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Tasmanian Shipping Inquiry
Productivity Commision
PO Box 1428
Canberra City
ACT 2601

7 February 2014

Dear Commissioner

Re: The Productivity Commission 2014, *Tasmanian Shipping and Freight,* Draft Inquiry Report – TasRail Supplemenatry Submission.

The *Tasmanian Shipping and Freight* Draft Inquiry Report (Draft Report) was released on 24 January 2014. Among the numerous issues examined in the Draft Report is Tasmania's rail network – its role in Tasmania's freight system and its costs and benefits.

The Draft Report poses a number of questions about the value of rail in Tasmania, and TasRail is pleased to have the opportunity to provide further information to the Inquiry via this Supplementary Submission to address the *Information Request* in Section 5 of the report pertaining to rail.

The Information Request raises important issues regarding TasRail's role in the Tasmanian freight network and broader economy. TasRail's Supplementary Submission reponds to the questions posed by the Productivity Commission in its Draft Report, and attempts to contextualise and quantify the relationship of rail to the Tasmanian economy.

For further information regarding the TasRail submission, please contact General Manager Commercial and Strategy Mr Neale Tomlin
I look forward to receiving the final draft of the ***Tasmanian Shipping and Freight*** report in due course.

Yours Sincerely,

Damien White, CEO.
(enc. TasRail Supplementary Submission to Productivity Commission Draft Report *Tasmanian Shipping and Freight*)

Executive Summary

The Productivity Commission released its *Tasmanian Freight and Shipping Report,* Draft Inquiry Report (the Draft Report) on 24 January 2014 and has invited comment by written submission or for interested parties to attend a public hearing.

Whilst TasRail appreciates the scope and limitations of information available to the Productivity Commission, the company submits that years of operation of the railway in Tasmania under a number of public and private owners, have proven that there is an ongoing need for a freight railway to service a significant number of the State's major companies and employers. The considerable investment that has been made by Australian and State Governments since TasRail was formed has begun to rectify the gross and systemic underinvestment in the network of past operators.

TasRail, in less than 5 years, has restored confidence in the service, gained customer trust, has facilitated private investment in related infrastructure, increased revenue and is now in the process of executing a step change in its operating capability and traffic volumes. This is akin to a start-up business model in terms of the scale of growth and transformation required. Rather than rationalisation or alternative ownership models, efficiency and innovation, achieved through revitalisation is the roadmap being used to reach the near term goal of Above Rail commercial sustainability.

TasRail is pleased to have the opportunity to provide further information to the Inquiry via this Supplementary Submission, which addresses the *Information Request* in Chapter 5 on Land Freight in the Draft Report.

The Information Request raises important questions regarding material that was not included in TasRail's December submission because it was unknown at that point what the Productivity Commission's areas of focus were to be. TasRail believes that the information below will provide context and a clearer understanding on TasRail's role in the Tasmanian freight network and broader economy. TasRail can answer any further questions or provide clarification directly to the Productivity Commission if required whilst the Final Report is being prepared.

Draft Recommendation 14

Draft Recommendation 14 in the Draft Report endorses the need for a comprehensive long term integrated freight strategy for Tasmania and that the strategy should address the long term role of rail in Tasmania.

TasRail also endorses the need for a long term integrated Tasmanian freight strategy and contends that TasRail will in fact play a more, not less, significant role into the future for the following reasons:

1. Despite freight rails chequered history of operation in Tasmania through systematic underinvestment and many changes in ownership, heavy industry has a continued

preference for a reliable and efficient rail network. Therefore, whilst competition against road transport is fierce, evidence would suggest that not all freight is substitutable and that rail has a significant, growing and sustainable market share.

2. Emblematic of the value assigned by industry to freight rail, TasRail has entered into long term contracts with key customers which account for in excess of 70% of TasRail's revenue. Many of the customers' facilities interface directly with the rail network.

3. Revenue, total tonnes and NTKs are about to increase considerably as TasRail grows intermodal volumes and begins haulage for a new major mining development. On this basis, TasRail share of the total freight market increases by around 70% over the 2011/12 figure by 2015/16. (see **Appendix 5**).

4. During 2014 TasRail will commission and commercialise an entire new fleet of rolling stock (locomotives and wagons). Freight rail in Tasmania has never operated a homogenous fleet utilising the latest technology to compete against road. This will reduce operating costs, improve commercial viability and consequentially facilitate growth in rail's market share.

5. The Tasmanian Government's Below Rail Infrastructure Contribution has reduced since TasRail was formed in 2009 consistent with revenue increases, and as detailed in **Appendix 5** is significantly less than the genuine positive spill over benefits due to TasRail's existence.

6. Whilst TasRail may not have a unique market or geographic advantage, it does possess the advantages inherent to freight rail in terms of the efficiency in hauling heavy base load freight which are not time sensitive. Much of this freight also requires specialist integrated loading facilities and are not suitable to be hauled on road. In addition to the direct savings, freight rail also provides value to industry by assisting proponents to secure regulatory and community approvals for new developments which high (adverse) impact road operations cannot offer.

7. An efficient freight rail network is a long term insurance policy against rising fuel prices.

What scope is there for parts of the rail network to be rationalised?

Network rationalisation can provide an opportunity to reduce costs in railways. TasRail currently manages 843kms of track of which only 632kms is operational. The 211kms remaining of non-operational track is managed at a minimal cost under a "care & maintenance" program. TasRail is working with community groups, local government and industry who would like to use these lines for Rail Trails (mountain biking), heritage rail and conventional cycle ways. The non-operational line strategy is to reduce the annual maintenance cost to TasRail whilst liberating these corridors to third parties who see them as an existing platform for economic development through value added tourism. TasRail

assigns an option value to these corridors and will retain the prerogative to return these lines to operational status should there be a demand from industry and a compelling business case in the future.

TasRail's three key operational branch lines (other than the primary freight corridor between Hobart to Burnie) include:

- Melba Line – 130km of track that links Tasmania's mining industry on the West Coast with TasRail's Bulk Minerals Ship Loader at Burnie.
- Fingal Line – 55km line linking bulk coal freight from Fingal to the main North South Line.
- Bell Bay Line – 57km line linking Launceston with the Port of Bell Bay.

(See Appendix 1 – TasRail Network).

To specifically address the Productivity Commission's Information Request, it is difficult for TasRail to make a case for further rationalising parts of the network that do not form part of the Burnie to Hobart primary freight corridor. The risks and costs of rationalisation are more evident than the benefits at this point. There are five principle reasons underpinning this statement.

1. The Melba Line should be part of the National Land Transport Network

From TasRail's perspective, the Melba Line should actually be considered as part of the National Land Transport Network. It links a region of major economic activity (Tasmania's highly mineralised West Coast) with the export port and shiploader at Burnie and should be considered of equal importance (albeit the Melba Line handles bulk materials) to the primary intermodal freight corridor between Burnie and Hobart.

The West Coast mining industry has used the Melba Line for many decades to haul mineral concentrates. In TasRail's opinion, although there is a parallel road route to Burnie Port from the mining region of the West Coast, neither industry nor the community see the existing freight task as being substitutable onto road from rail. The Murchison Highway travels through very difficult terrain (as does the Melba Line) but unlike freight trucks, freight rail does not need to interface with general commuter vehicle traffic.

Rail volume is going to increase by ~ 400% on the Melba Line in 2014 when Venture Minerals commence their Direct Shipping Ore Mine at Riley Creek. At this point, the Melba Line will generate in the order of 40% of TasRail's annual rail revenue and support ~ 1,000 mining jobs on the West Coast. The section of rail delivers Tasmania's exporters with a reliable, efficient and safe supply chain seamlessly linked to the bulk minerals ship loader at Burnie. The "pit to port" service model is a central plank of TasRail's business development strategy.

It is difficult to contemplate rationalising the Melba Line and trucks being responsible for hauling 1.2million tonnes per annum on the Murchison Highway. TasRail cannot offer expert opinion on road infrastructure but it would be reasonable to assume that shifting the volume to road would carry with it financial and economic costs including increased road OPEX and CAPEX, increased congestion/travelling times and the certainty of increased road trauma with attendant economic and social costs. It is certainly the mining industry's (existing and

prospective) preferred choice to use freight rail in this corridor and securing environmental approvals and community support for mining projects has proven more favourable when rail freight is the mode of transport.

