National Secretary
Mr Chris Venn-Brown FIEAust CPEng

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ref. RTSA-NS-91

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Mr Roger Fenner,
Project Manager Roads and Traffic Authority
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Dear Mr. Fenner

Re: **PACIFIC HIGHWAY MOORLAND TO HERONS CREEK ENVIRONMENTAL IMPACT STATEMENT**

In January 2004, the RTSA made a submission to Parsons Brinckerhoff regarding concept proposals for upgrading the Pacific Highway between Kempsey and Eungai. A copy of this submission is attached.

The RTSA requests that this submission, which touches on questions relating to Moorland to Herons Creek as well as between Kempsey and Eungai, and this letter, be regarded as a formal submission to the Environmental Impact Assessment for Moorland to Herons Creek currently on public exhibition. We would also request that a copy of the Representations Report be made available to us.

The requirements of the EIS, as laid down by Federal Government legislation (*The Environment Protection and Biodiversity Conservation Act 1999*) as well as the NSW government legislation (*Environmental Planning and Assessment Act 1979*), direct the proponent to address a number of items. In part these are:

1. Ecological Sustainable Development – 'to consider the needs and impacts of existing and potential land use and development patterns'.

2. Intergenerational Equity – 'namely that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefits of future generations'.

3. Strategic – 'Relationship of the proposal to relevant state and regional planning strategies and objectives…' and 'Consideration of alternatives including corridor and alignment options…'

The RTSA notes, and is supportive of the Federal Government's AusLink plan and the agreements flowing from the States. At a strategic level the AusLink plan guides the planning, development and funding of land transport (both rail and road) corridors. The Sydney – Brisbane corridor is included in this plan.

The RTSA also notes and supports the initial funding by the federal government of $450M (in 2004) to the ARTC for rail work on the north coast line. This initial allocation was earmarked for some 14 rail deviations, totalling 121 kilometres, to ease curves on this line.

The ARTC has ranked these 14 deviations (plus others). Within the area of Moorland to Herons Creek these rankings are:

Number 2 - Taree to John's River

Number 8 - Rossglen to Telegraph Point

Number 27 - John's River to Rossglen

Subsequently (May 2005) the ARTC is now concentrating on loop extension.

> *'Deviations were considered at length in the development of the strategy but have not been included in the final strategy.*
>
> *The basis of this is that the strategy should be able to be readily delivered within five years and preferably less. The nature of deviations requires significant land acquisition, environmental assessment and detailed engineering analysis.'*

Given the requirements of the EIS, the transport corridor strategies of federal and state governments and the desire of ARTC for rail deviations, the RTSA believes there is merit in discussion and assessment of certain environmental and social benefits of a combined road / rail corridor within the current EIS study area.

This discussion and assessment would extend only to the marginal benefits and costs of associating a rail easement within a road corridor. It is the RTSA's belief that the environmental and social impacts of road infrastructure development are generally more significant than rail infrastructure development.

This discussion and assessment would provide a better understanding of the economies of scope and increase in value, of the environmental and social performance of a combined road / rail corridor. Obviously any final assessment (including economic) would be undertaken by the ARTC as proponent for the rail development.

Specifically the RTSA seeks:

1. A discussion and cost estimate of rail bulk earthworks, drainage, bridgework and other civil work (inclusive of capping layer but exclusive of track, signal and communication trenching) within the transport corridor and at the time of road construction. The basis of the costs should be on a 'non-avoidable' cost basis. That is, where shared costs such as overheads, contract administration etc would occur irrespective of a rail construction, these would be to the road infrastructure account. Any benefits or costs (from economies of scale or diseconomies of scale) of the combined road / rail construction would be to the rail account. Costs estimates may be preliminary due to the uncertain nature of the concepts, but should include confidence levels.

2. A cost estimate of the marginal cost of acquiring additional land for a combined road / rail corridor (over the costs of acquiring land for road purposes only). A short discussion on the likely future requirements of an EIS for a rail line within a transport corridor for which no further land acquisition would be required

3. An assessment of the social benefits to local and regional communities of eliminating road level crossings and other on-road and off-road vehicle conflicts with rail operations, through an integrated road / rail designed transport corridor.

4. A discussion and initial environmental assessment of the costs and benefits of the impacts of combing the northern rail line within the transport corridor. This discussion and initial assessment should discuss:

    a. Geotechnical and soil conditions

    b. Hydrology, flooding and water quality

c. Flora and fauna

d. Aquatic ecology

The impacts are due to both the construction the rail deviation plus the mitigation measures (including reduction of habitat fragmentation) of revegetation of the old northern rail line.

5. An assessment of the changes in tables 5-5, 5-6, 5-7 and 5-8 (in the EIS) on ESD / Environmental and Land Use and Strategic Planning categories with the inclusion of a rail line within the transport corridor.

Yours sincerely

(Mr.) Chris Venn-Brown FIEAust CPEng
National Secretary

Submission re Pacific Highway Upgrade: Kempsey to Eungai Jan 2004

1. The Railway Technical Society of Australasia (RTSA) is a technical society of Engineers Australia. The RTSA now has over 800 members and hosted a major Conference on Railway Engineering in November 2002 at Wollongong with over 400 participants. The present submission, prepared with the assistance of the University of Wollongong, outlines member concerns and draws on submissions to various Federal and State transport inquires (including in 2003 to the Federal Government in response to its AusLink Green Paper and the NSW Ministerial Inquiry into Public Transport).

