



**TRANSCRIPT
OF PROCEEDINGS**

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PRODUCTIVITY COMMISSION

INQUIRY INTO RAIL REFORM

**MRS H. OWENS, Presiding Commissioner
PROF D. SCRAFTON, Associate Commissioner**

TRANSCRIPT OF PROCEEDINGS

AT SYDNEY ON THURSDAY, 13 MAY 1999, AT 9.32 AM

Continued from 12/5/99

MRS OWENS: Good morning and welcome to the second day of the public hearings in Sydney for the Productivity Commission's inquiry on Progress in Rail Reform. As I said yesterday, this public hearing is the first of four sets of hearings and we're also going to be running hearings in Perth, Adelaide and Melbourne over the next couple of weeks. They're designed for people to raise issues in relation to our draft report, which was called Progress in Rail Reform, which we issued at the end of March, and they give people the opportunity to have some input into our final report, which is due to be released in August.

At this stage I'll just introduce my colleague on my left, who you know, Prof Derek Scrafton, who's the associate commissioner on the inquiry, and I think what we might do at this stage is get started, so I would like you both to introduce yourself and your affiliation for the transcript.

MR PORTER: My name is Denis Porter. I'm the executive director of New South Wales Minerals Council.

MR CLACHER: I'm Kenn Clacher, coordinator of the Hunter Rail Access Task Force, which is a group set up under the auspices of the Minerals Council.

MRS OWENS: Thank you both for coming, and thank you for the submission which we have both read and I think found very useful. I was wondering, would you like to make a few opening comments and then we'll get on to some questions.

MR PORTER: Thank you, and thanks for the opportunity to appear today. We've provided to the commission a draft submission and we have the final one with us today. I'd just like to highlight a few issues and certainly a couple of these are firstly, the application of horizontal and vertical integration to the Hunter rail network; and secondly, the pricing and allocation of train schedules.

On horizontal integration, the draft report canvasses horizontal separation of high-volume regional networks of which the Hunter network is cited as an example. While in some circumstances this may be desirable, we believe it does not seem a good idea for the Hunter. It has features such as, first, it's a network that at the hub includes urban passenger, interstate freight, high-volume regional and low-volume regional traffic. Second, the bulk of its traffic is obliged to use rail, so there is no intermodal competition for that traffic. Third, it would be desirable for non-coal traffic that has its origin or destination outside the Hunter network to be able to deal with a single infrastructure owner. Creation of regional networks would require a body equivalent to the ARTC to provide a one-stop shop for intrastate traffic, as well as increasing complications for interstate traffic.

There would undoubtedly be benefits, in particular greater transparency, but this would appear to be attacking the symptoms of the problem rather than the problem itself. This is that there is still inadequate transparency provided for in the New South Wales rail access regime. This is notwithstanding, first, the public consultation

process conducted by the New South Wales Department of Transport; secondly, our assumed recommendation of the NCC on certification of the amended regime; and third, the recommendations of the recent IPART report. Even horizontal separation does not address the problem of transparency within the horizontally separated unit.

On vertical separation, the commission's draft report suggests that vertical integration may be appropriate for high-volume regional rail networks. Again the nature of the Hunter network is such that we consider vertical integration is inappropriate for this network. This is again brought about by the wide variety of traffic on the network. Unless the vertically integrated track owner operates all urban and inter-urban passenger services, all coal and other freight operations, all interstate operations and all light density operations connecting directly with the Hunter network, there will be traffic on the network which is not that of the owner. There is no apparent benefit in forcing entities that have been separated to reintegrate.

In the period since the old New South Wales SRA was divided into four separate entities there have been considerable gains made in all aspects of rail operation in New South Wales. There have been many developments, or you could say lack of development, of which the New South Wales Minerals Council has been highly critical but the outcome has been far better than would have been achieved with a vertically integrated rail infrastructure owner. Examination of the recent annual reports of RAC, FreightCorp, the new SRA and Rail Services Australia demonstrates that each considers that great benefits have accrued from the vertical separation, and the New South Wales Minerals Council agrees with this. We believe it would be a backward step to try to reintegrate them.

On the issue of pricing of train paths to reflect value of the track to users, we understand that the commission's encouragement for pricing and allocation of train schedules to reflect the value of the user's place on the track reflects a desire that rail operators wishing to secure the most advantageous train paths should be prepared to pay for that advantage. The New South Wales Minerals Council does not disagree with this principle; it's particularly frustrating for the coal industry that the highest priority rail traffic pays the lowest access charge, and the lowest priority traffic pays the highest charge. The council has been advocating for some years the adoption of a capacity transfer policy and was pleased to see that progress was apparently being made when the New South Wales cabinet office in November 97 made an undertaking to the NCC that such a policy would be developed within three months. We agreed with the principle and suggested some improvements, as well as a widening of discussion to include those who would be most affected - the rail customers.

Our submission has details of our proposals on capacity trading. To our knowledge, nothing has happened. In the meantime the NCC appears to think that the cabinet office's undertaking has been met, even though the NCC was supposed to be involved in the discussions which have never taken place, to our knowledge.

New South Wales Minerals Council would encourage the commission to make it clear that in its recommendation 7.1 it is not advocating the type of pricing

incorporated in the New South Wales rail access regime. This pricing allows the infrastructure owner to discriminate in its pricing, with no guidelines or objectives being specified for the discrimination, no independent regulator to ensure the discrimination is reasonable, and rail users have to pursue regulation through arbitration. That's the end of the brief statement, thank you.

MRS OWENS: Thank you very much, and I think we've both got some questions but I think the best way for structuring the questions might be just to run through your submission on a page-by-page basis, but I thought I'd just make one thing clear before we started. I don't think what we were doing in our draft report was trying to suggest to New South Wales that they should be reintegrating. I think what we were trying to establish in our mind was a set of principles. I think in New South Wales there is a system that needs to be evaluated and looked at. There are other states at different stages in their development and I think New South Wales is an interesting experiment and none of the other states have adopted this approach.

I think it's an interesting way of cutting the cake, if you like, but we were trying to set down what we thought could be appropriate principles and then we can say, "How do each of the jurisdictions depart from those principles, and does that make sense in that context?" Obviously we don't believe in having a recipe approach to anything. What might work well in New South Wales may not work particularly well, obviously, in Tasmania or even in Queensland. We are just fascinated that there are these different structural models. There are different ownership arrangements in the different states and they're having different effects. They might all be equally effective, depending on the environment in which they're operating and how well they are being implemented. I just thought I'd make that clear.

MR PORTER: Thank you.

PROF SCRAFTON: We did make that point clear, I think, in chapter 2 when we first introduced the concept, but when it appears towards the end it certainly has been read as being far more dogmatic than we originally intended. Comments such as yours, particularly your comment on the top of - I think it's about the second page of your submission where you point out that the Hunter has elements of every one of our characterised networks, if we could call it that. We accept that comment, the criticism that in effect it has appeared to be far more rigidly set out than we'd intended, and we will certainly take the comments on board.

The other thing I think is important too is that we had no intention of wanting to give people the impression of rolling back from progress that had been made, whatever the model. As Helen has said, your submission and your negotiation over the years with rail organisations and the Treasury and the Premier's Department and the NCC and so on are based upon a very clear understanding of the strengths and weaknesses of the network that you face. I think you make the point very clearly to us that given the regime within which you have operated or to which you have given business, if I could put it that way - or with whom you have done business - it's much

more important, from your point of view, to get those problems resolved that you see within the existing network than trying to superimpose some new system. We certainly didn't intend that.

MRS OWENS: Okay, as I said, we'll start on page 1 and work our way through. I'd like to actually focus a bit on the issue of transparency in the access regime and on horizontal separation because I'm interested in your views on that. I think they're quite important for us to understand. On page 1, before we get into that, you mention in your second paragraph about our black coal report. You said that you think there are some places where more comment is warranted. What we tried to do is not duplicate what was in our black coal report because we didn't think that was particularly sensible, coming from the same organisation. But if there are other things that you think we have missed that weren't in either report, that we have overlooked or got wrong, I think we would appreciate - you may want to take this on notice but you can point us in that direction and clarify that for us. Have you got anything you'd like to say on that at this stage?

MR CLACHER: No, not at this stage.

MRS OWENS: Okay. If there is something, we would be interested in knowing it. We tried, as I said, to not go too far into the work that they were doing, but we are happy to take it on board. Is there anything else on that page?

PROF SCRAFTON: No, I think we covered the point on the structure in our earlier comments.

MRS OWENS: Yes. On the next page you have a discussion about horizontal separation, and in your opening comments made some remarks that you don't think that horizontal separation is a particularly good idea for the Hunter. This is an issue where we are quite interested in understanding your position because your insights in this are valuable. What we were trying to say was that there are high-volume lines where the predominant business on those lines is coal traffic. There may be other things but the dominant business is the coal traffic. Are there arguments to say that they could be hived off and run, say, by a coal company or whoever? It's almost a model in the Hamersley as part of a production process. It may not work in the Hunter because of the fact you've got numerous coal companies maybe all using the one line but we're just trying to explore that. You were concerned about issues such as cross-subsidisation and it is one way of dealing with that issue, but you're saying that is not the most direct way.

MR PORTER: I guess if I can just comment, then Kenn come in because he's much more familiar in detail with these things, but it is very difficult to compare the Hunter with a system like you have in the Pilbara. The Hunter is a very complex system; there's no question about that. Coal is dominant in terms of tonnage and train movements, I guess, but it doesn't have priority in terms of timing. The passenger trains, which carry a minute number of passengers, still have priority in scheduling and so on. As our submission talks about, we've got interstate traffic, intrastate traffic

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which includes bulk grains and so on - so it's a complex system and there's a lot of other factors coming in. It's incorrect, I think, just to look at the Hunter versus a very simple iron ore network in the Pilbara.

MR CLACHER: Yes, the Hunter network I think is generally regarded as being bounded by Stratford, Gunnedah and Ulan in the north, and Eraring to the south of Newcastle. These places have very different characteristics and, as Denis said, we need to concentrate maybe not so much on tonnage but on train paths because a train path for a train that carries 10 passengers can take up the capacity of a 10,000 ton coal train. So starting from the south, virtually all the train paths are passenger train paths, but they also include interstate traffic and some intrastate, I would guess. Line from Newcastle to Stratford - mainly interstate traffic in terms of train paths; I would think a minor amount of coal traffic. Line from Muswellbrook to Gunnedah - some coal but I would think more grain traffic and perhaps general freight. So that leaves really only the line from Newcastle to Muswellbrook to Ulan as being predominantly coal traffic and even the line from Newcastle to Muswellbrook, which carries most of the coal traffic, again has a significant number of train paths allocated for grain and passenger and so on.

MRS OWENS: I suppose that might be a good example, that particular line, where you could say, "We're going to hive that one off." It could be horizontally integrated and the owner of that line could then contract with the other users of the line which, in terms of priorities, would potentially be lower priority - the passenger trains, for example. If they are minor they shouldn't be dominating in that market. They are not actually competing with the coal trains in terms of the service, it's just in terms of the time paths, and it doesn't make a lot of sense to me that they should get priority in those areas.

MR CLACHER: Certainly the priority, or just the existence of passenger and grain traffic - which I understand also in the grain season in fact gets priority over coal - means that it's very difficult, if not impossible, to run the railway as a coal railway in the same manner as the Pilbara iron ore railway is run.

MRS OWENS: The fact that the passengers get priority, is that part of this general government policy that passengers get priority? I thought it related more in the Sydney area. Does it happen in the country areas as well?

MR CLACHER: As Judy Stack pointed out yesterday, the Transport Administration Act says that passengers shall get priority, and the New South Wales rail access regime has a Schedule 4, I think it is, which also sets out in a page or so the policies or requirements regarding priority of passenger trains and, as far as I recall, there's no distinction made between urban and non-urban passenger traffic.

PROF SCRAFTON: I think also in the terminology of New South Wales as well it is actually considered to be part of the metropolitan system still. It's operated as part of CityRail and not - - -

MR CLACHER: I think up to Dungog is metropolitan.

PROF SCRAFTON: Yes, right out as far as Dungog and not by Countrylink, which is the country train.

MR PORTER: I think you've got a combination of traffic in the Hunter. You've got the pretty well patronised Sydney to Newcastle services and also the XPT, which will go up to New England and those sort of areas.

PROF SCRAFTON: Tamworth.

MR PORTER: And then you've got some of the very lightly patronised Newcastle to Maitland - or wherever - services. So you've got a distinction there.

MRS OWENS: I think the other important point that you made was about the administrative costs. This was a point you made in the submission to us, that you were concerned that if you carved off bits then you've got the administrative costs of getting access to different bits of the network, and you think that would be a significant factor as well.

MR CLACHER: We think so, yes. If regional networks were separated, then it would appear that you need a body equivalent to what the ARTC is trying to do to handle intrastate access.