2. Maintenance Costs and Infrastructure Investment Program Funds

In the 2013 FY TasRail's direct maintenance costs were $2.9m for the three operational branch lines, of which ~60% was spent on the Melba Line. Only $1.2m was spent on direct maintenance of the Bell Bay and Fingal Lines, which service existing contracted customers and link the rail network to the Port of Bell Bay. The Bell Bay Line has a structurally lower direct maintenance cost as the line is substantially newer than the balance of the network (it was constructed in the 1970s) and like the Fingal Line received relatively minor capital upgrades under the Australian Government's Nation Build One program .

TasRail is acutely aware that public funds are scarce and there is an opportunity cost associated with "gold plating infrastructure" - accordingly TasRail maintains the operational network so it is "fit for purpose" in line with minimum network safety standards, rail volumes, customer service requirements, and asset utilisation requirements. TasRail's Nation Building 2 Submission (now retitled as the Infrastructure Investment Program) did not request any further capital for the Bell Bay Line and only $4.7m over five years for the Fingal Line.

On this basis, rationalising the three branch lines would not avoid significant ongoing maintenance expense for TasRail and only the Melba Line features as a significant capital request in TasRail's Infrastructure Investment Program Submission. Further rationalisation and the consequential impact on rail freight volumes will erode TasRail's economies of scale.

3. Option Value

As detailed in Point 1 above, although not part of the primary freight corridor between Burnie and Hobart, the Melba Line is a critical part of the bulk supply chain for existing and soon to commence mineral operations on Tasmania's West Coast. Therefore, the value of retaining the Melba Line is evident under its current and future usage pattern.

The Fingal and Bell Bay Line are currently used to haul freight for contracted customers. However, TasRail also assigns a high option value to what these lines may be used for in the future. Although beyond the scope of this Supplementary Submission to quantify, the costs of remobilising these lines in terms of capital and time would be significant if they were closed. Tasmania is regarded as an economy in transition and these pieces of infrastructure may have significant future value for industry, whilst only incurring a small operational cost to retain.

As noted in **Appendix 5**, "strategic consideration of TasRail and its contribution to the economy should also recognise the future benefits that might flow from the availability of this infrastructure. Economics has long recognised 'Option Value' as an attribute of key assets" (Pitt& Sherry, 2014).

TasRail contends that when an existing infrastructure asset incurs only a small holding cost and there is the potential for substantial future benefits the threshold for divestment should be high.

The Fingal Line is currently used by Cornwall Coal (a wholly owned subsidiary of Cement Australia at Railton near Devonport on the State's North West – **See Appendix 2**). TasRail hauls Cornwall's coal for use in Cement Australia's production process that in turn produces ~1.2m tonnes of cement per annum, which is railed by TasRail to Cement Australia's export facility at Devonport Port. The Fingal line is in good condition (does not require significant capital) and requires a very modest direct maintenance spend per annum.

This small annual maintenance cost allows TasRail to service the Cornwall Coal and Cement Australia supply chain efficiently, whilst critically retaining the option value for further mineral development in the Fingal Valley. HardRock Coal Mining (HardRock) are progressing their thermal coal project in the Fingal Valley and intend to commence operations in 2014. HardRock would also need to use the Bell Bay Line to access a bulk minerals export facility at Bell Bay and intend to ship in more than 1 million tonnes pa when at full production.

The Fingal Line provides an essential link of the supply chain for a strong and sustainable regional Tasmanian business. There are indications of other mineral and coal opportunities in the region, evidenced by a number of new explorations. These, once proven and scaled, will logically use the rail infrastructure available, which already forms a part of the emerging business case to prospect in the area.

Australian Bauxite Limited (ABx) are currently progressing numerous bauxite deposits across central Tasmania with the intention of exporting more than 1 million tonnes pa when at full production from Bell Bay Port. Similar to HardRock, ABx will utilise the Bell Bay Line.

The very modest annual maintenance on the Bell Bay Line (and no capital request in TasRail's Infrastructure Investment Program Submission) allows TasRail to retain the option to increase rail traffic to and from the Bell Bay port. In addition to the above mineral freight tasks this could also include:

- Tasmania's southern based woodchip and export facility is closed requiring native and plantation timber to be transported to Bell Bay for chipping and export. TasRail is currently hauling logs for Forestry Tasmania from the State's south to Bell Bay for processing and export (Bell Bay is home to three wood chip export facilities).

- The Tasmanian Government and Opposition Liberal Party are both committed to attract an international container line back to Tasmania. TasRail does not believe a decision has been made on which port (s) the ship will call at, but there is a reasonable chance this will be at its former location of Bell Bay.

- If the Tamar Valley Pulp Mill project proceeds, a significant feedstock will need to be transported to Bell Bay. Long term, heavy weight, non time-sensitive cargo is ideally suited to rail freight in Tasmania.

- During 2014, TasRail is refurbishing an existing siding adjacent to the Bell Bay Industrial estate to service the heavy industrial precinct at Bell Bay and timber processors in the region with the intention to grow rail volumes to and from the region.

The minimal annual maintenance cost on the Bell Bay and Fingal Line allows TasRail to service existing industry, retain the option to increase volumes to Bell Bay Port for a range of freight opportunities and service potential mineral developments in central and NE Tasmania.

4. Existing Customer Contracts

TasRail provides haulage services for heavy industry in Tasmania that are geographically dispersed for historical reasons including proximity to natural resources and processing/export facilities (**See Appendix 2** – distribution of TasRail's customers)

TasRail has five customer contracts (most long term) with companies that require the use of the three operational branch lines. TasRail has been provided the following advice on the implications if TasRail elects to close an operational branch line during the term of existing customer contracts:

- *If TasRail unilaterally elects to no longer provide the services using the relevant branch lines and cannot deliver its obligations under the relevant customer contract then this is likely to constitute a material breach of the customer contract by TasRail.*

- *The material breach of the customer contract by TasRail would give the customer the right to:*

(a) terminate the customer contract under the express provisions of the customer contract; or

(b) terminate the customer contract under common law, as TasRail's action would amount to repudiation of the customer contract.

- *The damages claimable from TasRail will be the amount required to put the customer in the same position as if the services had been performed. This will be the difference between the amount payable to TasRail under the customer contracts and the cost to the customer of paying a third party to undertake the same or equivalent services.*

- *TasRail may also be at risk for capital expenditure incurred by the customers on rail related infrastructure based on representations by TasRail that it will be providing the services using the branch lines.*

The risks above do not include the financial costs and risks to individual businesses that have chosen to use TasRail's services under contract as part of their export supply chain. Based on existing customer contracts, any proposed further rationalisation of the rail network would be very problematic for TasRail, its customers and the broader economy.

5. Long term Tasmanian Port Strategy

The Productivity Commission notes in their Draft Report that "....there is an urgent need to articulate and implement a clear port strategy for Tasmania. This would provide the basis for a more effective approach to the use of scarce capital, while at the same time removing

uncertainty for business development and the establishment of road and rail links" (Productivity Commission, 2014).

The Freight Logistics Coordination Team (FLCT) Final Report in December 2013 also noted that a critical issue for Tasmania is to "provide certainty on Tasmanian port strategy" (FLCT, 2013). Jaturna (2013) in its final report to the FLCT state that network rationalisation was difficult because there has not yet been a rationalisation of ports, "making it hard to prioritise rail investment strategies".

The finalisation of a long-term port strategy may open opportunities for network rationalisation in the future (however this is not guaranteed for the reasons outlined above). The long-term port strategy may indeed reinforce the requirement for efficient transport links from existing industries whose supply chain is altered (due to port rationalisation).

Impacts of Full Cost Recovery

Background Information

TasRail is a vertically integrated business that reports Above Rail (freight business) and Below Rail business (network manager) as separate business segments internally.

TasRail expects the Above Rail Business to be commercially sustainable (defined as profitable at an EBIT level) and this is planned to occur on average over the 2014/15 to 2017/18 Corporate Planning Cycle. This will be achieved by profitable revenue growth, realising efficiencies from the new rolling stock (arriving in 2014) and entering into long-term contracts that reduce revenue volatility. TasRail has a Pricing Policy, which sets a minimum margin and includes the recovery of depreciation costs. Customer contracts are competitively negotiated based on these principles.

TasRail's Below Rail Business is funded by Access revenue from the Above Rail business plus an annual grant from the Tasmanian Government for network maintenance and renewal – the Below Rail Infrastructure Contribution (BRIC). The BRIC has reduced since TasRail began four years ago.

