	(62.5)	4.6	16.8	(8.0)	(4.0)	1.6	(6.4)	6.1	38.2	(144

**Key:** Bulk refers to specialised freight such as coal, milk, cement; IMEX is import/export freight; Kombi is domestic, point to point.

Note: EBITDA stands for Earnings Before Interest Taxes Depreciation and Amortisation. Depreciation and amortisation have been excluded from the calculation because (as shown in the table) we have included the actual amounts allocated for maintenance and renewal of the track infrastructure. There is a blurring, in practice, between maintenance and renewal work, but collectively both are needed to ensure safety standards and retain current service performance standards (i.e. speed and weight-bearing capabilities) of the network.

- 90. For obvious reasons, the Interislander line does not contribute to track network renewals. Instead we should add back depreciation as an equivalent indication of the cost of asset wear and tear/renewal (approximately \$6 million pa). This would suggest that Interislander operates profitably, but less so than the above table implies.
- 91. Table 10 suggests that, of the freight categories, IMEX is the most profitable, and Kombi the least. The profitability of Bulk freight has been decreased by un-commercial (and long term) contracts with major customers (in particular with Solid Energy). The recent (subsequent to this Table) uplift of 1 cent per Net Tonne Kilometre (NTK) will add \$10 million pa to Bulk's contribution. Compared to alternative modes of transport, there is scope for significant further uplift, if this could be negotiated.
- 92. It is clear that Kombi has also been poorly priced in the past. The main Kombi customers (Toll, Mainfreight, Hall's, Peter Baker Transport) are all road-freight operators, and they tend to use KRG for overload capacity and where they can transport goods more cheaply by rail than by road (eg when fuel prices are high).

# KRG's geographic distribution

93. Table 11 shows the geographic distribution of freight across the rall network.

Table 11: NTK split by section of network and freight category

PARTITION TO SERVICE STATE OF THE PARTITION OF THE PARTIT	C W DYNA S	K. Kombi.	MEX.
Golden Trlangle	59%	2%	39%
Central North Island	51%	17%	32%
Auckland Christehurch	10%	76%	14%
West Coast	96%	1%_	3%
South of Christchurch	24%	31%	45%
Minor Lines	26%	21%	53%
Total	44%	25%	31%

Source Deloitte report

Table 12 Key facts and figures about the main rail corridors.

Corridor description	Annual revenue \$ million	Annual EBIT \$ million	Average annual CAPEX \$ million	Number of trains per year	Annual Volume Millions of Net Tonne Kilometres	Annual Net Tonnes Millions
Auckland – Christchurch (717.5 km)	110	-55	45	10,556	1,340.4	4.630
Golden Triangle (807.7 km)	81	-14	33	18,837	9,591.1	8.767
West Coast (427.7 km)	65	-16	28	4.751	819.9	2.524
Central North Island (493.6 km)	33	16	17	41,175	247.7	2.454
South Of Christchurch (743.0 km)	52	-28	29	8,075	-573.2	2.754
Minor Lines (756.0 km in total)	10	-37	20	2,229	108.9	0.516

Source: data from various KRG sources

Note: Some double counting of freight volumes has resulted from cargoes transiting multiple corridors, and this is not feasibly rectifiable in the time available.

Page 24