PROF SCRAFTON: Could we move on down the page in your submission where you talk about that you believe there are better ways of eliminating these cross-subsidies and the problems, and the words you use are "adoption of an access regime that provides the necessary transparency would achieve the same result at much lower cost". It seems to me, though, from what we've heard from you, that you've been attempting to achieve this over a lot of years and I wonder what it is about the present regime that makes it so difficult to move that one step forward to eliminate the problems that you see.

MR CLACHER: There are a couple of areas. One is the fact that the regime allows for commercial negotiation with a monopolist, which seems to me to be an oxymoron, between a floor and a ceiling, but there is no indication either in the legislation or in the regime of the basis for the discrimination, the basis of setting the price between the floor and the ceiling. We know that RAC makes no secret of the fact that they price based on what they think is the ability to pay of the access seeker but again there's no indication of how they judge ability to pay. They've judged on the results of the New South Wales coal industry. I think we pointed out in our submission on black coal, and possibly even in our first submission to this inquiry, that the profitability of the New South Wales coal industry generally is not good. It averages only a couple of per cent on shareholders funds over the past 10 years.

So apart from the fact that there's nothing to say how ability to pay is to be judged, there's the setting of the floors and ceilings. There are two tests, a floor test

and a ceiling test, and just in the past couple of days, as it has turned out, I have sat down to try and figure out exactly what the regime that we now have is telling us about the tests we have to carry out, and as I calculated it - with the 41 separate line sectors nominated for the Hunter in the New South Wales rail access regime - there has to be a test considered for each line sector or group of line sectors.

With 41 line sectors that gives us two by ten to the twelfth combinations of line sectors and also you've got to look at - on some of the tests - an access seeker or group of access seekers, and there's about 24, I think it is, of those groups. You've got two by ten to the seventh different combinations of access seekers. So you've got a matrix of two by ten to the twelfth one way and 1.6 by ten to the seventh the other way. You don't have to work out all of those tests, every one of those combinations - it might be only a third or a quarter - but it's still an obviously impossibly large number.

MRS OWENS: I don't think we will do it in our head.

MR CLACHER: Well, it's ten to the eighteenth, or somewhere around about that.

MRS OWENS: Yes.

MR CLACHER: We appreciate that RAC says, "Yes, it's obvious that there are simplifying assumptions or simplified approaches that can be used," but we've had ACIL Economics carry out these sorts of combinatorial sums, and they've actually done them for groupings of access seekers just for one, really without looking at combinations of sectors - more or less looking at the one network - and it is very difficult and you get some answers which are not intuitively obvious. So we have in our various submissions to several people said, "Well, it's obvious you can't do what the regime says you must do. If there is a simplified way of doing it, say what the simplified method is," but that hasn't happened.

MRS OWENS: So how are you working within this regime, given the complexity?

MR CLACHER: Until February this year we haven't had the chance to talk directly to RAC about that because coal companies were not considered to be access seekers in terms of the regime, so they were not entitled to talk directly to RAC about how RAC figured out their prices.

MRS OWENS: So is there any way around this?

MR CLACHER: We are just going to, I presume, stay with RAC and try and figure out - - -

MRS OWENS: So you can now?

MR CLACHER: We can now, yes.

MRS OWENS: What happened in February this year that changed that?

MR CLACHER: A new regime was gazetted.

MR PORTER: That's not to say every company will want to do that but a lot of companies may want to just leave it to FreightCorp as their haulier, or whoever, in future to do that but anyway it's very early days, as Kenn said, so we're not sure how we will work our way through this just yet.

MRS OWENS: In terms of the system does the recent IPART report ease your mind on some of these issues?

MR PORTER: The big gain of course from the IPART report was on the rate of return and that's the one that's most easy to understand and we certainly welcomed that. There's still to be an exercise to value the system and we had hoped that we will see some reduction in the asset values from that process, but some of these things that Kenn is alluding to are much more complex and there hasn't been much progress made on them, but time will tell.

MRS OWENS: Did IPART look at some of these other issues?

MR CLACHER: We pointed these things out and I think they acknowledged that we had made these points but I think they more or less left it up to a future approach under the arbitration provisions of the regime. They did address issues of transparency but what they said was that - they pointed out in their report the need for greater transparency but rather than recommending that greater transparency be implemented or allowed for in the regime, they recommended that the government consider improving transparency.

MRS OWENS: So you say that's a sort of weaker recommendation?

MR CLACHER: Yes, because IPART's recommendations under the undertaking that was given to the National Competition Council were to be automatically integrated into the regime, so rather than having greater transparency automatically incorporated, what's automatically incorporated is that the government consider greater transparency.

MRS OWENS: I haven't read right through the IPART report but did they give any indication as to what the government could consider doing in terms of greater transparency?

MR CLACHER: Yes, there were some fairly specific items that they addressed but they didn't address the complexity of the any of the floors and ceilings. I don't think they addressed directly the issue of objectives to be met in application of the discrimination under the regime in pricing.

MRS OWENS: I suppose the other way of dealing with this is to think of another

way - instead of having floors and ceilings go, I think you've been promoting the past posted prices. In our report we've talked about auctioning.

MR CLACHER: We're not so much advocating posted prices, which tends to infer that these prices must be applied, but rather reference prices which says what people would pay if everyone was paying on the same basis. If then RAC wanted to charge a price, different from the reference price, then at least the people who were having to pay the different price, knows where they stand in relation to others. We also suggested that if RAC wishes to discriminate or charge a price which is not equal to the reference price, that it should have to justify that to someone.

MRS OWENS: There was another issue, which you've just alluded to very briefly, and that was the issue of vertical separation. We probably haven't got to that page but I think it was on page 5 and I might have had something before that to ask you but I can come back to that. You think it's appropriate for high-volume regional networks, such as the Hunter rail line, to be vertically separated, especially where the infrastructure owner is a state-owned monopoly. So you've given that qualification. Are there any circumstances where you'd see that vertical separation would be less than ideal; that you would prefer to see vertical integration?

MR CLACHER: I don't know that we'd prefer to see vertical integration necessarily but if there were intermodal competition, say, then vertical separation might be less inappropriate - if I could put it that way. Of course on the Hunter nearly all of the mines are obliged to use rail.

MRS OWENS: So you are more open-minded about other opportunities? We talked about, yesterday with the RAC, the low-volume lines. You could potentially see that integration in some of those lines does make sense?

MR CLACHER: I haven't thought about the low-volume lines.

MRS OWENS: No, that's an unfair question to ask you.

PROF SCRAFTON: I'd just like to go back to the access regime for a minute - and you make the point on page 3 that there's no independent regulator for the regime. Do you have any feeling for why that is? In other regimes, other states, there is a regulator set down in the regime.

MR CLACHER: There are certainly regulators for the major gas and electricity regimes that have been established in Australia. As has been indicated, all sorts of approaches may be appropriate to various circumstances. I understand that the reasoning behind the particular approach that has been taken with the New South Wales Rail Access regime, that it has no regulator, is that they looked at the Hilmer report and Hilmer set up basically two different models: one was I think a highly-regulated model and the other was what's been called "a negotiate and arbitrate" model.

The advantage of having a model such as New South Wales is that, where there is only a very small part of the network which makes a profit, and that is only a very small group of customers or one single group of customers who are contributing to that profit, and the type of regime that has been established makes it easier to continue to secure that profit. In setting up the regime as it was known, as I said, they looked at the Hilmer model of negotiate and arbitrate but they did not at the same time look at the qualification on that that said under the model it is essential to have maximum transparency.

PROF SCRAFTON: Yes, and you explain in some detail how you're caught in the middle of that, as you say, and so there is a dual thrust there of trying to improve the transparency in trying to achieve some independence in the process. I guess that's what a lot of your submission is about.

MR CLACHER: It seems to me that this negotiate and arbitrate model of Hilmer's effectively puts the onus of regulation on the users and they can't do that unless they get the same amount of information that a regulator would have.

PROF SCRAFTON: Yes, Helen just drew my attention to the end of that paragraph where you have a sentence about the undertakings that the cabinet office gave on transparency which apparently have not been honoured. I didn't mention it there because you've spelled it out quite clearly, including I think giving us the annex - - -

MRS OWENS: You've given us a bit more information.

MR CLACHER: Yes, I faxed some - - -

PROF SCRAFTON: Yes, that's right, additional information with the New South Wales government proposal. Did you want to add anything to that? I thought that was fairly self-explanatory.

MR CLACHER: I think so, yes. It's hard to understand the whole process when we haven't been involved in the discussions between the cabinet office and the NCC and so on. We know a little bit of what's happening but we read between the lines and so on.

PROF SCRAFTON: Certainly there has been no subsequent action, to your knowledge?

MRS OWENS: You gave us some interesting word changes in the material you forwarded to the office, which does look like a weakening. I'm not a lawyer but it does look like a weakening of the intent. Maybe, as you say, there have been discussions and that was agreed or maybe it's just something that's slipped through.

MR CLACHER: We pointed this out to both the state government when they went through their public consultation process, which is required under the Transport Administration Act, and we also made sure that the National Competition Council was aware of these subtle but fairly far-reaching word changes. We don't know what

the outcome is because the NCC, we know, has made a recommendation to the Commonwealth minister on certification but we don't know what the recommendation is.

MR PORTER: We would expect it to be positive in favour of certification, but it has been with the minister for some weeks now. We think that part of the delay has been waiting for the final IPART report. That has now been handed down a couple of weeks ago.

MRS OWENS: So any time now, you think.

MR PORTER: We would hope so.

MRS OWENS: Do you consider, as a result of the New South Wales regime, there is a sufficient degree of contestability on the coal lines? I know you don't probably call them coal lines but in say the Hunter do you feel that there is a sufficient opportunity now for other players to come into those markets?

MR PORTER: Yes, the opportunity is there and other companies are interested and they have been interested for some time. I think it's National Rail that has now got a contract with Macquarie Generation to haul a certain amount of coal. That's for the domestic market. Kenn will have some comments on this, he's better informed than I am, but I think some of the problems have been the lack of the rules of the game - the operations protocols and so on. If you're at Westrail, or someone not familiar in detail with the system of New South Wales, it's hard to come in and make a bit of a business if you don't know what the ground rules are going to be. So there's still a lot of progress to be made.

MR CLACHER: Yes, I was going to make that same point that certainly the opportunity is there but there are still unnecessary barriers to entry for a new operator because of the lack of the operations protocols, lack of I think a standard access agreement - the uncertainty until now about the regime.

MRS OWENS: Although the uncertainty must be reducing.

MR CLACHER: The uncertainty about what the regime will look like.

MRS OWENS: Yes.

MR CLACHER: There's still uncertainty of course brought about by the discrimination that's permitted under the pricing principles - between the floor and the ceiling.

A rail operator who wants to operate on the coal network, in particular, will be looking to maximise the utilisation of his asset. He's going to spend 20 or 30 million dollars on a single train set and he's not going to make money if that train set is hanging about for longer than it has to. Because of the lack of operations protocols,

because of the difficulties that Judi Stack spoke about yesterday about train control, about passenger train priority, a potential new haulage operator simply does not or could not have confidence that he'd be able to run his train in the most efficient way and get maximum utilisation from it.

MRS OWENS: With passenger priority, is this an issue in Queensland?

MR CLACHER: I think the coal lines up there have far less passenger traffic on them.

MRS OWENS: So they're not facing that same constraint.

MR CLACHER: I don't really know but I would guess no.

MR PORTER: I think you'd probably find that the coal that's exported through the Port of Brisbane will come into the Brisbane passenger system at some stage, but the big volume mines in the Bowen basin - I don't know whether there's much, if any, passenger traffic.

MRS OWENS: So it's a different set of circumstances.

MR PORTER: They're virtually dedicated coal lines, yes.

MRS OWENS: It seems to me a very sort of significant obstacle that you're facing in terms of getting other players into the system. That sounds like it could be a potential barrier. There's just the whole issue of protocols and uncertainty.

MR CLACHER: Yes.

MRS OWENS: The other thing that the RAC said yesterday was that there had been, as a result of this current regime, a significant reduction in freight rates for coal. There seemed to be an attribution to the fact that there is vertical separation and we do have this regime in New South Wales. I raised at the hearings that there are other factors like the fact that the monopoly rents are being phased out. Have you got a comment on that? Where would you see the freight rate reductions deriving from?

MR PORTER: I think Kenn has a pretty firm view that a very large proportion of the reduction is due to what we term the "acknowledged monopoly rent phase-out" and also the volume increase. The volume of coal over the lines in the last few years - the increase has been very significant. So those two things have clearly had a major impact on rate reductions. How much of an impact a more efficient track maintenance system might have had or more efficient FreightCorp operations, I'm not sure.