To address the Productivity Commission's Information Request, if rail charges were to be increased to reflect the full cost of service provision (assumed to mean the full cost of network maintenance and renewal) then TasRail would need to increase the pricing in its existing customer contracts. TasRail's position is that its existing customers would reject the price increase and move their volumes to road and or insist that they only be required to pay the agreed contracted rates to continue to use rail. Major industry in Tasmania may see this as a sovereign risk issue after entering into contracts with a State Owned Company. It is assumed this shift to full cost recovery would lead to a decline in TasRail's revenue, profitability and commercial viability in the long term.

TasRail is currently the only user of the rail network and does not generate sufficient access fees to fully fund track maintenance and renewal. The network's condition (although improved under projects funded by Nation Building One) also means that the track maintenance costs per track KM are higher than industry best practice accentuating this situation (although a key objective is to lower network maintenance costs).

Customers cannot be charged higher fees while the track and rollingstock are still being brought up to a contemporary standard of reliability. Once the repairs and upgrades needed under the Infrastructure Investment Program are complete, and the new assets are in the network, greater volumes are expected to lead to increased profits, which can then be applied to reduce the BRIC. Likewise, the ability to provide higher service levels and differentiated services brings with it the opportunity to negotiate higher freight rates.

The Productivity Commission notes in its Draft report that roads "Also tend to display public good like characteristics.... Also they exhibit a degree of non-excludability, in that it is difficult to directly charge users (which may be light and heavy vehicles, cyclists and pedestrians) of a particular road" (Productivity Commission, 2014). Therefore, there is the possibility that an individual trucking operator may not be paying their full contribution towards network maintenance, whereas a cursory glance at TasRail's Annual Report provides complete visibility on this issue.

Nature and Extent of Positive Spill Over Benefits and Market Share

TasRail is acutely aware of the ongoing annual infrastructure contribution from the Tasmanian Government and capital investment to date. To demonstrate the value of rail, TasRail has worked with consulting transport and infrastructure economists Pitt&Sherry during the Nation Building 2 submission process to assign a value to the broader economic spill over benefits of rail in Tasmania.

TasRail engaged Pitt&Sherry to complete an updated assessment for inclusion in this paper (**see Appendix 5).** The Pitt&Sherry Paper is a brief document given time constraints but the consultants that prepared it are available to provide further details and clarification as required.

Although not specifically requested, Pitt&Sherry have also provided some analysis to demonstrate TasRail's growing market share, which is increasing sharply.

Scope for Private Investment and Operational Service Provision in Rail

In 2007, the Tasmanian Government made an application to have the rail network declared Open Access. On 14 August 2007, the National Competition Commission (NCC) recommended to the then Tasmanian Premier that the network be declared Open Access. Based on this recommendation the Premier declared the Tasmanian Rail Network Open Access in October 2007 for 10 years **(See Appendix 3)**.

TasRail is required to provide access to the network to any third party rail operator under the conditions set out in the Tasmanian Government's third party access regime; the *Tasmanian Rail Network – Transitional Access Framework.*

Based on this declaration, there is scope that a private operator could choose to operate on the Tasmanian Railway Network. This could occur if an existing or prospective customer believed that they could operate services for less than the cost charged by TasRail (or with some other operational efficiency). Similarly, another rail operator could enter the market and compete head to head with TasRail for freight opportunities.

With new large volume miners (in a Tasmanian context) commencing operations, TasRail considers the likelihood of another operator entering the network increasing, as a miner or third party rail operator competes with TasRail to capture a significant base load cargo on a long-term contract.

If this circumstance occurred, TasRail would compete for the business opportunity and if unsuccessful TasRail would manage that third party access seeker through the provisions of the *Tasmanian Rail Network – Transitional Access Framework.*

TasRail is supportive of continued private sector investment into rail in Tasmania. TasRail's Pricing Policy requires customers to contribute to customer specific infrastructure, whilst more broadly TasRail is highly capital constrained, which can require customers to front end capital investment into rail and terminal infrastructure.

Recent examples have included the Toll Group's (Toll) significant investment into the new freight warehousing facilities at the Brighton Transport Hub. Toll is investing $25million, with the facilities expected to be completed in mid 2014 **(see Appendix 4).** Toll is also investing capital into the Burnie Port Optimisation, which begins in 2014.

TasRail has recently entered into a contract with a mining company to invest capital directly into the rail corridor, which will result in a boost to the network capacity and loading infrastructure for that business.

Whilst these examples are emblematic of TasRail engaging with private capital in some form as part of business development partnerships, they are not case studies of private capital investing into TasRail as an infrastructure investment.

Submission Ends.

Appendixes

Appendix 1 – TasRail Network

Appendix 2 –Distribution of TasRail's customers

Appendix 3 – 2007 Declaration of Open Access

Appendix 4 – Toll Groups investment at the Brighton Transport Hub

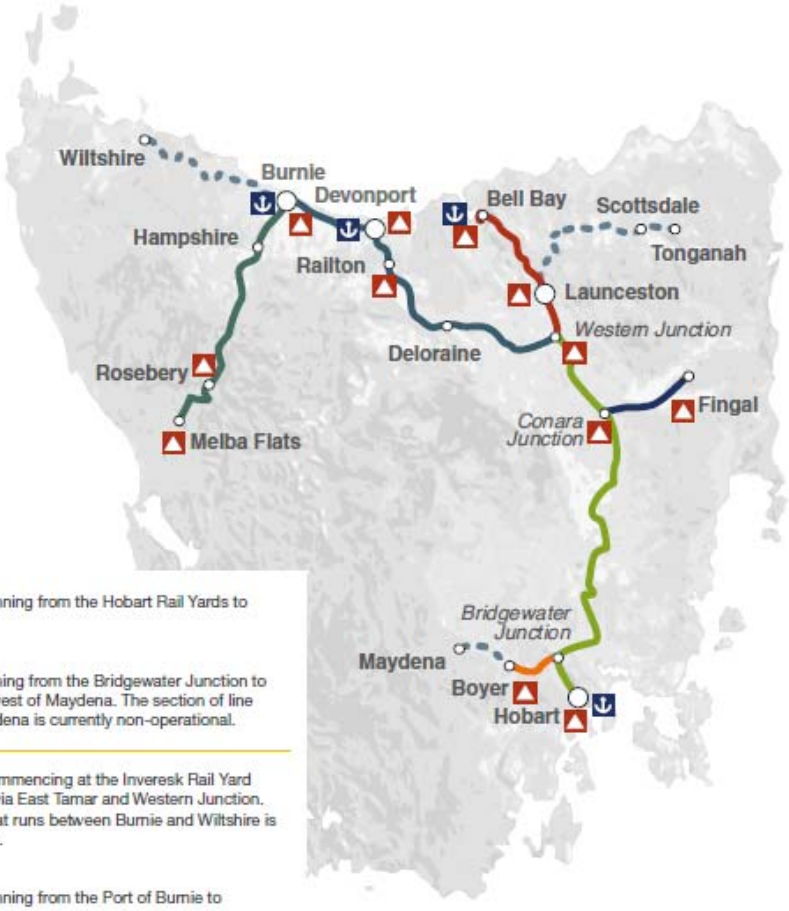
Appendix 5 – Pitt&Sherry Report (Positive Spill Over Benefits of TasRail)

Appendix 1

Tasmanian Rail Network

The Tasmanian Rail Network dates from the late 1800s and its alignment has changed little since. The network is a single rail line, narrow gauge (1,067 millimetre) transport system and consists of a total of 632 route km of operational lines and a further 211km of non-operational lines.

The operational network extends from Hobart to Western Junction and to the Port of Bell Bay in the north east and Burnie in the north west. Connections are also provided to Fingal in the east and Boyer in the Derwent Valley. The Melba Line (formerly named the Emu Bay Line) connects the West Coast to Burnie.