2. This submission is consistent with earlier submissions of the RTSA including one regarding the AusLink Green Paper. A summary of this AusLink submission was attached to the original of the present submission, and can be supplied on request..

3. The RTSA understands from DOTARS and RTA information (August 2002 Pacific Highway Progress Update) that the ten year program, at a cost exceeding $2 billion, aims to strike a *"…balance between social, ecological and transport needs";* also the program aims to improve road safety and transport efficiency in a sustainable manner.

4. The RTSA notes that considerable progress has already been made in upgrading the Pacific Highway. This includes to 15 December 2003 completion of 22 major projects (including 3.5 km of dual carriageway at Half Way Creek at a cost of $21.5m) with three major projects underway (Karuah Bypass; and Taree to Coopernook upgrade with bypass), along with minor projects. The combined benefits include reductions in transit times between Hexham and Tweed Heads of over one hour for heavy trucks.

5. Since 1996, the Pacific Highway has been progressively upgraded at a cost of more than $2 billion. Following the opening of the Yelgun – Chinderah highway 28.5 km at a cost of $348 million in August 2002, the NSW Roads and Traffic Authority (RTA) approved B-Double truck access for the entire length of the Pacific Highway within NSW. This was on the understanding that *"There will probably be a transfer of some of the B-Doubles from the New England Highway, but the total change in heavy vehicle numbers will be relatively small."*

Completion of Yelgun – Chinderah in August 2002 and approval of the use of B-Doubles for the entire length of the Pacific Highway were followed by a marked increase in the number of heavy trucks using the Pacific Highway.

6. The RTA via its website and by paid advertisements prior to Easter recommended Sydney – Brisbane motorists to consider using the New England Highway. On the website prior to Christmas in 2003 and in early 2004, it is noted that *" If you're heading up to Queensland, consider taking the New England Highway."*

7. The year of 2003 was marked by a noticeable number of fatal road crashes on the Pacific Highway: On 19 October 2003, the NSW Roads Minister the Hon Carl Scully MP announced that there would be an inquiry into road safety on the Pacific Highway. By that date, over 40 lives had been lost in road crashes on this Highway.

The Society is not aware of any invitation to the public to have input into what is seen as an important inquiry. The Society suggests that transferring interstate freight from road to rail should be viewed as part of an integrated strategy to improve road freight.

8. Further road crashes involving articulated trucks on the Pacific Highway include the fatal collision of two B-Doubles south of Urunga on or about 10 December 2003, leading to and closure of the road for many hours (see Daily Telegraph 11-12-03). By early December 2003, this number of fatalities had increased to 53 (SMH 'Drive' article on the Pacific Highway Dec 03).

9. In regards to the average cost of road crashes involving articulated trucks, a book *'Back on Track: Rethinking transport policy in Australia and New Zealand'* by Laird, Newman, Bachels and Kenworthy (2001 UNSW Press) notes an average cost of 0.5 cents per net tonne-km for road crashes involving articulated trucks. This estimate is partly based on the Bureau of Transport and Regional Economics (BTRE) 2000 report *'The cost of road crashes'* and is supported by a Queensland Transport 2001 study *'Land Freight External Costs in Queensland'*.

The National Track Audit which was completed in 2001 for the Australian Rail Track Corporation (ARTC – see www.artc.com.au for the full report and the Appendix with External Cost estimates for road and rail freight by Booz Allen and Hamilton), found that the average cost of accidents for rail freight in Australia is 0.03 cents per tonne-km. This estimate is supported by data given in the Queensland Transport study cited above and in part by the BTRE 2003 report *'Rail accident costs in Australia'*.

The ratio of accident costs for road freight and rail freight in Australia is then about 17 to one.

10. The increasing use of B- Doubles on side roads near the Pacific Highway is also a road safety concern. For example, the Lansdowne Road, which is a minor road north of Taree, has bad corners, four level crossings and a one-way bridge over the Lansdowne River. It also is an alternative route between Cundletown and Coopernook on the Pacific Highway. When the Highway is closed between these two towns because of accident or flood, traffic, presumably including B - Doubles, is directed along the Lansdowne Road. The Society has also had a reliable reporting of a B - Double on this road, away from the Pacific Highway and on a day the Pacific Highway was not closed.

There is a question whether the Lansdowne Road is approved for the use of B- Doubles, which would be surprising given the condition of the road.

11. The Society has also received a reliable report that it now quite common to see B-Doubles on the streets of Taree. It is understood that either the RTA or the Local Council may approve some routes in advance. However, even if a route is approved, these large trucks on the minor roads of a town like Taree certainly would seem to be a safety problem, whether the route is approved, or not.

As above, following RTA approval for the use of B-Doubles on the entire Pacific Highway in August 2002, there has been an increase in the use of B-Doubles on the main Pacific Highway. This appears to have resulted in B-Doubles 'straying' onto side roads, causing an additional road safety hazard.