MR CLACHER: We would like the issue of pricing to have been more transparent so that we would know exactly where all of these improvements are coming from but, as Denis said, obviously a big component of that has to be the phase-out of monopoly rent. A big component has to be brought about by the fact that I think in just two

years, between 96-97 and 97-98, coal traffic increased by about 35 per cent on the Hunter network.

MRS OWENS: That's largely because of broader economic factors - greater exports of coal - - -

MR PORTER: Export demand.

MR CLACHER: Yes. I would love to know just what contribution has been made by improved efficiency in maintenance - and they're not operations - but we don't because, as far as I know, they haven't been revealed by RAC.

MRS OWENS: But maybe the RAC does have insights that none of us have and can say with greater certainty that there are these other factors.

MR CLACHER: I've not seen any attempt by RAC to attribute the reduction to any of the components of their costs.

MRS OWENS: You may like to look at the submission they've given to us where I think they're attributing entirely efficiency gains as a result of the regime. I think it wasn't quite so clear-cut at the hearings yesterday where I think Ms Stack did acknowledge the other factors that were also occurring, so we did have quite an interesting discussion, as you know. We're just trying to tease it out and get to the bottom of that.

MR PORTER: We don't want to downplay the significance of the separation of the old SRA into the four components. I guess what we're saying is in recent years the phase-out of monopoly rent and the volume growth in the Hunter, we think, have been the major influences on freight rate reductions, but we acknowledge monopoly rent will have gone by mid-2000, so once we're through that process, the fact that we've got a system separated into the various components puts much more pressure on the operators, be it FreightCorp or an RAC and so on, to lift their game, so going into the future it's very significant, I think.

MRS OWENS: Yes, that's a good point. I think that as you actually exhaust these other factors, then the pressures that you have from this system and the internal pressures to improve maintenance costs and get greater efficiencies will possibly keep it running and you may benefit from that.

MR PORTER: Yes.

PROF SCRAFTON: In the hearings yesterday the CEO of FreightCorp gave his opinion, which was very close to yours, that it's essentially the monopoly rent phase-out plus volume, the lower rate resulting from greater volumes, greater tonnages. I'd like to not ask a question but just comment on a couple of items in this submission. At the bottom of page 4 and the top of page 5 you make some specific recommendations which would, in your view, enhance the findings in our draft report

and I just wanted to acknowledge that I think that's very useful from our point of view. We have a section in the report on page 145, you point out, with the characteristics of (indistinct) regimes and you suggest that we should consider a recommendation along those lines. We will certainly take that on board and if we agree with your view you'll see it in the final report, but I found that to be particularly helpful. It's only a few lines, but very helpful comments.

MR PORTER: Good.

MRS OWENS: I'm probably confusing you because I'm working from your old submission.

MR PORTER: That's all right, there's not much difference.

MRS OWENS: I've just realised they've got different things on different pages, so I'm sorry about that, but you probably get the gist of where I'm coming from.

MR PORTER: Yes.

MRS OWENS: The other thing I appreciated getting was the details you had of the capacity transfer model that you've got, which I think is - as I see it - complementing what we were saying about auctioning of train paths. I think that they are two things that could work together, and you had a proposal that you have given us as an appendix and I was just wondering what's happened to it. Has it just fallen into the black hole?

MR CLACHER: We were just told by RAC that they have developed a capacity trading statement or policy which they are about to release to us and others for our comment. I think we point out somewhere that back in November of 97 there was an undertaking by the New South Wales cabinet office to the NCC that there would be discussions between RAC, NCC and IPART about this capacity trading issue. As far as we know, those discussions have not taken place and we're now, what, a year and a half down the track and we're about to get a draft policy. Now, in our response to that NCC draft recommendation, we suggested that maybe users might have some useful input to development of a capacity trading policy as well.

The regime was gazetted on 19 February this year. Rather than saying that capacity trading policy will be developed in consultation with various people, it just says that RAC will make known its capacity trading policy, so it has removed the obligation that was made in the cabinet office letter to discuss this with various people but, as I said, we're advised informally by RAC that RAC has now made some progress on this and we're about to get a look at it and, if that is so, then we would welcome it.

MRS OWENS: I'd be really interested if that all comes about before we're finalising our report - if something does come of that we probably should go back to the RAC and ask them to keep us informed because it is for us, I think, quite an interesting

development and I think we'd just like to stay in touch with it. You seem to be implying, I think, in the appendix that you don't necessarily think a use or lose it policy is the right way to go. Is my interpretation correct?

MR CLACHER: That's what it says. I think the model put up by the cabinet office back in November of 97 more or less still gave RAC the sole right to trade in time paths. I think what we were suggesting to the NCC was that if someone couldn't use a train path it could on-sell it to someone else without having to give it back to RAC.

PROF SCRAFTON: So you can actually trade it?

MR CLACHER: Yes. And, in fact, the new regime specifically says that people cannot sell time paths, so people other than ARTC and RAC cannot sell time paths.

MRS OWENS: I don't think that your proposal actually excludes use or lose it. I mean, you can have actually both in place. You can have a trading arrangement but if you don't trade and you don't use - - -

MR CLACHER: If you can't sell it, yes.

MRS OWENS: If you can't sell it and you can't use it, then you lose it.

MR CLACHER: Yes.

MRS OWENS: So I don't think they're necessarily mutually exclusive, but what you're saying is that you should have the opportunity to trade first.

MR CLACHER: Yes, before you lose it.

MRS OWENS: Before you lose it, yes. I just wanted to clarify that. Have you got anything?

PROF SCRAFTON: Not on that, Helen. I just had one other comment on the valuation of assets, where you mention on page 8 that IPART's recently issued final report was ambiguous on the issue. I wonder if you'd just clarify that.

MR CLACHER: Yes. We had an interesting exchange with IPART about the meeting of the stand-alone test in the ceiling test of the regime. Now, we have always understood that in applying the stand-alone test to a group of infrastructure users, that in determining just what sort of assets or what sort of network is required, be it electricity, gas, rail, whatever sort of network is required to service that stand-alone group of users, that you would look at a network which was sized only to serve just those users, so that if you had a 100 million ton a year network and you were carrying out the ceiling test on a group of users who were only railing 30 million tons a year, then you wouldn't spread the costs of a 100 million ton network amongst those users. You'd say the whole principle of the Baumol pricing, of course, is you're looking at what would be charged by an efficient new competitor. And an efficient new

competitor, if he only wanted to move 30 million tons a year, wouldn't build a 100 million ton per year network.

We've always said that we don't think that this Baumol pricing is practicable. We have acknowledged always that theoretically it does result in the lowest efficiency losses, but the impossibility of applying it in a practical way in accordance with the theory means that you're better off using full distributed cost pricing, which according to the work that was done by ACIL, very extensive work, results in pretty minimal extra efficiency losses compared to a perfectly-applied Baumol application. Anyway, under the Baumol theory, if you can apply it, then depreciated optimised replacement cost is the asset valuation method, which is consistent with that Baumol pricing. Now, as it turns out, IPART has adopted a different interpretation of the sort of network which is to be considered in applying the ceiling test.

They said in their draft report, which was carried through to the final report, that the interpretation which they've adopted is that if you've got a 100 million ton network and you're looking only at a group of access-seekers to apply the ceiling test who rail 30 million tons a year, then you still look at your 100 million ton per year network and figure out how they can use that most efficiently, and we said that under those circumstances we do not think that depreciated optimised replacement cost is consistent with that interpretation of the ceiling test. Now, I think the final IPART report really hasn't corrected - in one spot it has, but in another spot it hasn't corrected its report for our view. It still says in one part that everyone agrees that DORC is the right interpretation, but really it has still left the valuation of a network up to an independent consultant which is to be appointed to work out just what depreciated optimised replacement cost should be, and it has given it a number of different ways in which it might approach it.

MRS OWENS: Have you got any problems with that aspect?

MR CLACHER: Not with the appointment of the consultant, although obviously the terms of reference of that consultancy will be vital and IPART has also recommended that the independent consultant make a draft report available for interested parties to comment on before it comes out with its final report.

MRS OWENS: Okay, I think that will keep you busy for a while, that issue. These are not simple issues and we won't be getting in to a lot of detail about these in our final report. We will address them but not in detail. I don't have any other questions I want to ask.

PROF SCRAFTON: No, I'm fine, thanks.

MRS OWENS: I think at this stage we'll have a break. Thank you both very much for coming and we both enjoyed that discussion - it clarified a few things for me - and we'll now break until our next participant, who is appearing at 11.15. Thank you.

MRS OWENS: I'd like to welcome our next participant this morning, Mr Paul Trevaskis. Could you please give your name and your affiliation for the purposes of the transcript.

MR TREVASKIS: Paul Trevaskis. I'm secretary of the Blue Mountains Commuter and Transport Users Association. I'm also chair of the integrated transport forum on the mountains as well, and I'm also secretary of the Highway Safety Action Committee, so I'm dealing with bus companies and CityRail and various aspects around that. I thank the commissioners for allowing me to talk at such short notice.

I found it interesting that the previous speakers raised the problems that we have been aware of on the mountains and other areas for some time, and one of those more recently is the restructure that has taken place where we've found where we used to have own sector manager who had under control the maintenance of the track, the provision of services, signalling, and any aspect of the system between Lithgow and Emu Plains, now that sector has been taken off us and the sector manager has the role to look after the sector from Lithgow to Dungog. I've indicated to CityRail I thought that was too large an area to look after, even though she's looking after the passenger rail system and the stations mainly and staff, but no doubt there are other aspects to that.

Last week we had an instance which indicates the problems we have now. The Indian Pacific broke down, or the loco did. The passenger carriages are owned by - I think it's Great Southern Railway. The loco is National Rail Corp, and they have to deal with CityRail from the point of view of our passengers. FreightCorp had to provide the locomotive to replace the National Rail Corp locomotive, and of course you've got network control, who actually look after the track capacity or the track space as far as track paths, I should say - correction, track paths.

I'm still getting correspondence together to the director of transport in New South Wales to find out what is going to happen in the future when these problems arise. Because what Great Southern Railway is doing is it has got up from 30 to 40 cars on the train, they're doubling up the Indian Pacific, so you've a fairly long train, and going up the mountains it's flat out doing 20 or 40 K's. So when you talk about the infrastructures which I'm quite aware of in different states we find that as secretary I've got to work through the system.

The other aspect which we have addressed with Rail Access Corporation is track capacity and the upgrading program, and I've asked the Department of Transport for Rail Access to place it on the annual report, so when people look at the Rail Access report we understand what track capacity is available in the system and when the upgrading program is going to be completed, because that is upsetting a lot of passengers. No doubt you've seen freight trains going over the Harbour Bridge. That's how good it is. I suppose at least freight is getting through.

So this brings me to the other aspect - to get more freight onto rail. We have

the problems of Mullet Creek where we've got the same track capacity up there as we had in the 40s, and you can say that is virtually between Lithgow, Goulburn, and Newcastle. So we feel that where the road systems have been expanded from two tracks to four tracks, if you like, and that's developing across the mountains as well as we've got the F3 and the other roads, the rail system is the poor cousin, and this brings me to ask - and I'm grateful in the report you say that you're to look at the real cost of - truck costs of transport in relation to that.

Admittedly there are some positives happening where trailer railers are being experimented with from Wetherill Park and also FreightCorp is looking at a freight distribution at St Marys. So briefly I submit, commissioners, that - I'll give a more detailed report to you, but there are - and I'm grateful today we're listening to the mineral people. They have their problems with relation to conflicts with passenger services, but there's probably ways around that. Also I feel that perhaps the rail passengers might have to look at or accept the fact that - in our case we're looking on the mountains. Where our services decrease from Katoomba to Lithgow, we might be able to, with the appropriate fare structure, provide a bus service rather than a train service where we are realistically looking at 30 or 40 people and you're providing at the present on a two-hour basis a four-car set which can take 400. In other words, as one of my CityRail friends said, we are shifting air space around. I think there have to be some compromises that we'll have to look at.

But from the other side, we feel that CityRail should be more aggressive in their marketing, especially in the ticketing area, in going out and saying, "Look, we are here. We want your patronage. We will provide the services," so it's not all one way. We have found since this restructure CityRail has gone off the marketing phase. They appear to be, well, inward thinking. They certainly haven't been innovative as they said to their report to IPART, which we're going to criticise anyway. So I won't take any more time. I can appreciate Phil is there waiting to have a go, but if you've got any questions about how we relate to the system on the mountains and other areas - - -

MRS OWENS: Thank you very much for that, Mr Trevaskis. I've actually found that quite an interesting little run-through of quite a few very important issues, and I think it would be really very useful for us if you did put in even just a short submission that talked about some of those things, because they are all key issues.

MR TREVASKIS: Yes.

MRS OWENS: The maintenance issue we talked about yesterday with the RAC, and you have brought to our attention a different perspective of some of the problems you may have. You've raised just the general complexity issue, and investment, and this problem we were discussing this morning about the passengers and the complexity between the passengers and these other trains, and they are all important issues. I don't know if I have any questions at this stage because I'll wait and have a look at your submission.