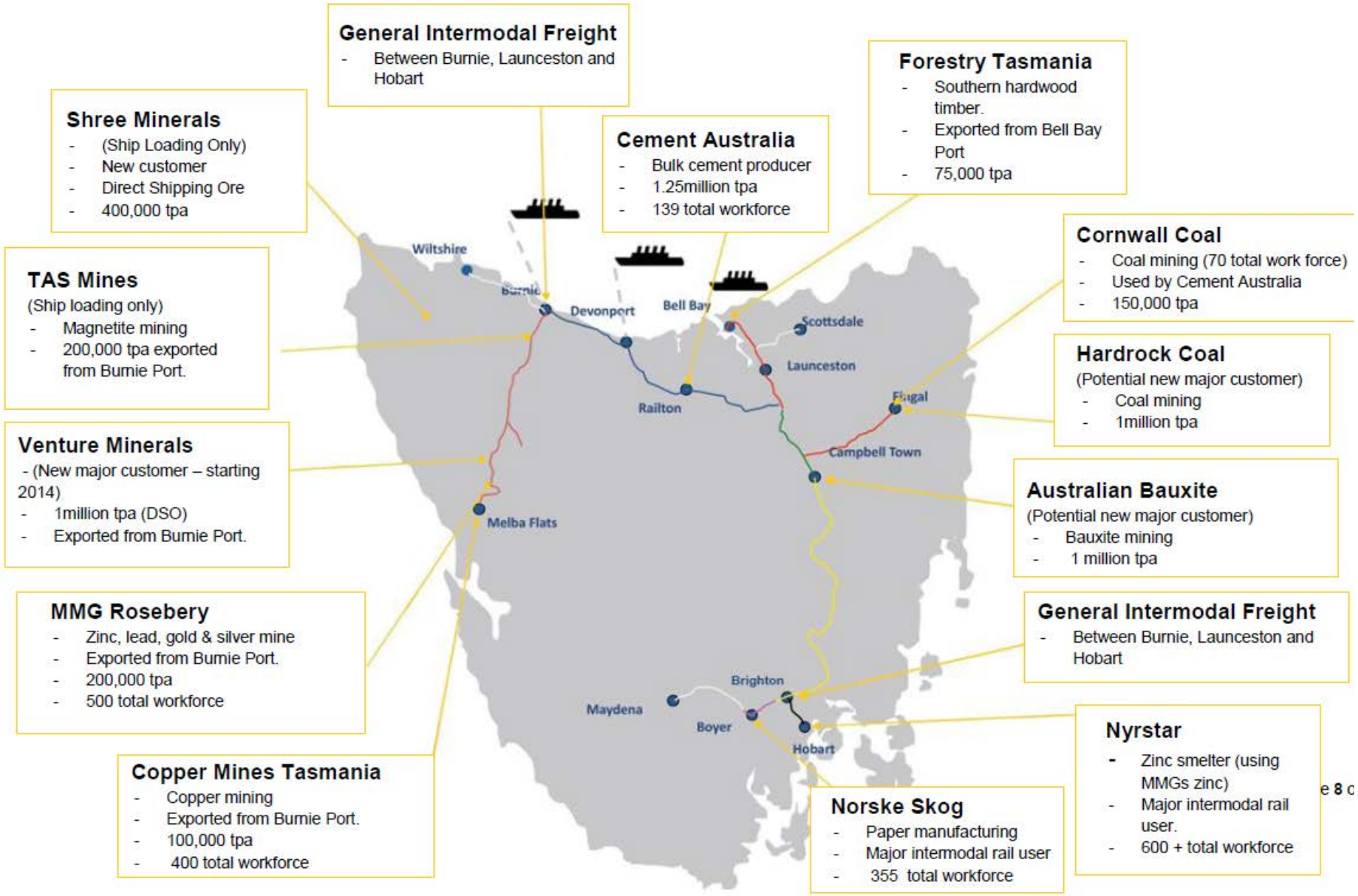


South	Approximately 199km running from the Hobart Rail Yards to Western Junction.
Derwent Valley	Approximately 71km running from the Bridgewater Junction to the Florentine Rail Yard west of Maydena. The section of line between Boyer and Maydena is currently non-operational.
Western	Approximately 259km commencing at the Inveresk Rail Yard and running to Wiltshire via East Tamar and Western Junction. The section of the line that runs between Burnie and Wiltshire is currently non-operational.
Melba	Approximately 130km running from the Port of Burnie to Melba Flats.
Bell Bay	Approximately 57km running from the East Tamar Junction to the Port of Bell Bay.
Fingal	Approximately 55km running from Conara Junction to Fingal.
North East	Approximately 73km running from Coldwater Creek Junction to Tonganah. This line is currently non-operational.

Rail Loading Points Ports Non-operational Line

Appendix 2

Distribution of TasRail's Customers



Appendix 3

Declaration of the service provided by means
of the Tasmanian Railway Network
under Part IIIA of the *Trade Practices Act* 1974

Statement of Decision and Reasons

I, the Hon Paul Lennon MHA, Premier of Tasmania, as the designated Minister for the purposes of Part IIIA of the *Trade Practices Act* 1974 (the "Act"), make the following declaration in relation to the service provided by means of the Tasmanian Railway Network.

NCC Recommendation

Section 44F of the Act provides that the designated Minister, or any other person, may make a written application to the National Competition Council ("NCC") asking the NCC to recommend that a particular service be declared. After receiving the application, the NCC must, after having regard to the objects of Part IIIA of the Act and matters specified in section 44G, recommend to the designated Minister either that the service be declared or that the service not be declared.

On 14 August 2007, the NCC made its recommendation to me in relation to the application made by the Rail Unit of the Tasmanian Department of Infrastructure, Energy and Resources on 2 May 2007 seeking declaration in respect of the use of the rail tracks and associated infrastructure that comprise the Tasmanian Railway Network for the purpose of operating a rail service on the Tasmanian network.

The NCC's recommendation was that this service be declared for a period of 10 years.

In forming its recommendation, the NCC determined that all of the matters in subsection 44G(2) of the Act are satisfied, namely that:

(a) access (or increased access) to the service would promote a material increase in competition in at least one market (whether or not in Australia) other than the market for the service;

(b) it would be uneconomical for anyone to develop another facility to provide the service;

(c) that the facility is of national significance, having regard to:

  (i) the size of the facility; or

  (ii) the importance of the facility to constitutional trade or commerce; or

  (iii) the importance of the facility to the national economy.

(d) that access to the facility can be provided without undue risk to human health or safety;

(e) that access to the service is not already the subject of an effective access regime; and

(f) that access (or increased access) to the service would not be contrary to the public interest.

Decision

Section 44H of the Act provides that, on receiving a declaration recommendation, the designated Minister must either declare the service or decide not to declare the service. If the designated Minister declares the service, the declaration must specify the expiry date of the declaration.

Following consideration of the NCC's recommendation, I have decided to declare the service described below for a period of 10 years.

The declared service is the use of the rail tracks and associated infrastructure that comprise the Tasmanian Railway Network for the purpose of operating a rail service on the Tasmanian network, including, without limitation, loading and unloading freight, making up trains, shunting and other activities necessary for the efficient haulage of freight by rail.

The facility which is the subject of this declaration is:

(a) the infrastructure that comprises the Tasmanian Railway Network consisting of rail lines, crossing loops, sleepers ballast, cuttings, tunnels, embankments, bridges, culverts, rail tracks and yards on wharves, fastenings, points, poles, pylons, structures and supports, signalling equipment, overhead lines, platforms, railway stations, freight sheds and associated buildings (excluding terminals), workshops, electrical substations, train communications systems, plant, machinery and other fixed equipment; and

(b) the rail terminals at Burnie, Devonport, Launceston and Hobart.

The Tasmanian Railway Network comprises each of the following line segments (shown in green and red on the attached map):

- the Bell Bay line (being the railway line of approximately 57km running from the Western Junction to Bell Bay);
- the Derwent Valley line (being the railway line of approximately 71km running from Bridgewater to Maydena);
- the Fingal line (being the railway line of approximately 55km running from Conara Junction to Fingal Coal Washery);
- the South line (being the railway line of approximately 199km running from the Hobart Rail Yard to Western Junction);
- the North-East line (being the railway line of approximately 73km running from Coldwater Creek to Tonganah);
- the Western line (being the railway line of approximately 78km running from Western Junction to Wiltshire); and
- the Zinc Works line (being the railway line of approximately 3km running from Derwent Park to Risdon).

The facility does not include the Melba line (being the railway line of approximately 130km running from Burnie to Melba Flats shown in blue on the map attached as Schedule 1), nor the workshops and administration facility at Tamar Junction owned by Pacific National Tasmania.

