



# FOR THE LONG HAUL

The integration of regional road and rail networks is a major national challenge currently being investigated by the House of Representatives Transport and Regional Services Committee

*Geoffrey Maslen reports.*

Since the first humans trod the earth, transport has been as essential to our survival as sex and shelter. The caveman dragging an animal carcass to his family started it all, using the only form of transport he knew. Then along came the genius who imagined a wheel being cut from a rolling log—and suddenly legs gave way to new forms of locomotion.

Today, we have machines to take us and our goods wherever we want—under the ground or on the surface, in the sea or in the air. While most people are more concerned about cars, trains and planes for their personal transport needs, it is the movement of materials that keeps the nation's economic clock ticking faster.

Half a million trucks rumble up and down the roads of Australia, each travelling an average 20,000 kilometres a year fully laden. As well, 2,000 locomotives drag 100,000 freight wagons from one end of the country to the other, moving 600 million tonnes annually along 40,000 kilometres of rail. And there are the ships that, mostly unseen, carry vast quantities of ore, coal, grain and animals around the coast and across the oceans to far-off lands.

The multitude of machines that comprise Australia's domestic transport fleet shift close to 3 billion tonnes of goods a year. In purely tonnage terms, trucks carry nearly three-quarters of this huge load, rail 25 per cent and ships 2 per cent. But on a tonne/kilometre basis, rail's share comes to 38 per cent and movement by sea amounts to 28 per cent because of the longer distances involved.

The Bureau of Transport and Regional Economics estimates that interstate freight movement will increase by around 80 per cent over the next 15 years. But the bureau warns this will be complicated by passenger traffic which, in terms of the number of trips on the 10 major inter-capital routes, is expected to grow by 40 per cent over the same period.

If past trends continue, road transport will expand more rapidly than its rail and sea competitors. This seems certain to add to the existing congestion, increase pollution, cause even more damage to the highways, and create ever-longer traffic jams in urban areas, especially on the roads leading to the ports.

Into this enormously complex arena has stepped the House of Representatives Transport and Regional Services Committee to conduct an inquiry into the integration of regional road and rail networks. Committee Chair,

Paul Neville (Member for Hinkler, Qld), says the inquiry will examine the operation of the networks in handling the rapidly growing task of moving Australia's freight. An important aspect is the way those networks connect with ports, Mr Neville says.

The committee is holding public hearings around the country and has already received more than 110 submissions from transport engineers, rail and road authorities, mining companies, the CSIRO, 20 municipal councils and half a dozen ports, as well as the governments of New South Wales, the Northern Territory, Queensland and Tasmania.

In its submission, the Australian Shipowners Association complains about the emphasis on road and rail in the committee's terms of reference and the way shipping's contribution has been ignored. With their ships all at sea, the bosses object to the orientation solely to land transport.

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As the association gloomily informed the committee, market shares of the road, rail and sea sectors have altered appreciably since the mid-1980s—and the big losers have been the big boats. Indeed, their share of Australia's non-urban freight movement has been slashed.

Expressed as tonne-kilometres, transport by sea has plummeted from a 44 per cent share of the market two decades ago to 28 per cent today. Meanwhile, road's share has jumped from 22 per cent to 32.5 per cent and rail from 33.5 per cent to 38 per cent.

In other words, groan the owners, road has moved from third place to second place, rail has leapt from second to first and sea has dropped from first to third place. They say this contraction is surprising, not to mention alarming, given that sea transport requires no permanent highway infrastructure, is the most fuel efficient of the three transport modes, generates the least greenhouse gas emissions and creates the smallest social impact.

Moreover, unlike the roads and much of the rail network, port infrastructure is more than fully funded by the shipping industry. As the shipowners point out, the federal government

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will spend \$11.4 billion on land transport over the next five years: almost \$11 billion in road and rail funding and a one-off \$450 million investment for new rail infrastructure projects—but nothing on shipping.

In contrast, those involved in sea transport use infrastructure fully funded by the shipping industry. Similarly, it is shipping that pays levies to support the Australian Maritime Safety Authority in installing and maintaining navigation aids and lights. Even the use of port facilities by ships is subject to charges levied by port authorities.

Freight moved by sea, of course, is usually unable to be effectively transported by road or rail. That is because the volume is so large sea transport is the only practical means available or because of the long distances in moving mining products along the Queensland and Western Australia coasts, or because of geographical barriers. Bass Strait, for example, cuts Tasmania from the mainland while the oceans separate Australia from the rest of the world.