MR TREVASKIS: Okay.

MRS OWENS: Derek, would you like ask any questions.

PROF SCRAFTON: No, I don't have anything to ask, except to say that if it saves you time you don't need to rewrite some of this stuff. If you've got submissions that you've made to other organisations that you feel might do the job, that would be fine.

MR TREVASKIS: Thank you. I do feel that with all the technology that they've used - like upgrading the sleepers, the track, the signalling - we wonder has it been made technically efficient, so we don't have to go back over the same thing. In other words, are we getting an efficient replacement? It's like buying a hi-fi set and taking it back to get it fixed all the time. We wonder sometimes on this maintenance aspect of it, are we in the 90s or are we still back in the 40s? As one of my friends said, "Paul, they don't want to finish the upgrading because they'll be out of a job."

MRS OWENS: On that note, thank you very much. That's a good quote for us. Thank you. We'll just break for a minute.

MRS OWENS: Our next participant this morning is Prof Philip Laird, and he has presented us with a submission. I will ask you, Philip, if you would please give your name and your affiliation for the transcript.

DR LAIRD: Yes, my name is Philip Glencoe Laird. I'm an employee of the University of Wollongong and although I've drawn extensively on the university's resources to prepare the submission and the underlying research, the views expressed are those of my own.

MRS OWENS: Good, thank you. Thank you for the submission. We always read anything you give us with great interest, so it was very good to get another submission from you this time. I can see from the submission you've obviously spent a bit of time thinking about what we've written as well, so thank you. Would you like to make any opening comments?

DR LAIRD: Yes, thank you. The draft report was a good starting point. I'd express a personal hope that the final report will be different. If I can just go straight in, I raise 10 issues that were raised in the report as measures needing more attention. I raise a further eight issues that are not put out in bold in the report but may be of interest, and then finally, I raise the topic of competitive neutrality but do not address it at this stage.

The first measure needing more attention is recognition of the findings and recommendations of the House of Representatives Standing Committee on Communication, Transport and Micro-economic Reform. I say that because if you look at the evidence going into the present inquiry that's on the public record and that which went into the Neville committee, there is a surprising degree of commonality - and I personally feel that Neville got it right.

The second one is progress in rail since the 1991 rail report and I do feel the 1991 final report was a good one, but I do feel the present report could give more recognition of the progress made by the government rail systems and I have a slide that I showed elsewhere that in your 1991 report you said that rail freight deficits were about one-quarter of the overall deficit - that was about 525 million. The Bureau of Industry Economics in its definitive 1995 report on rail freight found that the rail freights were in the order of about \$200 million, and as far as I can see - and I think it's on the public record - the aggregate profits from rail freight systems, namely Queensland Rail, FreightCorp and Westrail far outweigh the losses incurred by National Rail and, if any, from V/Line Freight. So we have moved in the 90s very definitely from a situation of significant rail freight deficits to profits, and the profits coincide with the interest of the private sector and the privatisation process.

The third one I would dwell on is data deficiencies. The commission recognises data deficiencies in numerous parts of the draft report. A footnote on page 8 was a delightful understatement: "There are currently limitations on the quality of transport data in Australia." I'd suggest that these data limitations are very severe and they're

probably costing the country heaps and heaps because it means that treasuries, both state and federal, are not having adequate data to justify budget outlays. So I would say that the commission, having clearly recognised that there are data deficiencies in a number of pages of the draft report, take that extra step and recommend that something be done about it.

What could be done about it? The first thing is we might follow the American lead and set up a special Bureau of Transportation Statistics which would be very well resourced. The second thing is that we may give the Australian Bureau of Statistics more direction and funding. The third thing is that we could give the Bureau of Transport Economics more funding and direction - note I've turned the order of funding and direction around because I think ABS has not been so massively downsized as BTE was.

Also I have to say that the steering committee on national performance monitoring of government business enterprises was the saviour throughout the 90s for rail transport data. It was the only place where you could get the tonne kilometres, the number of locos in a consistent form, the various physical productivity indices. These are the things that help count not so much the dollars on the bottom line but simply the net tonne kilometres per freight employee from under 1 million net tonne kilometres per freight employee, about the time of the 1991 report, to well over three now. I think one positive recommendation the commission could carry to government is maybe we should reinstate this committee and it should not just be dealing with financial data, but physical data as well.

MRS OWENS: Have you finished?

DR LAIRD: No, I have four more, but do you have any questions on data before I go on to the next one?

MRS OWENS: I have questions on a number of things you've raised already. I think what we might do is you just keep going rather than us interrupt you, otherwise you'll never finish what you want to say. Once we get into an issue we might never come up for air again.

DR LAIRD: Okay. Average rail freight rates - I think if you're going to look at Australia you should put the good with the not so good, and it's documented. You might say with what authority do I claim that the iron ore operations operate at less than 1 cent per net tonne kilometre? I can't say I've seen their books, but I have been to conferences in this town and in Melbourne where people have got up and said for one of them, "0.6 cents per net tonne K," and that was a few years ago and, bless them, not being content with being the world's best rail freight railways, they keep on getting better and better - and the other rail system was less than 0.6 cents per net tonne K - but if we're generous and we just say, "Well, look, let's suppose they're 1 cent per net tonne K," and you aggregate that with the government rail freight task, which you said in your draft report was about 4.2 cents per net tonne K, then the Australian average is about 3 cents per net tonne K. When you consider that so much

of the American freight task is done by class 1 railways over class 1 track - not a goat track but a class 1 track capable of fast and heavy trains like 25-tonne axle loads moving at 100 kilometres an hour, which is something we only dream about here - then I think that the Australian ones are doing pretty well.

2.5 is a technical one on energy use and I'm happy to try and supply more information to the commission and update the table if it would help. I have to warn you, though, that there are severe data limitations and the closer a rail system gets towards privatisation and the more severely it's downsized, the harder it is to get data and the less reliable it is if you do get it.

MRS OWENS: That was one of the questions I was going to ask you when you were talking about data before. Maybe we will come back to that because that is a significant issue.

DR LAIRD: I think rail transport does have various positive attributes on environment and greenhouse and I think that these deserve recognition in the final report. Queensland government main line upgrade - I have to admit to being a real fan of main line upgrade because I had the pleasure of visiting family right throughout its construction. You would go and see tenders called for, say, the Gunalda deviation which replaced 10 kilometres of really winding track that took the intercity electric train about 11 minutes to traverse. Within two years they had finished, replaced that winding section of track with eight kilometres of track built to modern engineering standards, improved safety with less level crossing, improved flood mitigation and that same train does it in four minutes.

It has allowed freight trains to double their freight loads in the last 10 years and if that isn't part of rail reform then tell me what is. Instead, in the draft report it got one mention - it slowed trains down. Well, I was there when it happened. The track possessions are measured in terms of hours and you had a team of bulldozers and trucks and contractors and they converged on the site and the old line was switched out and the new one switched in in a matter of 24 to 27 hours.

MRS OWENS: You have convinced us.

DR LAIRD: Thank you. Next example, overseas examples, if we're going to benchmark our Aussie systems with the Canadians and the Americans, let's have a bit more physical data about what their systems are, how big they are, and how good their track is.

Track upgrading, 2.9, and I'd suggest that it would rate a separate chapter or a subsection in the final report. It's so important because if you don't get the track right you can have National Rail's most modern electric locos brimming with high-tech technology but if you've got poor track then all the benefits of modern locos and rolling stock and IT systems are diminished. Finally, performance of rail. I think we have to appreciate that the east-west corridor performs a lot better than the north-south corridor, and this is related to track standards. So that finishes the

10 items that I saw raised in the draft report. I would proceed very quickly on to eight other issues.

MRS OWENS: Excuse me, Philip, would you like to stop there and we'll go through those 10.

DR LAIRD: Yes.

MRS OWENS: Because otherwise we might lose that, and then we can come to the eight. Is that all right with you? You were looking very expectantly before for questions and I think this might be a good time to just stop and you can draw breath for a minute and we'll just go back to some of the issues you raised earlier. I think the first one you raised was - you said actually in your submission, and I think you said it just before, that you were amazed that our draft report was different from Tracking Australia, and I suppose it is different. I think that one criticism I might accept is that we haven't referred sufficiently to that report. I think we intend to rectify that in the final report so you can look forward to seeing a bit more in there.

I don't know if we necessarily would accept some of the conclusions they reach, primarily because we've tried to stand back and we've tried to think about other approaches and we have done some analysis and probably taken a broader perspective than that committee; although that committee, I think, did a very, very good job. We did have broader terms of reference so we have covered other things but we have been particularly interested in trying to go beyond the existing boundaries and think about broader issues like what is the role of the private sector? We have these problems with investment in infrastructure, what can we do about them? Do we have to rely just on government, and particularly the Commonwealth government to rectify those problems? Are there other ways of thinking about them?

So we've been trying to sort of stand back from it, because I think the government has got plenty of others coming to them and saying, "We need to invest more in track." I haven't seen the Smorgon report yet but you mention that, I think, in your submission but I think - like Tracking Australia - there will be, as I understand it, an emphasis on putting more money into track in Australia. I am very aware of some of the problems. I've spent time travelling around on trains, the last one of which was a trip from Melbourne to Adelaide on a freight train looking at some of the obvious problems on the Victorian side of the border, which are now being rectified. There is obviously a major upgrade program going on there and so I was able to experience that first-hand, which was very useful. So we will be doing something about that.

DR LAIRD: That is appreciated, and also that you had the opportunity for a ride on Melbourne-Adelaide - which I see is in the Victorian side primarily what was not done under One Nation, plus deferred maintenance - and I think it could even be said that the Victorian treasury was taking all that track access money and not returning it for about at least three years, and so hence when I started I said these matters should concern state treasuries as well as federal treasury, and we need better data.

The major work on Adelaide-Melbourne, I think, though, is the long-term capital planning. You know, no-one is going to rush out and do a major deviation in two years, but they do have a long lead term in planning and they do need, for example, environmental impact assessment, and they do need land acquisition or at least reservation, but I'll come to that later.

MRS OWENS: I'd like to come back to this issue of investment. Did you have anything on the House of Representatives?

PROF SCRAFTON: No, I think Helen just sort of endorsed what you've said. I quite like the way, Philip, you have set it out saying what you see as weaknesses or areas where you think the final report ought to be enhanced. Some of these, as Helen said, we will certainly take a look at. But I would draw attention to the fact that some of these things are in there but you may feel that they're not there with the right level of emphasis or priority. Part of the reason for that is the very fact you alluded to, that there are already - there's the NTPT report, the House of Repts, Tracking Australia report and others that you refer to - but nevertheless, we'll take a look at the draft in terms of that balance.

One problem for us is that already it is a very thick document, and what we wanted to do was to try to pick up some of the areas that others had not commented on. But also you pick up some of them: one for instance on 2.2 where you talk about Tranz Rail. We thought we gave Tranz Rail a pretty good wrap in our report. It's box 6.6 and it's difficult to know how much more we can do within that overall balance of the report. Nevertheless, I repeat the fact that we acknowledge that we need submissions from people like yourself if you think the balance isn't quite right, or the amount of detail is missing. So that isn't really a question, it's just a comment.

I quite like your specific reference there to the deficits, the freight deficits. I think we'll pick up those from the transcript and see if and where it's appropriate to try to restore some of that balance.

MRS OWENS: One of the relevant chapters where we could pick that up would be our reform chapter. I think the author of that chapter is sitting in the room so he can possibly take that on board.

PROF SCRAFTON: Philip, I also would comment that one of the criticisms, which has not been made to us formally but just in general discussion that we've heard, is that in report we've tried to be very fair about acknowledging what had been done and what had been achieved in the 90s. Some people have said that perhaps we've done a little bit too much of that and people will relax and say, "The Productivity Commission has given us a big tick. We don't have to do any more." So there's a balance again between acknowledging what has been done and then looking at the direction we think the reform might take or should take in the next few years. There are a lot of things there that we ultimately have to take into account. It's not a defence against what you've said, it's just to try to point out the dilemma that we've

had. In fact I'm sure some of the things that you mention in here might have been in draft chapters that we have had to cut down simply for reasons of length, but we'll take them on board.

DR LAIRD: It was a voluminous report.

PROF SCRAFTON: It is a problem.

DR LAIRD: You might well be looking at the 1991 scenario with the main report plus appendices in two volumes.

MRS OWENS: I think the commission is trying desperately to make our reports more user-friendly and, if anything, try and shorten them so people will read them. One of the criticisms we've had from others has been that they're so voluminous that they become door-stoppers. We've been trying very hard to actually cut them back and then maybe put out separate working papers. We're going to do that with the modelling work that we've been doing, and performance measurement work. We'll be putting out a separate document that will have a lot more of the detail about what we did and how we did it.