Reasons

Section 44H of the Act provides that:

- in making his or her decision, the designated Minister must have regard to the objects of Part IIIA of the Act;
- in deciding whether or not to declare the service, the designated Minister must consider whether it would be economical for anyone to develop another facility that could provide part of the service (s 44H (2));
- the designated Minister cannot declare a service that is the subject of an access undertaking in operation under Division 6 of Part IIIA of the Act (s 44H(3));
- while a decision of the Australian Competition and Consumer Commission ("ACCC") is in force under subsection 44PA(3) approving a tender process for the construction and operation of a facility as a competitive tender process, the designated Minister cannot declare any service provided by means of the facility specified under 44PA(2)(a) (s44H(3)(a)); and
- the designated Minister cannot declare a service unless he or she is satisfied of all of the matters in paragraphs (a) to (f) of subsection 44H(4). These mirror the criteria that the NCC must consider in forming its recommendation (s44G (2) (a) to (f), outlined above).

In making my decision, I have had regard to the objects of Part IIIA of the Act, which are to:

(a) promote the economically efficient operation of, use of, and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets; and

(b) provide a consistent framework and guiding principles to encourage a consistent approach to access regulation in each industry.

Current rail freight volumes on the Tasmanian network are below the level that would represent an efficient usage of rail in Tasmania, in part due to underinvestment in infrastructure.

Declaration is an important part of the Tasmanian "Rail Rescue Package" designed by the Tasmanian and Federal Governments to remedy this situation and promote the economically efficient operation of, use of, and investment in, the Tasmanian Railway Network, with the expectation that the benefit of investment in improving the network infrastructure will be passed on to end customers via increased competition in the downstream market for rail services.

The service is not the subject of an access undertaking in operation under Division 6 of Part IIIA of the Act, nor is the facility specified in any application to the ACCC under section 44PA.

I agree with the NCC determination that the relevant criteria are satisfied. The reasons in relation to each matter specified in 44H(4) (a) to (f) and 44H (2) are addressed below:

- In relation to the criterion in paragraph (a), there is a clear functional separation between the upstream market for the service and the downstream market for rail line haul services. I agree with the NCC's conclusion that, because rail line haul services are dependent on the use of the service provided by the Tasmanian Rail Network, enabling access to the service will promote a material increase in competition in the downstream, dependent market of rail line haul services.
- In relation to paragraph (b), the Tasmanian Rail Network exhibits "natural monopoly" characteristics in that, although there are relatively low operating costs, developing another facility would involve significant capital investment and the existing and potential capacity of

the facility is sufficient to meet the foreseeable demand over the 10-year declaration period. I therefore agree with the NCC that it would be uneconomical for anyone to develop another facility to provide the service.

- Pursuant to subsection 44H (2), I have also considered whether it would be economical for anyone to develop another facility that could provide part of the service. Essentially this would involve duplicating part of the Tasmanian Railway Network, which, again, would be uneconomic given the spare capacity in relation to foreseeable demand.
- In addition, the rail terminals included within the facility are an integral part of the network infrastructure used by freight rail services and exhibit the same "natural monopoly" characteristics as rail tracks. The capital and maintenance cost relative to demand means that aggregating rail freight at these nodes through one common user terminal is more cost effective than multiple terminals.
- In relation to s44H (4)(c), I agree with the NCC that the facility is of national significance on the basis of its importance to constitutional trade or commerce, which is defined in the Act to include trade or commerce among States or between Australia and places outside Australia. This is recognised by both the amount of import and export traffic on the Tasmanian Railway Network, and the inclusion of the Tasmanian Railway Network in the AusLink Tasmanian Corridor.
- In relation to paragraph (d), the NCC found that the existing accreditation regime (which requires all rail operators to be accredited under the *Tasmanian Rail Safety Act* 1997), combined with a single operator, and the opportunity to negotiate and arbitrate the terms of access, will ensure the safe operation of the facility and provision of the service. Based on these factors, I agree that access to the facility can be provided without undue risk to human health or safety.
- In relation to paragraph (e), the NCC considered whether the Rail Management and Maintenance Deed (RMMD) between the Tasmanian Government and Pacific National Tasmania constitutes an effective access regime, having regard to the Competition Principles Agreement and objects of Part IIIA of the Act. I agree with the NCC's determination that, because a third party access seeker is not a party to the RMMD, and because the RMMD evidences the intention to seek declaration under the Act to establish an access regime, the RMMD itself does not constitute an effective access regime.
- In relation to the criterion in paragraph (f), the NCC concluded that the benefits of declaration outweigh any costs flowing from declaration and that accordingly access is not contrary to the public interest. I agree with this conclusion.

The Tasmanian Railway Network is primarily a freight system linking industry and ports. Rail plays an important role in Tasmanian supply chains especially in relation to interstate and international freight moving to and from Tasmania's three northern ports. Businesses make investment decisions in Tasmania based on options in rail, and road is not an efficient alternative.

There has never been "above rail" competition in freight rail services in Tasmania. Access to the Tasmanian Railway Network is essential to permit effective competition in rail services within Tasmania, with flow on effects for competition in the downstream markets for freight forwarding or logistics services to and from or within Tasmania.

Declaration under Part IIIA of the Act is an important part of the arrangements implementing the "Rail Rescue Package" designed by the Tasmanian and Federal Governments. These arrangements are aimed at removing impediments to the investment of public money in rail

infrastructure that is timely and well targeted, and at facilitating private investment and effective competition in rail services and supply chain solutions, in a manner that is consistent with the national approach to economic regulation of significant infrastructure.

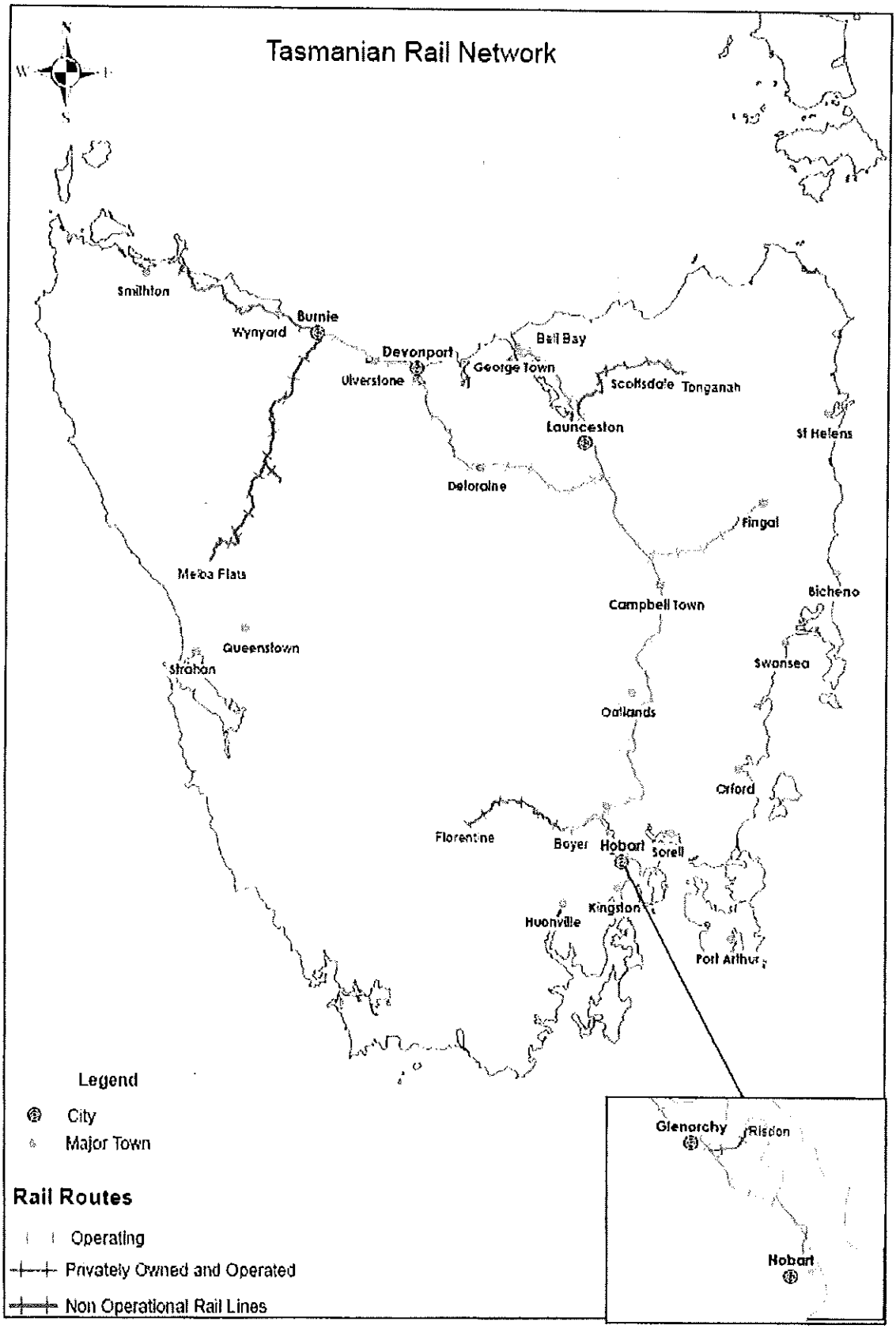
Publication of Decision and Reasons

Section 44HA of the Act provides that the designated Minister must publish, by electronic or other means, his or her decision on a declaration recommendation and his or her reasons for the decision.