12. The RTSA shares the concerns of former Federal MP, Mr. Colin Hollis when he was a Federal MP and Deputy Chairman of the House of Representatives Committee chaired by Mr. Paul Neville MP who produced the reports *'Planning not Patching'* (1997) re roads and *'Tracking Australia'* (1998) re rail. To quote Mr Hollis from Hansard for the House of Representatives on 8 February 1999 re the poor state of the Sydney - Brisbane Railway and the need to address rail when upgrading the Pacific Highway:

> "Some 396 kilometres or 41 per cent of this track fails to meet basic fast freight train standards of any curve having a radius of at least 800 metres. This is one reason why the average terminal to terminal speed on intermodal freight trains is little more than 50 kilometres per hour on this corridor. Another reason is the lack of a modern signalling system north of Casino. As found by the 1994 BTCE report for the National Transport Planning Task Force for this rail corridor: *Transit times, reliability and costs are so poor that the corridor may not survive as a commercial freight alternative unless improvements are implemented. ...*
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> "The Sydney-Brisbane rail corridor was noted as far back as 1989 as being in jeopardy by an earlier Booz Allen Hamilton report for State Rail. Its present outlook, at current levels of upgrading, is poor. **Indeed, the current upgrading of the Pacific Highway to a near four-lane standard by 2005 may prove to be in vain if all it achieves is taking more and more freight off rail and putting it onto B-doubles."**

13. The ARTC 2001 National Track Audit, and other official reports have identified the substandard nature of the Maitland – Brisbane line. Originally a string of branch lines, then joined together and extended between Kyogle and South Brisbane in 1930, over 40 per cent of this "long and winding track" has excessive curvature with radius less than 800 metres. In addition, the Engineers Australia Infrastructure Report Card has twice rated this line as F.

If the line was to be rebuilt to modern engineering standards with a minimum curve radius of 2200 metres (as per Queensland Main Line Upgrade standards applied to over 100 km of rail deviation), and a more direct route taken, point to point distance would be reduced by over 100 km.

14. It is understood by RTSA that in 2003, the Maitland – Brisbane rail line was assessed as the weakest interstate rail line in Australia. As well as the Transport Planning Task Force noted by Mr Hollis above, a Booz Allen and Hamilton 1989 Report for State Rail found this line was a candidate for closure, whilst the 1998 report 'Tracking Australia' also considered that if interstate lines such as Maitland – Brisbane were not upgraded, they could face a loss of traffic that would be 'irretrievable' leading to closure.

This makes a total of no fewer than four significant warnings given since 1989 on the long term future of this line.

15. The BTRE Info Sheet 22 *'Freight between Australian cities 1972 to 2001'* showed that for the year 2001, the Sydney - Brisbane intercapital city road freight movement was about 4.9 million tonnes, with rail having about 0.9 million tonnes. This gives rail a land freight modal share of 15.5 per cent, which has since declined. The BTRE projection in this Info Sheet for 2010 indicates that by then road freight will have seen major growth to about 8 million tonnes, whilst rail will have declined to about 0.6 million tonnes. This means rail will then have a land freight modal share of less than 7 per cent.

These trends are projected to continue through to 2020 with road at 11.4 million tonnes and rail 0.3 million tonnes. This implies rail would have a paltry 2.5 per cent modal share (assuming that the line has not been closed by then).

16. Whilst the Track Audit optimal basic upgrade will give some reduction in transit time (the aim is to lower the present Sydney – Brisbane freight train time of 21 hours to 17.5 hours), more work will be needed to ensure that intercity rail freight can effectively compete with B-Doubles using upgraded freeways.

17. In addition, improved road pricing is supported as a means of increasing revenue for road construction and maintenance works, and assisting with vehicle use demand management.

As per our submission to AusLink, road pricing should include congestion pricing within and near major cities, and mass-distance charging for heavy trucks.

18. In regards to a preferred new route between Kempsey (503.56 km) and Eungai, the RTSA notes that all routes come near the North Coast Railway south of Kempsey, north of the location marked Collombatti Rail on the RTA December 2003 Brochure, and near Eungai. The RTSA would request that consideration be given to the option of identifying a land corridor that can be used for both road and rail track deviations.

Another aspect of integrated transport planning is the use of telecommunications. Rail telecommunications on the NSW north coast is antiquated (a coaxial cable system based on frequency division multiplexing) and is unsupportable from the manufacturer, as well as being at risk of failure. Rail would benefit from a more modern system.

Both the RTA and RIC (ARTC?) could well benefit through a combined telecommunication bearer (fibre optic) to support both road and rail telecommunication services (eg Safe-t-Cam cameras, Variable Message Signs etc for roads as well as signalling and communications systems for rail).

Both rail and road would be increasing their use of telecommunications services in the future. The combining of their requirements would not only deliver an efficient outcome for the NSW government but also increase net worth in the NSW assets. As well, other regional government agencies may also be able to use excess telecommunication capacity.

19. To this end, the RTSA would request that consultation be undertaken with the Rail Infrastructure Corporation (or its successor), and the ARTC. etc