We did, for the draft report, have an appendix which didn't in the end go in, on the different rail systems in Australia, and it went into a lot of detail about the different systems. That could have been a report in its own right, so in the end we pulled the plug on that and we've been just deciding whether to incorporate it in the final. There's always this question, "Do we want the document to be a stand-alone record of where we are in rail as of today?" or, "Do we want the document to be addressing the key issues the government has asked us to address?" What we're probably doing is a bit of both, but I don't think we're going to have a comprehensive document - as much as we'd like to.

With data, which was, I think, the next issue you raised, I thought that our frustration with the data problems had come through in the report - - -

DR LAIRD: Agreed.

MRS OWENS: It's always a frustration and the frustration is that it doesn't matter which inquiry we're working on, we always have these problems. We could put a recommendation that the government needs the lift its game, or somebody needs to lift their game and give us better data. On every inquiry I think I've ever been on we've had the same sort of problems. The problems we have is when we're doing, say, the performance measurements, people come back and criticise us because we haven't done this, or we haven't got the most recent year, or we haven't looked at such-and-such a country. In your case you've actually criticised us quite fairly because we haven't brought in the energy data - and I think you now understand why - but it's enormously difficult. We have to use what we can get.

DR LAIRD: I would be very interested to see how land transport data relates to

other sectors of the economy. I do think it can be absolutely said that the quality of this data and the quantity of this data in the land transport area has significantly deteriorated in the 1990s - that is data on the public record. It really has gone backwards.

MRS OWENS: Do you think that's worse than in other areas, that you're aware of?

DR LAIRD: It's difficult to say because I tend to concentrate on land transport. But it's not just rail data, it's also severe deficiencies in road transport tasks that are emerging. For example, the 1995 survey of motor vehicle usage, they published a preliminary version with the intention of proceeding to a final version and they realised their data was so bad they could not proceed to a final version, they just had to put a qualifier statement out. They discontinued interstate road transport. So here we are at the end of the 90s and the most reliable data that we have for intercapital city freight movements is of the early 90s.

MRS OWENS: We had enormous difficulty because we wanted to get data on east-west corridor versus north-south, and I had gone to conferences and heard people talking about it, but when it actually came to the crunch and trying to get that sort of information it was a horror sort of story for us.

DR LAIRD: You have my commiserations. At the end of the day these data deficiencies will start to harm our international competitiveness because as they compound it means that we're not making the optimum resource allocations over not just years but perhaps a decade, and we'll pay for it later.

MRS OWENS: One of the other issues that you raised in your opening comments was this issue about the fact that as you get greater private sector involvement in this industry the problems could compound. It becomes more difficult to get some of this information because there's always the danger that it will be protected by commercial-in-confidence type of arguments, and we often encounter that too.

DR LAIRD: Agreed, but I think at the end of the day it's the prerogative of parliament to legislate that certain data sets will be on the public record. Whilst, for example, you wish - if you have two competitors in one state you do not want to disclose information about one of them that will assist the other - if you have a single vertically integrated operator in one state, I cannot see why there's any sound intellectual argument as to why that data for that private operator in that one state relating to net tonne kilometres, passenger kilometres, if any, and fuel use should not be a matter of public interest and public record.

MRS OWENS: But we don't have any single state where you've got a single private vertically integrated - that doesn't actually show up on the public record.

DR LAIRD: Not on the mainland but we do have in Tasmania.

MRS OWENS: Yes, but we're thinking about national data sets, you see. We've

got to think about what you can do across the whole country. We might be able to do something really good in Tasmania, but we've still got the rest of the country to worry about.

DR LAIRD: I think at the end of the day, for example, Tranz Rail's annual report, their latest one as I recall it, gave tonne kilometres. It's a private company, operating in New Zealand, but their part-subsiary in Tasmania said, "No, we'll talk tonnages but not tonne K's." National Rail - they were in each annual report of recent years until the last one and then someone, or a group of people sitting around a table possibly at the highest level, took a decision not to publish those tonne kilometres. Is this non-disclosure in the public interest? I don't have an answer. I just raised the question, but I'm glad that you did raise the difficulties in numerous places in dealing with data. I would invite the commission to consider going that extra step because, having so keenly felt the problem, consider making the recommendation that maybe you should be doing a bit better with it.

MRS OWENS: Derek has pointed out that some of the other issues I want to raise will actually come up when you talk about the other issues.

DR LAIRD: Thank you.

MRS OWENS: I think what we might do is move on. You said that you had eight other points, so we might go on to that.

DR LAIRD: Thank you very much. The first is, having identified deficiencies in track, particular intercapital city track, then we look at the need for the track upgrading. It was very well recognised by the national transport planning task force five years ago and, more recently, by the Australian Transport Council that gave various key performance indicators for various types of trains. I will spare the detail.

The next is relative intercity road and rail track funding: I'm interested in these people who keep on saying that we have spent 12 or 11 billion dollars on the national highway system. When I get hold of the published data over 25 years I use the appropriate inflators and I come up with 17.89 billion and, if it was of any assistance to the commission, I would be happy to provide on a preferably not-for-publication basis, but the worksheets that - - -

MRS OWENS: That would be very useful, yes. Thank you very much.

DR LAIRD: Right.

MRS OWENS: I think if you are going to give it to us you will have to put on it, "Not for publication". Just note it on it.

DR LAIRD: It has to wait until it has appeared somewhere else.

MRS OWENS: Yes.

PROF SCRAFTON: The way you have set it out on page 12 of your submission is probably all we need for our own purposes but if we could have the back-up data it would help us a little, so that the researchers who are working on that can at least understand where the numbers come from.

DR LAIRD: Thank you. I will be pleased to provide that. 3.3, the funding issue for intercity rail track upgrading; 3.4, what is it going to cost us if we don't upgrade? If we see, for example - and I have just come from a conference in Melbourne, where some engineer asked, "What is going to happen when we have upgraded the Pacific Highway to a basic four-lane highway? Do we have to close down Maitland-Brisbane railway because it is so uncompetitive?" I merely draw attention to the fact that this is noted not only by the NTPT five years ago, but also in a report by Booz Allen and Hamilton for State Rail and by the Neville committee: 3.5, residual gauge standardisation: I think it does have a bright future in Victoria and it is possible that the new private owners of Freight Victoria may be interested but, again, with massive highway subsidisation, I think it comes down like toll roads; many of them - or all that use Southern Railway - need a slab of public funding under them in order to get the private sector to come in and kick in and deliver the efficiencies.

3.6, double stack containers I think are part of the great picture of rail reform of the 90s that we were able to introduce this 1980s technology from America. 3.7, urban public transport I think is important, and 3.8 - some people like vertical disaggregation, some people don't - like Ed Burkhardt says he doesn't like it - but I think it is, at best, a giant experiment, and we will have to wait a few years to see the outcome. Finally, competitive neutrality - I am waiting for your next inquiry before addressing that topic in further detail.

MRS OWENS: Good, thank you. We might just very quickly run through those eight issues because we want to get on to the other submissions that you are going to be presenting. I think the first one was the need for intercity track upgrading. You imply in a number of places throughout the submission and I think it was implicit in your views about the House of Reps Tracking Australia report that the track upgrading should be funded by the Commonwealth. I am probably covering two or three of your points here at once - yes, you talk about that on page 12. I suppose it raises a question in our mind as to why the Commonwealth government? The other options, of course, are the states doing their bit and another option is for the private sector to create an environment in which the private sector would see that it was going to be worth their while investing.

DR LAIRD: If we had roads operated on a commercial basis then I don't think we would be having an inquiry here today because the flight of private sector capital into the rail industry would be so quick and we would have been brought so much up to speed, so we have, I think, market failure because of the ongoing high level of federal funding of the national highway system and now roads of national importance, which distorts markets and impacts on the private sector's ability or willingness to invest in rail.

Why not the states? I certainly feel there is more role for state participation but, basically, I think what we are looking at now is what was very apparent on the intercapital city highway network of Australia in 1970. They were an absolute disgrace. The Hume Highway - if you set out to drive from Sydney to Melbourne you got a few kilometres of dual carriageway out to about Campbelltown, then you are on a winding, two-lane track, hopping from town to town - like Picton to Mittagong and Goulburn, Yass - all the way down and then, finally, into Victoria. Towards Melbourne, you got some four-lane highway, and the states flatly refused to invest in these intercapital city road links in the early 1970s - absolutely refused.

It was so bad that the Commonwealth Bureau of Roads looked at it - and that itself was a federal initiative - and they said, "Look, it needs Commonwealth funding to get this thing to" - I don't know if they said the word "OECD" - but towards OECD standards, and they recommended 80 per cent funding and the Whitlam government, in one of the broad master strokes, said, "We'll pay the lot" and it is only now with the Pacific Highway that we are getting this balance, so I think, yes, it would be good to have private sector investment but we're not going to get that until we get a much more commercial focus on road provision funding and pricing.

MRS OWENS: So you are not discounting that as something for the future?

DR LAIRD: Definitely not, and, in fact, Neville himself in the House of Representatives on 8 February qualified his report, saying, "We need the federal funding up-front for the next year or two, and then we look more for that 2 million to the states and the private sector but, in the meantime - I mean, we have to take a choice if we continue to fund highways the way we do at the moment, under-price the road track access for the heavier, long-distance vehicles, increase their mass limits without forcing the costs of that relaxation of mass limits back onto the people who use those services, then I think we are looking at losing some of this interstate rail network and my bet is that first to go will be Maitland-Brisbane.

Certainly encourage the private sector, who have been part of this process of transforming our intercity rail over this decade but, until we get more balance, it is going to have to be like many a toll road. You have the government money underneath and then the private sector comes and builds the road and operates it with private sector efficiencies. The same with the new southern railway: 6 or 7 hundred million dollars of government money sitting under it and then the private sector building the stations and operating them, and this is where I think we're at at the moment with this rail, and it comes down to that very stark choice painted by the Neville committee, that if we don't upgrade it it will lose traffic to the point where it will be irretrievable.

MRS OWENS: I suppose there is another model somewhere in between while we're waiting and that is that we have suggested in the report that one option would be for an ARTC-type body to become the track manager for the interstate track along the lines of the national electricity market - NEMMCO it is called - and there is a

possible under that scenario that that track manager could then contract out some of the infrastructure investment and maintenance and so on to the private sector. Has that been something that you - you know, a boot-type scheme, but on an interstate basis or an intercity basis. Have you thought about that?

DR LAIRD: Not in any great depth but it does raise the question, have we done the right thing in giving the Australian Rail Track Corporation only a five-year horizon before subject to major review when we're dealing with assets, with lifetimes of at least 25 and possibly 50 or a hundred years? It is quite possible that if we gave the ARTC a longer horizon it may be in a better position to raise capital. I don't think we need another rail authority - I think we have enough already - and no doubt somebody has already drawn to your attention that early table - Railway Services Australia is missing.

We have lots and lots of rail authorities, 14 public and, what, 15 private at last count and, by the time we get to 1 July there is probably going to be another one. I don't want to go down the British model. I think the Americans got it right where you have them big and you have intersystem agreements as opposed to the Heinz variety of getting a single system and chopping it up into so many pieces that - - -

MRS OWENS: It is not a - a slightly connected point in the context of you talking about the need for an upgrade on pages 10 and 11 and you said that if one-tenth of the effort and expense that had gone into the disaggregation of rail systems had instead gone into track upgrading, these items would have been fixed long ago.

DR LAIRD: Did I really say that?

MRS OWENS: Yes, you did. I thought we might quote you on that.

DR LAIRD: Thank you. I am very, very happy to say that as we sit here now, you know, the people - the private contractors - are working and fixing up, inserting those concrete sleepers at Maroona and Vite Vite the speed has already been lifted up to 80K an hour and soon to go to a hundred. Within two months we may be in the happy situation of having the Overland train down to 10 and a half hours and that means that the private operator has the option of running not one train a day but two a day, getting utilisation of the rolling stock, and that comment was prompted by going to Parkes at the end of May last year and, in the morning, we had the private sector investment of 2.9 billion by FCL with an intermodal freight facility at Goobang Junction and then, in the afternoon, you could come back and watch a Sydney-Perth superfreighter come from Sydney through Cootamundra and Parkes off to Perth.

The train was 1100 metres long. The loop at Parkes is only 900 metres. It took an extra two locomotives an hour to turn that train around and get it going out and only now are they building the necessary triangle loop at Parkes. The other one that sits out like a sore thumb is the Acacia Ridge to Casino signalling, which is something out of the last century, as featured on the 7.30 Report on 6 November 98 and which,

coincidentally, was the day that the Queensland Rail tilt train started operation and they have now carried over a hundred thousand passengers. For the first time ever since the war it was hard to get a booking between the January holidays and Easter .