This declaration decision and statement of reasons will be published today on the Tasmanian Government website and will begin to operate on 23 OCT 2007 being not earlier than 21 days after publication.

The Hon Paul Lennon MHA
Premier of Tasmania

- 2 OCT 2007


Tasmanian Rail Network
N
W
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Smithton
Wynyard
Burnie
Devonport
Ulverstone
Bell Bay
George Town
Scottsdale
Tonganah
Launceston
St Helens
Deloraine
Fingal
Meeba Flats
Campbell Town
Bicheno
Queenstown
Strahan
Swansea
Oatlands
Orford
Florentine
Boyer
Hobart
Sorell
Kingston
Huonville
Port Arthur
Glenorchy
Risdon
Hobart
Legend
City
Major Town
Rail Routes
Operating
Privately Owned and Operated
Non Operational Rail Lines

Relevant Extracts from Part IIIA of the Trade Practices Act 1974

SECTION 44H Designated Minister may declare a service

(1) On receiving a declaration recommendation, the designated Minister must either declare the service or decide not to declare it.

(1A) The designated Minister must have regard to the objects of this Part in making his or her decision.

(2) In deciding whether to declare the service or not, the designated Minister must consider whether it would be economical for anyone to develop another facility that could provide part of the service. This subsection does not limit the grounds on which the designated Minister may make a decision whether to declare the service or not.

(3) The designated Minister cannot declare a service that is the subject of an access undertaking in operation under Division 6.

(3A) While a decision of the Commission is in force under subsection 44PA(3) approving a tender process, for the construction and operation of a facility, as a competitive tender process, the designated Minister cannot declare any service provided by means of the facility that was specified under paragraph 44PA(2)(a).

(4) The designated Minister cannot declare a service unless he or she is satisfied of all of the following matters:

(a) that access (or increased access) to the service would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service;

(b) that it would be uneconomical for anyone to develop another facility to provide the service;

(c) that the facility is of national significance, having regard to:

(i) the size of the facility; or

(ii) the importance of the facility to constitutional trade or commerce; or

(iii) the importance of the facility to the national economy;

(d) that access to the service can be provided without undue risk to human health or safety;

(e) that access to the service is not already the subject of an effective access regime;

(f) that access (or increased access) to the service would not be contrary to the public interest.

(5) If the designated Minister declares the service, the declaration must specify the expiry date of the declaration.

(6) If the designated Minister does not publish under section 44HA his or her decision on the declaration recommendation within 60 days after receiving the declaration recommendation, the designated Minister is taken, at the end of that 60-day period, to have decided not to declare the service and to have published that decision not to declare the service.

SECTION 44HA Designated Minister must publish his or her decision

(1) The designated Minister must publish, by electronic or other means, his or her decision on a declaration recommendation and his or her reasons for the decision.

(2) The designated Minister must give a copy of the publication to:

(a) the applicant under section 44F; and

(b) if the applicant is not the provider of the service--the provider.

SECTION 44I Duration and effect of declaration

(1) Subject to this section, a declaration begins to operate at a time specified in the declaration. The time cannot be earlier than 21 days after the declaration is published.

(2) If an application for review of a declaration is made within 21 days after the declaration is published, the declaration does not begin to operate until the Tribunal makes its decision on the review.

(3) A declaration continues in operation until its expiry date, unless it is earlier revoked.

Appendix 4

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Toll Holdings Ltd
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Media release

Wednesday 12 December 2012

Toll's Brighton lease a commitment to Tasmania for decades to come

Australia's largest mover of freight, Toll Group, today announced plans to become the anchor tenant at TasRail's new intermodal freight terminal, the Brighton Transport Hub.

The long-term lease involves Toll investing in new warehouse facilities, as well as a long-term freight haulage agreement that will see an increased use of rail.

Speaking at today's announcement, Toll Domestic Forwarding Divisional Director Paul Ebsworth said the move further cements Toll's standing as Tasmania – and Australia's – largest provider of transport and logistics.

"Toll is proud to be the key tenant in the new Brighton Transport Hub development," Mr Ebsworth said.

"We have been a supporter of the development of the Brighton precinct for many years, which is why we originally purchased the land more than 10 years ago.

"This development will set the standard for intermodal freight in Tasmania for decades to come.

"We see this as a long-term investment in Tasmania's freight future, which has obvious flow-on economic benefits for the state.

"Over the past few years, as rail has become more reliable, we have been able to increase the amount of freight we can carry via rail, and we plan to continue to do so as the service improves.

"More freight by trains will mean less trucks on Tasmanian roads."

Mr Ebsworth also said Toll is the largest shipper of goods between Tasmania and the mainland, moving the equivalent of 150,000 twenty-foot containers and around 10,000 cars and across Bass Strait each year.

Toll Group is one of Tasmania's largest employers.

<ends>

Note to editors
Toll Group is a leading global provider of integrated logistics solutions, employing 45,000 people across some 1,200 locations in more than 50 countries.

Toll combines transport and logistics assets such as road, air and marine fleet capacity, warehousing and other core assets with operational and technological best practice to deliver industry-leading supply chain management and logistics solutions.

Toll's capabilities, processes and networks help connect customers across industries, across technologies and across borders, driving its vision of a single source for global supply chain management.

Media contact
Christopher Whitefield
Group Manager, Media & Research

The positive spillover benefits of rail in Tasmania: A brief discussion

Appendix 5 of TasRail's submission to the Productivity Commission

transport | community | industrial & mining | carbon & energy

pitt&sherry

Prepared for: TasRail

Project Number: HB14036

Date: 6 February 2014
Rev 00

sustainable*thinking*®

Table of Contents

List of tables

Prepared by: Mark Johnston & Brett Janissen Date: 6 February 2014

Reviewed by: Brett Janissen Date: 6 February 2014

Authorised by: Brett Janissen Date: 6 February 2014

Report Revision History					
Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date

1. About this short report

The Productivity Commission Draft Report *Tasmanian Shipping and Freight* was released in mid January 2014. Among the numerous issues examined in the draft report is Tasmania's rail network – its role in Tasmania's freight system and its cost.

TasRail is the below rail owner and manager in Tasmania and is presently the sole above rail operator.

pitt&sherry was asked by TasRail to prepare this short report to inform TasRail's response to a specific Productivity Commission information request. Namely:

> *What are the nature and extent of any positive spillover benefits from rail that justify continued public subsidisation of rail freight charges?*

pitt&sherry are in a position to provide information in this area based on previous analysis of TasRail's operations. We worked with TasRail and the Tasmanian Department of Infrastructure, Energy and Resources on the benefit-cost analysis that accompanied a request for 'NB2' Commonwealth funding for further below rail investment. Background work included the preparation of a model examining the costs of road, rail and sea freight future freight demand. The model quantifies some of the spill-over benefits of rail including lower environmental and accident costs using established metrics from BITRE, Austroads and other research groups. We have drawn on this model using updated freight task information from TasRail and the Tasmanian Government for the purposes of this report.

The key points of this report follow in Section 2. An overview of the current and expected size of the Tasmanian land freight task and rail's share of that task is provided in Section 3. This is important information, as the size of rail's spill-over and direct benefits are frequently a function of the net tonne kilometres (ntk) carried on rail. The fourth section examines the nature and size of these spill-over benefits. Section 5 discusses some of the economic impacts of removing rail from the Tasmanian freight system. Finally section 6 provides a summary of key methodological points.

pitt&sherry request that readers note that this report is intended to be read as a supplement to the TasRail submission to the Productivity Commission. Therefore information on TasRail's operating arrangements and other matters is not separately included here. Readers should also note that the scope and depth of this report has been significantly limited by time. Those wishing to clarify any issue raised in this report are welcome to contact either TasRail or pitt&sherry. pitt&sherry's contact details are provided on the final page.