The contribution ships make to the national economy in carrying vast quantities of Australian produce overseas is substantial, especially given that 220 million tonnes of coal worth \$11 billion was transported overseas last year. So were 208 million tonnes of iron ore worth \$5.3 billion, 21 million tonnes of grain, value \$5.1 billion, 14 million tonnes of bauxite and alumina, \$3.7 billion, and 10 million tonnes of woodchips that earned \$800 million—not to mention the 10 million tonnes of salt, 1 million tonnes of meat and the gold bullion that collectively generated some \$12 billion.

Still, compared with the complexities involved in rail and road transport, shipping looks like child's play. As the federal Transport Department notes in its submission, moving coal by rail to export ports in NSW and Queensland occurs on track occupied by other rail users. This is particularly an issue in the Hunter Valley where more than 30 coal mines operate and the trains used to transport the mineral have to work in with both passenger and grain haulage services—a situation made more difficult by the state government's insistence on passenger movement having priority.

Then there is the actual condition of the road and rail networks. In its submission, Engineers Australia draws attention to its 'Australian Infrastructure Report Card' which provides a



commentary and rating on the state of the nation's telecommunications, ports, roads and rail.

In 2004, the engineers rated the national road systems in NSW and Queensland as C+ on a scale from A (best) to E (worst). State roads in each case were given a C- rating while rail was graded C+ in Queensland and D in NSW.

The Transport Department likewise notes that Australia's regional rail networks servicing grain-growing areas were constructed during the second half of the 19th century and the early part of the 20th century. "Consistent with the engineering standards and capabilities of the time, large parts of the networks are poorly aligned and built for much lighter axle loads than those of modern-day requirements," the department says.

Also, much of the grain network has been starved of adequate investment and maintenance funds over recent decades and is in poor condition. The low volumes on many of the lines mean that private operators are unable to achieve the revenue stream needed to tackle maintenance deficiencies, "resulting in a downward spiral of the condition of the track".

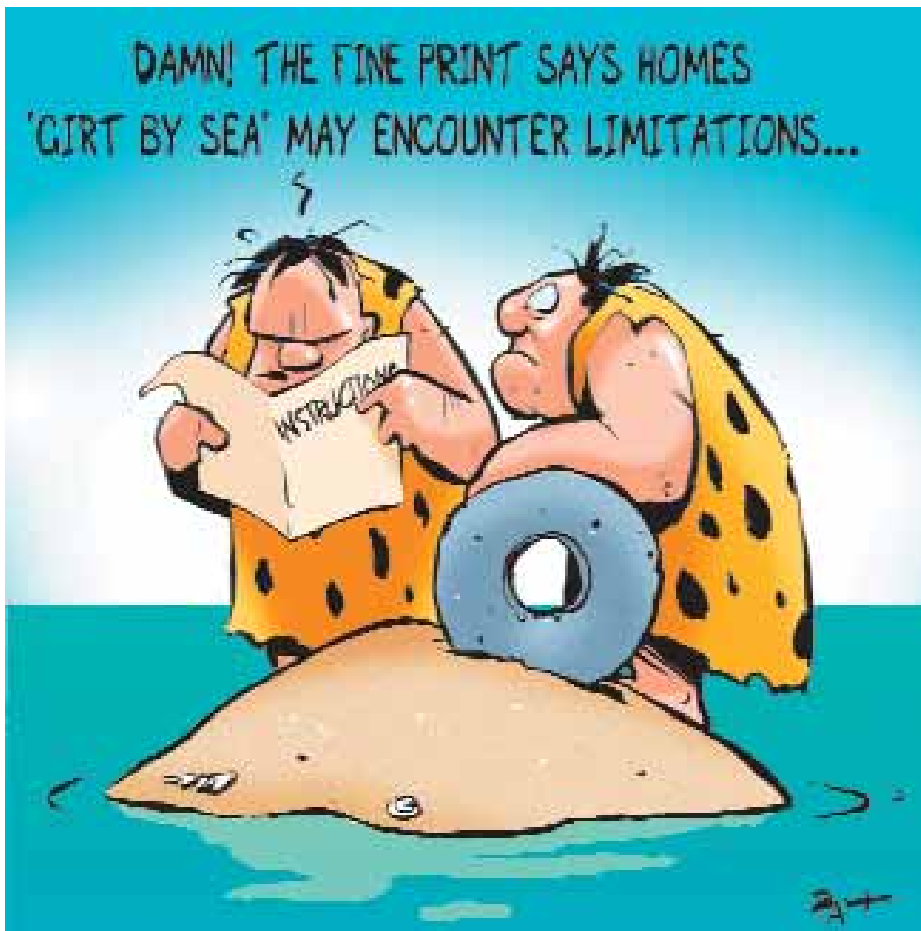
In sharp contrast, a spokesman for the giant mining conglomerate Rio Tinto told a public hearing in Gladstone how his company was able to shift millions of tonnes of iron ore by rail from the Pilbara