MRS OWENS: Philip, you have the most amazing memory for dates of anybody that I have ever met.

DR LAIRD: Let me tell you what else happened that day: the Booz Allen and Hamilton report that was prepared for the Commonwealth Department of Transport - the version dated 6 November was finally released - and also on that day at Launceston the Chartered Institute of Transport held its annual conference entitled Beyond Oil. Thank you.

PROF SCRAFTON: Philip, just one point about that RSA not being in the table, the footnote says, "Excludes separate maintenance and construction providers".

DR LAIRD: Right.

PROF SCRAFTON: So the owners are in - Australia Rail Track Corporation and the Rail Access Corporation, as owners, but separate maintenance providers were not, so we were aware that we had made that distinction. The other thing which reminded me - and going back to this point about investment - you may be interested in reading the transcript of yesterday's hearings at which the Rail Access Corporation appeared and pointed out to us that they have adequate funds for investment in the railways, but they are looking for a rate of return which obviously some of the track that you've been talking about with Helen would not necessarily deliver, at least in the early stages.

MRS OWENS: I think we probably need to move on and you said you had quite a few comments you wanted to make about the next submission so what we're going to do at this stage, again, I will ask you now to reintroduce yourself and the capacity in which you are now presenting to this inquiry.

DR LAIRD: Thank you. The name again is Philip Laird and I appear here as the national chairman of the Railway Technical Society of Australasia. The submission that you have before you was approved by the full national council of the society at its meeting in Melbourne on 9 May.

MRS OWENS: Good, thank you. Again, I think we might just go straight into you addressing some of the issues you wanted to bring to our attention. I think there is some overlap and there are some other issues, such as education and training, which we haven't discussed as yet, so would you like to lead us through it, please.

DR LAIRD: Thank you. The first point is that the Railway Technical Society participated in the Neville Committee inquiry and, although they did not agree with everything that we proposed, we felt that basically the committee had got it right and the national council approved expenditure to produce 8000 brochures called Fix the

Rails, and I'm pleased to say that the national council, at its meeting this week, approved further such expenditure for further such purposes. The second thing is that we feel that more recognition needs to be given to engineering upgrades as a necessary part of rail reform and around the table, we asked what has happened in the 1990s that is of engineering note. The first thing was the completion by Australian National of its 500 million plus concrete resleeper program over its standard gauge track.

That was an enormous job, it took 20 years and, at the end of the day, it gave benefits in lower costs and higher modal shares. The second one, of course, was Adelaide-Melbourne gauge standardisation, which was officially opened almost four years ago and, as a society, we would question whether you'd have the likes of SCT or Toll running Sydney-Perth trains if they had to go through a bogie exchange in Adelaide. The third one was the Queensland Rail main line upgrade. The fourth was the acquisition of the new generation of locomotives. We see the NR class, 124,000 horsepower locos, the FreightCorp 4000 horsepower locos for heavy haul in the Hunter and, only last month, BHP commissioned a heavy-haul AC traction locomotive for use in the Pilbara.

On the wagon fleet, there have been developments there as well and at a recent conference, we were told that National Rail inherited a very old clunky wagon fleet and since NR took up that fleet, it has downsized. It has cut one-third of the tare mass off the wagon fleet. They've got rid of the very worst and the older wagons. Those that could be upgraded, have been upgraded, plus they've bought some new ones, so the basic message the council asked me to bring before you is that engineering upgrades are very much a necessary part of rail reform. Now, to bring in the new technology takes money and we see it as essential that both public operators and private operators be allowed to earn a rate of return on their commercial traffics and where there are non-commercial traffics that are justified on the basis of the large external benefits they bring and less pollution and higher safety, that that gets recognition too.

We've drawn attention to the issue of antiquated safe working systems. The three other major areas of concern are firstly the one, Commissioner Owens, that you mentioned and that was the rail training and, to that end, the society in conjunction with the Australasian Railway Association and the Institution of Railway Signal Engineers commissioned a report, and what we found was cause for concern. It is best typified by the Rail Track Conference at Melbourne, where I was yesterday, and the master of ceremonies said, "Look around behind you and see how many young Turks are behind you."

MRS OWENS: None?

DR LAIRD: Far too few. But it was very pleasing to see two ladies present papers, which is more than we'd have seen in the early 90s.

MRS OWENS: Excuse me, were they young Turks?

DR LAIRD: I'll have to take that on notice. Already in the area of railway signal engineering, the worldwide shortage of competent railway signal engineers led to a delay in the commissioning of the Roma Street to Brisbane Central Station. All the tunnels had been built, the track and structures built, but the signalling delayed it. I believe it was also a cause of delay for getting standard gauge to Fisherman Island and now, as we talk, it's a cause of delay for completing the triangle at Parkes. But it's not just signalling that it might appear and we've got a lot of efficiencies gains, you know, the reform process in the 90s, which we've gone along with, has overshot in some areas and this is an area where some compensation is needed. Now, how do you address it?

We've written a report, which suggests that action is needed at four levels: firstly, individuals, get yourself some more training and if you're in an organisation, that can make a difference, like taking on a young graduate engineer and giving them five years of experience or giving a university student paid summer work experience. Take the step. If you're a company, be aware, and if you're a government agency, be aware as well, and we spelt out to government that we feel a working party that would look at the issues and how we're going to train up people so that if we give a green light to Sydney-Canberra Speedrail, it's going to be built by Australian engineers and not French engineers. Likewise, if we give a green light to Alice Springs-Darwin, we'd like to see Australian steel used, as opposed to say, steel from further north, and we'd like again to see it built by Australian engineers, as opposed to having to import them.

The other thing I'd have to add is that in the process of that report - and could I ask, have you got both the summary report and the final report as yet?

MRS OWENS: Are you talking about the report I have?

DR LAIRD: Keeping Australia on Track.

MRS OWENS: I don't know. Have we got that report?

DR LAIRD: There are two of them. There's the summary report and the final main report, which is bound.

MRS OWENS: Attached to the submission, I have just the title page and I've got three pages relating to it.

DR LAIRD: Let us send you - what, two copies of each?

MRS OWENS: It says on the cover sheet, yes, we've got a booklet called Keeping Australia on Track, so there must be a copy.

DR LAIRD: It was only released today, the bound copy, the 103-page report and we will furnish the commission with a copy.

MRS OWENS: Good, thank you very much. So we've got something, but it may be just the smaller - - -

PROF SCRAFTON: Just before we leave that topic, Philip, what was the reason for this shortage of engineers? I mean, is it related in some way to any unattractiveness of the industry as a career path for young engineers or is it something which is common to other areas of engineering?

DR LAIRD: I think a number of factors. Firstly, there is a tremendous technological revolution in railway signalling post-war, where you had sort of relay networks, and now we're moving to where it's all now applied in solid state and computerised. Secondly, there was a lot of downsizing and often when people leave - he might have been doing a very good job as a railway signalling engineer, he's left the industry and now he's, say, in IT, doing computers and is probably very well rewarded and not inclined to go back. Can I just say that in the process - it's in the main report, there's a list of proposed rail projects of \$14 billion - and that is excluding the grand dream of Melbourne-Darwin, which is an extra 10 billion - and so we have in total about 25 billion of proposed or talked-of railway projects in this country alone.

At the bottom, you've got the most probable - in our view, about 5 billion, excluding the new southern railway nearing completion. The next is another 5 billion, like the Neville report or the Surat basin. The next tier is Speedrail and Alice Springs-Darwin and the top 10 billion is Melbourne-Darwin.

MRS OWENS: So what you're saying is we're not going to have the people to be able to cope with all of this?

DR LAIRD: We could move from a situation where - I mean, 10 years ago there was over-employment in the industry. There were more people than were needed for the task. We're running, we feel, as the Railway Technical Society - and certainly the Institution of Engineers Australia feel that we are running a grave risk of not having a sufficient skills base to meet the traffic tasks at hand, because we feel that when you do want to move goods and people efficiently, you will look to rail first.

MRS OWENS: Do you know whether companies like NR are still taking on new drivers or are they just using their existing stock? This is drivers and it's not engineers, I know, but I mean, they're fairly important too.

DR LAIRD: I would have to pass on NR.

MRS OWENS: We can ask them.

DR LAIRD: But I was pleased to hear the Australian Railtrac Corporation response to this very point at the Melbourne conference - they said, "We took on five graduate engineers."

PROF SCRAFTON: And there are university courses to accommodate this.

DR LAIRD: We feel there should be more, but the universities have been downsized as well, but the institution has - as part of this process, we've conducted a survey of all of our members. If there were courses available, would you take them? What areas are you interested in this year, next year or the year after? So the institution is being proactive in it, but we feel that there's a role for government as well, and possibly it could be referred to the standing committee - Scott, you know, of ATC.

PROF SCRAFTON: I was just thinking in terms of the market though, the way you've described it, it's much greater than the capability say of any one university to put these courses on, isn't it? The numbers you're looking at, probably there might be two or three universities could actually put on courses, whereas at present what are we talking about - Central Queensland and - - -

DR LAIRD: The University of Sydney on transportation as a whole. But I would love to see us get in the area - or the University of Wollongong does offer maintenance courses overseas in Hong Kong, for example.

PROF SCRAFTON: But I was thinking more about the specific example that you've quoted of single engineers, you know, capable of dealing with modern high-tech signalling systems and the like. Would the market accommodate one university specialising in that? That's what I was thinking. I just wondered if the society in its report had looked at this demand and supply relationship.

DR LAIRD: Can I take that one on notice?

PROF SCRAFTON: Yes, thanks.

DR LAIRD: Can I just say very briefly that we have got at Launceston a maritime college of international reputation, and a Victorian university offers courses in aviation and they send people from Hong Kong to Melbourne, and it would be nice to see the Australian Rail education scene up to that level of international standing.

PROF SCRAFTON: Well, aviation parallel is an interesting one, isn't it? I think there are probably - I don't know, three, four, five universities in Australia which are marketing those courses and getting reasonable intakes every year from overseas. I know they have fallen off in the last couple of years but they have been pretty considerable. Sorry about that, Helen, I guess we have talked quite a long time.

MRS OWENS: I think it is quite an important issue and it's one that we haven't really looked at in our draft report.

PROF SCRAFTON: No.

MRS OWENS: But I think in terms of blockages for future development that

becomes - potentially could be an important one and which would maybe not solve the problem but highlight the problem.

DR LAIRD: Thanks. Can I now turn to the question that was asked in this room - when was it, last October when we were all here together?

MRS OWENS: Yes, it was October.

DR LAIRD: You said whether the federal land transport dollars should be diverted from road to rail track upgrading, and on page 4, after consultation, we have given our view that we wouldn't be right now stopping road works that had already commenced from proceeding to finish, although you might, for example, question the wisdom of augmenting the Pacific Highway from four lanes to eight lanes for 35 kilometres between near Southport and Logan, having all that done by May 2000. We might relax the budgets a bit and spread it out a little more. But we feel that for future such road projects they ought to be stacked up fairly and squarely against rail projects with all externality, all external benefits for both modes in the pot, rather than the situation we've got at the moment where the road through travel time savings can inflate benefit cost ratios, and the rail is expected to get good BCRs on a financial basis only. So would that answer that question?

PROF SCRAFTON: Yes, that's good. We appreciate that. That's good. You give examples there on page 4 of the potential to divert the funds from the Adelaide Hills road tunnels into the Adelaide-Melbourne rail.

DR LAIRD: Exactly. When that tunnel is opened in November this year, I think it would be very nice if we could then start looking at the rail tunnels in the Adelaide Hills; you know, the daylighting of them or lowering the floors for double stack containers and, where cost effective, realignment. But we also raise separation of rail functions. These were not my views, although I do support them, but they are put in the consultative process. Where do we think we're going with the separation? We feel as a group it has gone far enough. We're supportive of the Queensland Rail position that a vertically integrated railway works well. That leads us on to the necessity for rail systems, both private and public, to be able to return a reasonable return on investments. Investing in coal facilities is not always a bonanza or a sure-fire thing; one has only to look at the public investment in the Port Kembla coal terminal. 20 years ago the New South Wales government took a decision to invest its own funds in that facility and it has very rarely reached design capability even after 20 years.

So the public rail systems are entitled to factor in a component of risk when upgrading coal lines, or in the case of Queensland Rail at the moment, they're buying nearly 2000 new coal wagons. The diesel fuel excise question I think we'll leave in the hands of our political masters, at least for the next five weeks. We still feel there is a role for a better informed public debate on the value of infrastructure and underpinning our quality of life. We support the Institute of Engineers and 21 other peak business and industry associations.

Finally, we need more research. We don't want to be all the time picking up the phone and ringing up Piablo, the Association of American Railroads test facility, we also not only want to have the research capability to draw on what is good from overseas, but we want to be able to help contribute to the rest of the world's railways rather than just having R and D being a one-way street. So that would be the society's submission.