2. Key Points

The Productivity Commission draft report contains many valuable suggestions and insights.

However, as might be expected with a draft report, some suggestions need further testing. For example Section 5.3 of the draft report concludes that:

> *In the long run, it seems likely that a State with a small tax base will have to confront the costs associated with largely duplicated road and rail networks and determine whether multiple networks or a more efficient transport system is the higher priority.*

We suggest that the decisions facing the Tasmanian and Australian Governments, as well as potential private investors in the Tasmanian freight system are not quite as simple as the above sentence implies. Certainly all stakeholders will benefit from a more efficient transport system. But an efficient freight system and a system with both road and rail components may not be mutually exclusive. In other words the removal, or significant reduction, of rail services may not contribute to the goal of an efficient Tasmanian freight system. Issues of both cost and inherent (and unpriced) value are important to strategic decisions around the configuration of the transport system that is most likely to best serve the needs of the Tasmanian economy and its communities in the future.

This brief report does not attempt to identify the ideal land-freight pathway for Tasmania. Nevertheless, the key points below provide some indication of the value of rail and food for further thought.

- Rail is increasing its share of total land freight. While the rail share was 18% in 2011/12, in 2012/13 it was likely around 22%. It could reasonably be expected to further increase to 30% by 2015/16
- The positive spill-over benefits of the Tasmanian freight system are estimated to be considerable. Rail has a lower environmental impact and is safer than road. The environmental and safety benefits of transporting freight by rail are estimated to be around $9 million in 2012/13, increasing to around $14 million in 2017/18 as TasRail performs a larger freight task
- Rail produces less greenhouse gas emissions than road, and the cost of these emissions needs to be reflected in any comparison of the relative economics of these transport modes. In 2012/13 rail moved 415 million net tonne kilometres across Tasmania. In the future event that this task is shifted to road, an additional 4.1 million litres of fuel would be consumed – increasing greenhouse gas emissions by around 11,500 tonnes
- There are direct and growing benefits to the Tasmanian freight system of moving freight by rail. Rail is forecast to achieve a significant fuel and labour productivity advantage over road per net tonne kilometres by 2014/15. Rail's expected performance in 2014/15 will inject an estimated cost saving of $4.9 million into the freight system. By 2017/18 the saving will be around $15 million
- The net benefit (excluding capital investment in road and rail infrastructure and equipment), accounting for the Tasmanian Government Below Rail Contribution, of TasRail's presence in 2017/18 is estimated to be $17 million. In that year the Below Rail Contribution is expected to be $12 million. This is less than half of the spillover and direct benefits of $29 million
- Rail's continuing operation avoids incremental freight system costs like road damage. Rail's 415 million ntk 2012/13 performance prevented almost $5 million in road damage at a conservative estimate (which raises consequential issues around the rate of cost recovery in the road freight sector)
- The option value of rail to Tasmania's freight system is important and should be incorporated into policy deliberations. Rail's ability to move bulk product such as mining products at low direct and external costs may play an important role in Tasmania's economic future.

3. TasRail's freight task and market share to 2017/18

The value of Rail's contribution to the Tasmanian freight system and wider economy is largely a function of the quantity of freight moved by rail and the share of the total freight task performed by rail. Accordingly this short section looks at the current and future freight tasks.

The Productivity Commission's draft report notes that TasRail performed 18% of the 2011/12 Tasmanian land freight task. This figure is based on the Tasmanian government's Tasmanian Freight Survey, which is performed every three years, as well as TasRail data.

Since 2011/12, TasRail has lifted its net tonne kilometre performance. TasRail expects this trend of increasing freight task to continue. This expectation is based on improved network performance (running time, reliability), increased above rail freight efficiency and capacity (new locomotives and wagons) and increased demand, for example from new mining projects coming on-line. TasRail has provided estimates of their freight task to the year 2017/18; these appear in Table 1 below. The estimates are based on the revenue assumptions that will form the TasRail 2014 Corporate Plan (currently under development).

pitt&sherry has estimated the total Tasmanian land freight task in order to estimate rail's share to 2017/18. We project that TasRail will perform a quarter of the total freight task in 2013/14, rising to 30% by 2015/16 – substantial increases over the previous 2011-12 level.

These projections and shares are shown in Table 1 (actual tasks are in blue and projections in green). They indicate that rail is becoming an increasingly important part of the land freight system in Tasmania.

Table 1 - Freight tasks and rail share: Actual in 2011/12, projected to 2017/18

Year	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Total Million Ntk	1,856	1,892	1,913	2,036	2,059	2,084	2,111
TasRail Million Ntk	329.0	415.0	480.0	587.5	620.9	639.9	659.6
TasRail %	18%	22%	25%	29%	30%	31%	31%

Information on the estimation method for total freight is provided in section 6.

4. Quantifying some positive spill-over benefits of rail

Moving freight by rail, rather than by road, produces relative spill-over benefits in a number of areas. We focus on environmental and safety benefits in this section.

Rail uses less fuel on a net tonne kilometre basis, resulting in smaller greenhouse and local air pollution impacts.

The combination of scale (a low number of movements per ntk) and an isolated corridor also give rail lower accident rates than road. This markedly lowers health costs. The accident rate also contributes environmentally with a smaller number of fuel and freight spillages that adversely impact air and water quality and flora and fauna. The methodology section contains details on the differences in environmental and safety costs under road and rail on a per net tonne kilometre basis.

pitt&sherry has estimated the dollar value of environmental and safety benefits, shown in Table 2 below.

Table 2 - Estimated value of rail's environmental and safety spill over benefits by year ($ million)

Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Environmental benefit $M	3.3	3.8	4.6	4.9	5.0	5.2
Safety benefit $M	5.6	6.5	7.9	8.3	8.6	8.9
Total calculated spillovers $M	8.8	10.2	12.5	13.2	13.6	14.0

Rail's environmental benefit includes lower greenhouse gas emissions than road freight (per net tonne kilometre). The 415 Mntk moved by TasRail in 2012/13 illustrate the effect. Shifting this task to road would result in an additional consumption of about 4.1 million litres of fuel – increasing the annual freight system emissions by about 11,500 tonnes of CO_2e.

The Australian government intends to remove the carbon price (which applies to rail and was previously intended to apply to road in future years) on transport fuels in the freight sector. However greenhouse gas emissions reduction remains Government policy, and a target for regulatory and budget action. Emissions continue to represent a pollutant which must be accounted for in the inventory of spill-overs and policy decisions which affect market decision making and the selection of one transport technology over another.

5. Examining the net benefit of rail in Tasmania

The section above discusses the environmental and safety related spill-over benefits of rail and estimates them to be substantial. These spillover benefits are estimated to far exceed the expected contribution (about $12 million from 2015/16) of the Tasmanian Government to ongoing maintenance of the below rail network.

There are both direct and spillover benefits of moving freight by rail in Tasmania. Some of these are direct benefits to customers of the Tasmanian freight system, others are societal in nature.

5.1 Direct Benefits

Rail vs Road costs

The direct benefits stem from the fact that rail is a very effective method of transporting freight. By way of rough comparison, two locomotives with a driver each hauls a payload of 1,000 tonnes (compared to a B-double truck hauling a 50 tonne load) providing economies of scale. A train's steel wheels on steel tracks have the lowest rolling resistance of any freight mode (at least 6 times less than a tyre on a road) and a train's length provides a per tonne aerodynamic benefit – combining for a fuel efficiency and environmental advantage over other freight modes (Barkan).

Rail's mobile efficiency advantages do not apply to all freight tasks of course. Quarry to construction site, or store to home type freight tasks are naturally performed by road, as a single truck can pick up and deliver without the need for 'mode switching'

Road's avoided mode switching advantage applies in fewer circumstances in Tasmania than on mainland Australia. All imported and exported freight must go through at least one mode switch (land to sea). Investment in port loading facilities at Burnie has largely eliminated differences between mode transfer costs at that point. Similarly at Brighton, which can be thought of as Hobart's inland port and principal freight hub in Tasmania's south, the transfer cost difference does not apply.

pitt&sherry has estimated the 'within mode' operating costs of road and rail, based on information provided by TasRail and road cost information sourced from BITRE, TransEco and the NTC. These costs are *inclusive* of infrastructure maintenance costs, road user charges are incorporated, as well as a rail access fee and the Below Rail Contribution.