Sea transport is the most fuel efficient of the three transport modes and creates the smallest social impact.



Photo: Newspix

to the ships in the most efficient and optimised way possible. But Rio Tinto was also worried that others might demand to use a facility that its shareholders had paid for.



“The rail line is a privately owned, dedicated, integrated infrastructure,” the spokesman said. “The risk is that if third parties apply through the national access regime to access our infrastructures it would cause enormous efficiency complications.”

That comment created some tension when the committee asked why other companies should not be able to use Rio Tinto’s line. One member of the committee observed:

“You are basically saying that it is in the shareholders’ interests in terms of efficiency and effectiveness, to have that infrastructure 100 per cent for the use by Rio. Then you say that it is also in Australia’s interests. To my way of thinking, maybe there could be a slight conflict in duplicating infrastructure alongside Rio’s to do a similar task, as compared to forming some sort of agreement where you could share.”

That issue, however, is probably of minor importance compared with the more troublesome questions facing the committee. The Transport Department’s submission argues the best outcome from a national and regional viewpoint will be obtained when transport services, particularly rail and road, are well-integrated. It says a high level of

integration is most likely to be achieved if transport planning is coordinated and unnecessary duplication of facilities is avoided, the most suitable transport mode is used, and transfers of freight between modes are handled efficiently.

The department notes that the expected increase in freight traffic and its impact on Australia’s transport infrastructure led to the release of AusLink in June last year. This document is the federal government’s policy for land transport infrastructure, backed with a \$12.5 billion investment in the five years from 2005 to 2009.

The main focus of the funding is on the AusLink National Network. But it also includes substantial sums for local and regional transport links under the Roads to Recovery program and its new strategic component.

“AusLink will provide an integrated, long-term approach to land transport infrastructure planning in Australia,” the department’s submission states. “Road and rail systems, which were formerly considered on a separate basis, are now part of a single national network. This allows for greater integration of the two modes as well as intermodal transfer facilities, and provides a sound basis for developing long-term investment priorities.”

The AusLink network includes the most nationally significant regional arterial links, along with urban road and rail links to capital city ports. The scheme is expected to improve access to other ports through direct connections or as a result of the proximity of these ports to the national network.

“AusLink encompasses a new approach to the way the Australian government will plan, make decisions about and invest in national land transport infrastructure,” the department says. It further points out that:

- The system adopts a multi-modal approach that incorporates a combined pool of funds for road and rail projects. The focus is on the transport corridor and the best way to tackle a transport need.
- Funding decisions will be made on the basis of the best solution, whether it is road construction, rail enhancement or a technology approach.
- The investment will be based on the new national network. This goes beyond the old National Highway system and includes links of national strategic importance that provide the greatest economic and social benefits.
- The government will share funding responsibility with the states and territories.
- For the first time, too, transport infrastructure funding will be underpinned by a five-year national plan with a 20-year horizon. The submission says this provides the longer timeframes and certainty to ensure strategic investment—so important in the planning and construction of major infrastructure works.

The AusLink framework also maximises the potential for private sector involvement. The new shared funding arrangements will encourage state and territory governments to seek private sector involvement, in appropriate circumstances. The longer planning and investment horizon is more conducive to private sector planning timeframes, the department says. ■

*For more information on the inquiry into the integration of regional rail and road networks and their interface with ports by the House of Representatives Transport and Regional Services Committee visit [www.aph.gov.au/house/committee/trs](http://www.aph.gov.au/house/committee/trs) or email [trs.reps@aph.gov.au](mailto:trs.reps@aph.gov.au) or phone (02) 6277 2352.*