MRS OWENS: Thank you. I think we have got one more submission to get through and we're running out of time. But I just want to ask you one question, and that was the society's views about separation and the preference for the Queensland Rail model, and I presume that view has been formed on engineering grounds. You talk here about "The wheel-rail combination is an integrated system, and keeping wheels rolling on rails in an efficient manner is essential to good rail productivity." So you've taken that view. We heard yesterday from Judi Stack and the others from the RAC that there are very strong arguments the other way. They basically downplayed that as an argument and said that what is important is to separate so that you can encourage greater competition. So what we're doing is trading off one set of objectives, which are the engineering objectives, which I think they haven't necessarily accepted as being important, against the objectives of greater competition in the system. Have you got any comments about that?

DR LAIRD: Yes. At the end of the day the bottom line is what modal split are you achieving with your mode? You have to ask has the separation really helped rail to grow its modal split.

MRS OWENS: When you say "modal split" you're talking about the modal split between - - -

DR LAIRD: Modal share. Are we building up on Sydney-Melbourne intercity freight which in 1970 rail had 50 per cent, and at the beginning of the 90s, about 20 to 25 per cent, and we're told that in Melbourne it's down to 18 per cent. We're not saying that splitting up State Rail was a bad thing, what we're saying is that the separation has gone far enough. We feel that we should let the separated model have a chance to prove itself but at the same time we should not be forcing all the systems to go down that road. What we have in New South Wales is a very interesting experiment, but in the same way QR, we believe, is - well, our formal national chairman says Queensland Rail is the only decent rail system left in Australia.

MRS OWENS: We'll ask QR whether they agree with that comment, shall we?

DR LAIRD: Having said that, the next question that I think is related to separation is return on assets, and I think both the separated railway and the non-separated railway would agree on the need for a return on assets. That's where RAC and QR might both agree.

MRS OWENS: Talking about a return on assets, if the Commonwealth was to

spend more money on track upgrading, would you expect there to be a return on that upgrade expenditure through say access pricing?

DR LAIRD: Yes, because I think ultimately the idea of a track investment is to lower the track access prices, so that the operators of the freight trains can offer lower transport costs to their customers. So yes, one would expect that your system would be so constructed that it does not behave like a glorified merchant bank which just happens to be called a rail company, but it actually is out there doing the necessary hard physical engineering work to make that system more physically efficient so it can deliver lower total costs.

MRS OWENS: So what you're saying is feed that into the access price but in the end you think the access price will come down because the system will become more efficient because you have got a better rail network in place.

DR LAIRD: Yes, if you have good capital programs planned out over a number of years, you can drive down your maintenance costs and you can drive down the costs of train operations. And the NTPT recognised that with the outlay of \$3 billion. You would lower the maintenance costs over - was it 20 years?

PROF SCRAFTON: Yes, 20.

DR LAIRD: From 4 and a half billion down to 3 and a half billion, but best of all you drive down the freight production costs from over three cents per net tonne K down to two cents per net tonne K, all of which helps Australia be more internationally competitive, and at the same time gives us brownie points for reducing greenhouse gas emissions.

MRS OWENS: We haven't actually covered that issue, but I think we might move on to the other submission that you will be addressing. Would you like to reintroduce yourself again? I'm sorry about the formalities, it's just for the public record.

DR LAIRD: My pleasure. I appear as the chairman of the Healthy Cities Illawarra Transport and Environment Task Force to address a submission signed by the manager of Health Cities, Frank Woolner, dated 5 May 1999. The Healthy Cities Illawarra was pleased to participate in the first round. We looked forward to getting the draft report and we felt it was a little light on urban public transport. In particular we would have really liked to have seen a little mention, if it was felt possible, about our Oak Flats public transport interchange. You might say, "Why is this tiny station, about a hundred kilometres south from where we sit at the moment, so important?" It just happens to be the closest railway station to three major housing subdivision areas which, when finished, will account for 10,000 home sites. Those areas are not quite half full with homes of living, breathing people. The first one off the mark was called Centenary Estate at Albion Park, and one of the selling points for that was it was so close to the freeway if you wanted to work in Sydney. Just what we needed.

MRS OWENS: Just a few more cars on the road going into Sydney, yes.

DR LAIRD: Yes. One of the cruel ironies of that advertisement is that happens to be a recognised ozone pocket, because ozone generated by Sydney in some atmospheric conditions transports down the coast and ends up sitting in that Albion Park area. So in 1981 the - - -

MRS OWENS: I think you've just lowered the land values there.

DR LAIRD: We need a balance in these things.

MRS OWENS: Yes.

DR LAIRD: But in 1981 the New South Wales minister for transport, the Honourable Peter Cox, came to Wollongong with the Wollongong transport improvement program and it included a public transport interchange at Oak Flats, and during the 80s no-one particularly worried about it because those three massive subdivisions hadn't kicked off. But by the time the 90s were, the Shellharbour Municipal Council - which in the process of growth became Shellharbour City Council - became very very concerned at the lack of progress on this.

Now, some progress had been made under the federal structured urban public transport funds. The electrification had been extended from Coniston, near Wollongong, to Dapto, but it needs to go further to Oak Flats or Kiama or further south. There was a little bit of state money in last year's state budget for planning and it was mentioned, Action for Transport 2010, that they would do it by 2002, but this again becomes another Parkes triangle, another sleeper sitting by the track for four years at Maroona. It really should have been part of the physical infrastructure of New South Wales in the 1990s rather than waiting for the next decade.

In a similar way we could argue that Action for Transport 2010 is basically a list of projects that should have been done in New South Wales in the 1990s but we're now having to wait till the next decade, and I refer to the Hornsby-Warnervale track realignment, and when they do that they will be doing something like the Queensland government did in the 1980s, and that was the upgrade of the Brisbane-Nambour line with electrification with civil works in time for Expo 88, except that the Olympics 2000 weren't good enough to get this track upgrade.

PROF SCRAFTON: I have to say that I have used the station at Oak Flats to get to Shellharbour, and my recollection was that on arriving there there were cabs. But, as you say, it's a rather forlorn station, as I remember, sitting quite close to the highway, just somewhere back from the highway. But Shellharbour itself, having been always a fairly innovative council in terms of transport, tried the system with the "rough" bus or whatever trade name was attached to it at the time, but I always thought that was fairly ambitious. I think small councils like that tend to be fairly innovative, so I don't know that we can do a lot about bringing the Oak Flats interchange into being, but at least I have a great deal of sympathy with the objective of Healthy Cities Illawarra. The very point that you made, that if you don't put it in

place, then - and I think it says it in the submission - all that will happen is that people will drive to town.

MRS OWENS: But you've raised the issue that the Commonwealth might assist in some way. I was a bit puzzled as to that.

DR LAIRD: The Whitlam government had three great initiatives, and if you read the Prime Minister's statement for December 1972 he said we can't keep on going with more and more cars, and the way he used to say, "My government will do something about this. We will have federal public transport grants," and he introduced, as far as I can tell, the very first federal funding for urban public transport, and it ran - it was on throughout the rest of the 70s.

PROF SCRAFTON: That's right.

DR LAIRD: It was turned off in a review of Commonwealth functions in the early 80s, then it was turned on again, and then it petered out by the mid-90s, but building better cities carried it on for a year or two in their structured form. So I guess what Healthy Cities is saying, and I think also the Railway Technical Society of Australasia, and certainly the Institution of Engineers Australia in a submission to the Senate committee on a new tax system, felt that we really have to recognise the value of urban public transport in making our cities more liveable and sustainable, and that when we put on things like a GST on public transport and make cars cheaper at the same time and diesel cheaper at the same time, it's not a very good path to be going down.

The flip side of that is that those urban public transport grants that started 25 years ago had a very valuable role in inducing state governments to think again about urban public transport. Now, it was open to the criticism that, "Oh, goody, we've got 2 million from the federal government for this program, so we can use the state treasury; we can shift it elsewhere," but it didn't always work that way because sometimes we had structured funding dollar for dollar as opposed to outright grants.

But look at the runs on the board that it got - Brisbane, 25,000 volts AC, came in 79. That technological advance from Europe was transplanted into Australia with the help of a federal urban public transport grant and time precludes me going through all the state capitals.

PROF SCRAFTON: In South Australia it was the extension to Christie Downs. It was Noarlunga Centre.

MRS OWENS: But I think we need to actually say, well, the political climate has obviously changed significantly since that time and we've got a different sort of government in Canberra. But there are other models, there are other ways of getting this investment in place, and I perhaps refer Healthy Cities Illawarra to the other experiment that's going to be taking place in Victoria and that's with the franchising of the urban rail network. There is a franchise arrangement where there will be two

companies, and part of the franchise deal is that they are going to be required to invest in the network which they will be running, and it is another model. It's probably not a model that you can use in New South Wales because the decision has been made to structure the New South Wales system in a particular way which precludes what we've called horizontal separation.

We did talk about horizontal separation as a possibility in our draft report and discussed it yesterday with the Rail Access Corporation who basically rejected the idea out of hand. But it is another way of - if there are problems with investment in the urban network or if something you think is important is not deemed to be as important by the RAC or whatever - I don't know whether it is an RAC responsibility - there is another way of thinking of doing it, of addressing the problem.

DR LAIRD: Two comments: firstly, one of the things about the Oak Flats interchange is that instead of dealing with one authority you have the pleasure of dealing with about three. RAC would do the electrification apparently; CityRail or State Rail would have to provide the funds for it on a so-called commercial basis. One wonders in fact whether this is one of the costs of separation - the delay to that Oak Flats interchange is a casualty of separation.

The second one, in Melbourne I think it's a fascinating experiment but I don't think it should be quickly followed by other jurisdictions. I think we should wait and see how it goes, but it brings us back to where we started. And the other fascinating thing in Melbourne of course is the new electronic tolling which starts this month, and that takes us full circle to Healthy Cities Illawarra adding its support to the commission's proposal for an inquiry into road provision, funding, and pricing.

MRS OWENS: I don't know whether that particular recommendation will be accepted by government and, if it was, who would be doing it, but it would be, we believe, a very good way of really getting into some of these issues in more depth than we can in this inquiry. I think we've actually taken up much more of your time than we anticipated, and I think at this stage, unless you've got anything else you'd like to say, Philip - we've had you here for an hour and a half, I'm sorry about that. I think we might now break and our next participant - we'll resume at 1.30 when our next participant, Operations Research Group, will be appearing, thank you.

(Luncheon adjournment)

MRS OWENS: The next participant this afternoon is Mr Jay Horton, managing director of the Operations Research Group. Would you please give your name and affiliation for the record.

MR HORTON: My name is Jay Horton. I'm managing director of Operations Research Group Pty Ltd. ORG, as it's named, started business in 1989 providing a range of operations research and management science services to business in Australia but also overseas. In the 10 years that we've been in operation we've grown from a small company to a company involving over a dozen people that specialise in three main areas: first of all, the provision of advice on strategies and best ways to operate production and distribution systems; the second area is in the area of building decision support systems that enable our clients to manage their operations using powerful techniques such as optimisation and risk analysis, and the third area is that we offer a range of training and education services in how management can best make use of these new management technologies for improving operations, reducing costs, improving service and making general improvements in how businesses are managed.

The areas that we focus on cover almost every sector of the Australian economy, including resources and agriculture, manufacturing and services. Within the services sector we've done a range of projects in transportation. In transportation we've worked for companies such as BHP Transport, Sugar North in Queensland, and Qantas here in Sydney, where we're applying new network management approaches to help find better ways of allocating resources in operations. Over the past 12 months we've identified rail transportation as a sector that offers lots of improvement opportunities if, as and when, management embraces some of these new decision technologies.

For some time now we've started to understand the needs that these organisations in rail have for more advanced methods of planning their business operations. In particular one of the areas of opportunity that we've identified is in the network planning and service planning area. If you look at a complex rail network, there are often many many choices about how investments can be applied to expand the capacity of that network or improve its operation. Likewise, for a given network there are many choices as to how services can be best deployed over that rail network.

For example, if we're to add more trains to the Sydney network or more trains travelling and taking goods between Melbourne and Brisbane, there is a need to identify how that resource can be best utilised. When you start to look at the practical issues of adding new train paths to an existing network and an existing array of services, it's a very complex problem to find better alternatives. So to that end, our company has been working on the development of a product called RailPro.

RailPro is an optimisation based planning tool that provides the ability for users to identify cost-effective capital expansions in the network as well as new train paths and new service options within an existing network. So together with these planning issues - both long-term capacity planning issues as well as the short-to-medium term

issues of adding new services or adjusting existing train services - it's our view that RailPro can provide a very powerful weapon for rail users or rail planners to find better answers than what currently are being applied at present.