Table 3 below indicates that rail will draw about equal with road in the current year and then enjoy a cost advantage. Rail's cost improvement is thanks to investment in the above and below rail network. Details on the estimation of these costs are provided in section 6.

Table 3 - Road vs Rail operating costs

Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
TasRail $/NTK	0.093	0.089	0.073	0.070	0.068	0.068
Road $/NTK	0.088	0.090	0.090	0.090	0.090	0.090

5.2 Quantified net benefit

The net benefit of TasRail's presence in the Tasmanian freight system can be estimated by considering spillover benefits, the relative operating costs of road and rail, and the Below Rail Contribution provided to the rail system by the Tasmanian Government.

Table 4 below shows the results. TasRail is projected to provide a modest net benefit in 2014/15 rising to $17M in 2017/18.

Table 4 - TasRail's net benefit

Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Benefits						
Environmental benefit $M	$3.3	$3.8	$4.6	$4.9	$5.0	$5.2
Safety benefit $M	$5.6	$6.5	$7.9	$8.3	$8.6	$8.9
Operating cost benefit $M	-$1.9	$0.6	$4.9	$12.5	$14.1	$15.0
Total spillover + direct benefit $M	$6.9	$10.9	$17.4	$25.8	$27.7	$29.0
Minus						
Below Rail Contribution (cost) $M	$16.3	$16.6	$16.8	$12.0	$12.0	$12.0
Net Benefit $M	-$9.4	-$5.7	$0.5	$13.8	$15.8	$17.1

Please note that a discount rate has not been applied.

While the estimation of net benefit includes running costs of above road/rail equipment and also some infrastructure maintenance costs, it does not include capital investment by governments and business in infrastructure (ie roads or rail network, or new equipment – trucks and locomotives). On the issue of capital expenditure it is worth noting that investment in the existing rail system has reduced the need for new road capacity. A particular example of this effect is the Melba line. This section of the rail network takes mining products to Burnie Port and will carry about 34 million ntk in 2013/14 and 132 million ntk in 2014/15. It is very likely that very substantial road upgrades would be required in the absence of rail.

Avoided road maintenance costs

The modelling of road and rail costs allows estimation of impacts of removing TasRail from the Tasmanian freight system. A particular impact (included within the net benefit estimation) would be higher road maintenance costs as road damage increases with road freight movements. Table 5 below provides estimates of the road maintenance costs being avoided by running a rail system in Tasmania.

Table 5 - Estimated avoided road maintenance cost resulting from rail's Tasmanian freight task

Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Road maintenance costs $/NTK	0.011	0.012	0.012	0.012	0.012	0.12
Rail M ntk	415.0	480.0	587.5	620.9	639.9	659.6
Avoided maintenance cost $M	4.8	5.6	7.0	7.5	7.9	8.2

The road maintenance costs are based on the road user charges determined by the National Transport Commission (NTC). Heavy trucks are charged at a rate that is intended to compensate for the damage each vehicle inflicts on roads, although these estimates and the degree of cost recovery achieved can be controversial. The charges are levied via an adjustment in the fuel excise and a component of registration fees. We converted these figures into dollars per ntk.

Note that the avoided road maintenance costs of $4.8 million in 2012/13, rising to $8.2 million in 2017/18 are included in the 'operating cost benefit' reported within Table 4.

5.3 Other Benefits

Social Benefits

Obviously, while additional costs associated with transporting Tasmanian freight via rail alternatives is an important measure of the 'uncaptured' contribution and value of the rail system, it only captures the value of TasRail operations under the current economic structure.

Importantly, strategic consideration of TasRail and its contribution to the economy should also recognise the future benefits that might flow from the availability of this infrastructure. Economics has long recognised 'Option value' as an attribute of key assets. It addresses the uncertainty of future costs and returns, and the set of opportunities that can be unlocked or denied through infrastructure support or disinvestment.

New Zealand consultant, Motu Economics and Public Policy Research notes:

> *The potential importance of options created by particular infrastructure investments means that a standard "needs analysis" may be an insufficient basis from which to begin an ex ante evaluation of a potential investment. In the cases discussed above, an "opportunities analysis" also needs to be included prospectively. Furthermore, it is important not to restrict opportunities to those that may be exercised (or even internalised) just by the infrastructure provider or by existing agents. Future agents (e.g. new migrants, start-up firms or international firms not yet present in the country) may be the agents that take advantage of opportunities that are created.*
>
> *A corollary of this approach is that disinvestment decisions need to take account of future opportunities that are potentially lost through a decision to scrap existing infrastructure. The opportunity (or option) approach may be particularly important where discontinuities are possible. For instance, a decision to close (large parts of) the rail network owing to its inability to*

> *pass a conventional CBA may turn out to have a large negative outcome if fuel prices were to surge massively, in which case the option to increase rail traffic would no longer be available. Of course, this option value must be weighed against the costs of ongoing operational deficits in determining the closure decision.*
>
> *Grimes A. (2010), The Economics of Infrastructure Investment: Beyond Simple Cost-Benefit Analysis, Motu Working Paper 10-05, August 2010, p.37*

For Tasmania, like other jurisdictions, the economic future is uncertain. However, mineral development, timber products and the need to haul heavy freight in a safe, timely and efficient manner in harmony with population and environmental goals look to be a strong part of its future. In the time available for this study, there has been no serious attempt to crystallise or put a value on these future opportunities, or to seek industry's views on the options that rail implies for it. This remains to be done.

Nevertheless, the value of these options and the importance of an operational rail system to achieving them clearly needs to be on the table.

6. Methodology

In essence, the analysis in this report is based on comparing the cost of moving freight by rail with the cost of moving freight by road. As explained above, we looked at costs in several areas - environmental, safety as well as operating and maintenance costs.

A benefit of the rail system occurs when the cost of performing the freight task differs under road and rail. The size of the overall benefit (or cost) often depends on the size of the freight task.

The freight task is measured in net tonne kilometres (moving 1 tonne of freight over a distance of 1 kilometre).

Further detail on the methodologies used to make the estimates in the report appears below.

Projecting total freight

The freight growth rates used to make the total task estimates (in Table 1) are based initially on Treasury's projected GSP growth rates for Tasmania. These were published in the Treasury 2011 report *Strong Growth, Low Pollution: Modelling a Carbon Price.* We then discounted these projections by half a percent to provide the growth rates shown in Table 6 below. Finally the quantities that are known to flow from a particular mining project in the North West of Tasmania are added. This new project was expressly included in TasRail's forecasts of their own freight task, so we included this new task in the overall numbers from 2014/15 onwards.

Historically freight growth has risen at a rate faster than GSP or GDP growth. Therefore some freight projections include a freight multiplier. However we elected not to use a freight multiplier for the purpose of this report.

Table 6 - Estimates of Annual Tasmanian Freight growth

Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Annual Growth rate	1.92%	1.15%	1.03%	1.1%	1.24%	1.3%

Estimating spill-overs

The estimates of spill-over benefits are based on multiplying the rail freight task by the difference in the road and rail environmental and safety costs on a 'per net tonne kilometre' basis. We based these costs on parameters drawn from a variety of sources as summarised in Table 7 for road and Table 8 for rail below.

Table 7 - Road – parameters for environmental and safety costs, $ per ntk

Costs	General Access	HPVs and HMLs	Assumed 50% GA/HPV mix	Source of GA Value
Environmental	0.011	0.009	0.010	Austroads 2012
Safety Costs	0.016	0.012	0.014	Austroads 2003
Total External			0.024	

Note: Both general access and high productivity type trucks carry freight on the Tasmanian network. We assumed a simple half/half split. A 20% efficiency gain was applied to HPVs on the basis of BITRE 2011 – so the final figure is 10% less (a smaller cost/impact) than the Austroad parameters.

Table 8 - Rail – parameters for environmental and safety costs, $ per ntk

Costs	Value	Source
Environmental	0.0023	RIRDC 2007
Safety Costs	0.0004	BTRE 2003
Total External	0.0027	

Estimating operating costs

TasRail provided the rail operating costs tabled in section 5.1. These include labour (drivers, rail operators, maintenance staff), fuel, maintenance & consumables, track access charges. The State Below Rail Contribution is also included in this estimate.

Road costs include labour, tyres, maintenance, fuel and road access charges incorporated through registration and fuel excise adjustment. The costs are based on publications from BITRE, TransEco and the NTC – see the Reference Section for details.

7. References

Austroads 2003, *Valuing environmental and other externalities*, https://www.onlinepublications.austroads.com.au/items/AP-R229-03

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