It's our understanding, for example, that much of the planning of this kind that's currently performed in the rail industry is done manually; it's done with pencils and paper and with some computer-aided simulation techniques. There's a lot of experience required to build rail timetables and track configurations, and experience is very important. We believe that with the addition of computer-aided techniques based on optimisation the rail industry can make major gains, find better solutions, save money and improve service through the adoption of these new techniques.

RailPro itself is a system that we've designed here in Sydney. It's not an overseas product that we're importing. It's based on our 10 years of experience in designing decision support systems for complex network businesses. Because of the changes occurring in the rail industry with deregulation and privatisation of the operations, we believe the time is right for the rail industry to now embrace these techniques and achieve solutions that can make them more competitive against the other modes of transport. Road, for example, is many years ahead in terms of the kinds of planning techniques that are in use today. However, there's no reason why the rail industry can't achieve those same gains through a combination of training, an upgrade of skills of the planners and the schedulers, the adoption of these new decision support technologies and an aggressive approach to market and business development.

If they're to compete effectively, they'll have to offer a much more service-oriented approach to their business. That is, if someone rings up and says, "I would like a train path from Sydney to Brisbane. How much is it going to cost and can I leave at 10 o'clock on a Tuesday night and arrive in Brisbane on Saturday?" - if that question were to be placed today, it would perhaps take them three weeks or three months to come back with an answer. With RailPro we can get the answer in a matter of hours, certainly not weeks, and in that way give the rail industry a competitive advantage in how they service their growing and future customer base.

So we're looking forward to more deregulation and opening up of the industry because ultimately that will make it a more successful and viable industry. To that end, RailPro offers a real solution to a need that exists now but we don't underestimate the changes which will need to occur if the rail industry is going to embrace some of these new modern planning techniques. We're here to promote that modern rail industry and look forward to opportunities for its use across all of the operators, both track and rolling stock, in all states.

MRS OWENS: Good, thank you very much. That was fascinating. We've obviously spent a lot of time during this inquiry talking to people within the industry and I was particularly pleased to see you were coming because I think it's rather nice to talk to somebody who's outside the industry and can perceive the industry and compare what's happening in that industry with other sectors that you've already got

into. I think one of the issues that I'm interested in, Jay, is to ask you, do you see that the management in the rail sector is in any way less sophisticated or less receptive to these ideas and techniques and your models than other sectors?

MR HORTON: That's a good question. Having worked across a range of sectors, we can't identify any one sector that has superior management talent. There are both forward thinkers and what we might call conservative management thinkers within all sectors. What is perhaps different about the rail sector is that it's coming from essentially a very protected, conservative and highly politicised era that essentially has set the ground rules or the fundamental policies as to how that industry and that management group works within that industry. In particular, the management teams that are probably out there in the rail industry now are used to working within a highly political and constrained environment. They often face a very tight budget constraints on what can be achieved and what can't be achieved.

We are now moving into a new era which is where it's not constraint-driven but it's market-driven: what the customers want; how can we compete more effectively. That requires a new generation of thinkers in rail, and for those rail operators to be successful we expect that they will have to inject their management teams with that new kind of market thinking that simply wasn't part of the planning apparatus in days gone by. As the deregulation continues to occur then - there are people out there, I'm sure, that would be interested in opportunities in the rail sector. I would also suggest that an effective way for the rail industry to upgrade its management skills is to outsource, to find partnering arrangements with other companies that can fill the gap in skills and help them adjust and position the industry for this new era.

In that context and speaking hypothetically, a group such as ORG could help plan Sydney's or New South Wales' or Australia's rail network and services. There's no reason why it has to be done by a team within State Rail or Rail Access Corporation. As companies compete around the world today, they do it through alliances. We don't try and do everything ourselves but, rather, apply the best skills from wherever they may come and we'd suggest that is a very appropriate strategy for the new era in rail.

MRS OWENS: Have you got very far in trying to convince organisations such as the RAC that that is something they should be thinking about?

MR HORTON: We've had numerous discussions with them right through from the people that are doing the scheduling through to senior management and through to the chairman of the board about these issues. I'd have to say there is general agreement that this is the way forward but it's a new step for the industry or for the organisations to take and those decisions, being realistic, won't be done or taken quickly. Over time, however, this kind of thinking will develop. It's been, for example, only two months since we launched RailPro, so this is very much state of the art in terms of computer-aided planning. We're anticipating a market development period that will - it's commenced now - take 12 months to two years to start achieving gains and the use of these tools within the rail industry.

MRS OWENS: Have you looked at what's happening in other countries? Are computer-aided models being used elsewhere so that you could point potential customers to these models and say, "Here is an example of a successful model and this is what it has meant for this company in this environment"?

MR HORTON: There are indeed, Helen. The US rail sector, and to some extent the European rail sector, have applied these techniques for quite a number of years now.

but perhaps if you like, the modern generation has only emerged within the past five years.

Through our contacts in the operations research community around the world - that's the Informs in the US - the Institute for Operations Research Management Sciences, and in the case of Europe its Euro - the European Union of Operations Research Societies - we are aware of many rail operators using these techniques. They're using them to improve services, to save money in terms of getting better use out of a network, and so we'd say there are lots of opportunities that are in existence, or lots of examples that are in existence in North America and Europe of this kind of technique.

MRS OWENS: In my mind it actually makes a lot of sense. I have been only very briefly looking at the ways that some of this scheduling is done, and we have been in Victoria and we have looked at what happens with an urban network, and to me it's remarkably - well, maybe it is a system that has worked well in the past, but it seems remarkably unsophisticated, and I think to convince management that there is something they should be doing, you need to be able to provide examples of successes and what the impact has been. That's why I asked the question about management, because you need to have a management that can accept and understand the new ideas. Even if they are going to contract out, they need to be able to recognise that there are problems with what they've got and that there is a better way of doing it.

MR HORTON: Yes, that is exactly right. We have written a paper that looks at the future of new planning approaches in rail. I'd be happy to drop you a copy of that. That goes through a very wide range of examples of where overseas companies are using these techniques. So if that's of any interest, we will do that.

MRS OWENS: Good. That will be a great help.

PROF SCRAFTON: I just have one question, Jay. Just reading the one-page note that I've got, it's difficult to sort of understand exactly what RailPro embraces. Is it a suite of models? Because you talked about having a capital investment version and an operations model.

MR HORTON: Well, as you would know, Derek, by changing some of the parameters in the model one can make track expansion a variable in the model. By

fixing that variable you can work within an existing track configuration and look at service or changing services within an existing network framework. So it is a general framework and, depending on how you configure the data set that's fed into RailPro you can look at that wide range of questions. If you allow track to be a variable, or network expansion options, it can be used to evaluate new configurations. If you fix the track, you can then use RailPro to look at, for example, adding services to a network. So it's a general purpose tool that can deal with both the short-term as well as the longer-term planning requirements.

MRS OWENS: At the very broadest level could you look at the whole of the rail system in Australia? Say the government was going to put money into it - there have been proposals to put 2 or 3 billion dollars into the rail system - and somebody says, "Okay, what are we going to do with that money? How are we going to prioritise the expenditure? What are we going to do first?" could your model cope with something of that dimension?

MR HORTON: In principle, yes. In fact, that was one of the applications that it has been specifically designed to do. To take a case in point, where you may want to model the freight network or the rail network between Adelaide, via Melbourne, to Brisbane, along that network there are many different investment options available, so RailPro could be used to develop some scenarios to say, "Given this level of traffic volume that might be operating in five or 10 years' time, where should we invest for most gain, for the most cost-effective upgrade of the network?" The prototype that we have built of the Sydney Speedrail has been used to identify how the East Hills line could be upgraded to take on the new high-speed services between Sydney and Canberra. So that is an example of where capital investments can be identified and evaluated in a very rigorous and economic kind of framework - that is, finding the best economic solution, not just a technically feasible solution.

MRS OWENS: This work you've done on Speedrail, was that for the consortium, or did you just do this off your own bat?

MR HORTON: This was really just to prototype the use of the tool as an example of how it could be applied. As we understand it, that design is being done using the conventional methods of pencil and paper and a calculator.

MRS OWENS: I think it has got an enormous amount of potential to be able to do this, because as I understand it when the government was initially proposing spending the last \$250 million, it took a long time for priorities to be set, and I think it was because there were - I don't know, but perhaps there was no access to this sort of system that could be just picked up and used.

MR HORTON: I'm sure you're right. If you were to evaluate the many possible combinations or options for investment it would take you years doing it manually.

MRS OWENS: Yes, and you have got the political overlay, the political dimension, because each state is going to say - - -

MR HORTON: That's true.

MRS OWENS: - - - you know, "We think that Sydney is the most important part of the network" or - and maybe it is, so each state is going to have its own set of priorities.

MR HORTON: That's right, and I think what we would suggest is that tools such as RailPro can help influence the political debate in directions which make best use of capital resources rather than the other way around, which is what we see too much of. One of the governing philosophies that we see is the philosophy of letting the political and operational constraints drive an investment program. We would say that is entirely the wrong approach. With any investment program there are many choices that can be made that achieve both technical and, to some extent, political feasibility. Tools such as RailPro can identify those best choices rather than let the political debate occur in an economic vacuum.

MRS OWENS: The other part of this that you mentioned is that you could keep track of a fixed variable - a fixed component - and then determine what services you can add to the network.

MR HORTON: Yes.

MRS OWENS: You mentioned in your letter that you could maximise utilisation of existing resources.

MR HORTON: Yes.

MRS OWENS: And automatic generation of self-consistent sets of train paths.

MR HORTON: Yes.

MRS OWENS: So you are in a position then to actually be able to determine the most appropriate use of train paths.

MR HORTON: The most appropriate combination, yes.

MRS OWENS: Combination, yes.

MR HORTON: Yes, that's correct. The issue of course is that if you were to say, "I'd like to run a new train from here to Brisbane, leaving at a certain time, and I'm prepared to pay a lot of money for that," if you're going to implement that new train path then what might be required is for changes or adjustments in existing time paths or train paths. That becomes an enormously complex issue to try and grapple with if you're going to do it with a pencil and paper. So the approach of using RailPro is that it can find that, if you like, value maximising set of train paths that makes best use of the track between here and Brisbane or wherever.

Ultimately we see RailPro, or a variation of RailPro, providing the market allocation mechanism in traded market in time paths or train paths. Just as - as you would know - in the electricity industry today, there are linear programmings running every five minutes to produce the spot price value and the associated supply schedule as to which generators are producing and which ones are turned off, similarly RailPro can provide the market allocation mechanism in a functioning market for train paths.

So you might come along, Derek, with a train path that starts at let's say 9 o'clock in the morning, and you're prepared to pay so many dollars for that service; Helen might come along and say, "Well, I'm prepared to wait until 11 o'clock at night, and I'll only pay half what you're prepared to pay." What RailPro could do is produce the efficient allocation of train paths to highest value users. That's some way down the track but I think that's where we see the potential.

PROF SCRAFTON: But it also raises the number of potential clients for the product, because users become an important potential client as much as providers of rail services or planners of rail services, let's say.

MR HORTON: Yes, that's exactly right. I might also add in the context of your point that RailPro has been designed with the Web in mind. It's been designed using software that means that within a matter of months RailPro can be used by anyone who has access to the World Wide Web. In other words, we are going to put it on one of our network servers and offer people, not to have to buy the system, but to access it via the Web where they can dial up, run a scenario, change the data, and then rerun it, to get answers without having to invest in the very expensive optimisation software that exists underneath RailPro. So, again coming back to this issue of outsourcing, the Web can be a distribution channel for the use of RailPro in the not too distant future.

MRS OWENS: So you're really saying that our proposal that we had in our report where we floated the possibility of an auctioning-type system is totally workable right now?

MR HORTON: In principle we're saying we have the building blocks. Now, we would need to understand much more about the design requirements of that auction, but we don't see the technical modelling and mathematical difficulties as being insurmountable. We're very close to it. It obviously needs high-speed computers. Coming back to the electricity industry, NEMMCO, the National Electricity Market Management Co, runs a network of high-powered PCs solving for the spot price continuously. It's happening today and we're saying the rail industry can't be too far behind if a commitment is made and resources are provided for that to occur.

MRS OWENS: Have you spoken to the ARTC about your model?

MR HORTON: Not yet, no. We are aware of the opportunities - - -

MRS OWENS: They have got an interest.

MR HORTON: Yes. As I was saying, it's very new, but over the course of the next few months we will be addressing those particular organisations outside Sydney about those issues, yes.

MRS OWENS: I think another opportunity - I shouldn't be telling you what your opportunities are, but in Victoria we have now seen the privatisation of V/Line Freight and Freight Victoria, which has taken that over, has taken over a vertically integrated business.

MR HORTON: Yes.

MRS OWENS: The questions then arises about access to other parties into the lines that they will be controlling.

MR HORTON: Yes.

MRS OWENS: So how is that going to be determined? Can your model cope with that sort of contingency?

MR HORTON: In principle it's the purpose for which RailPro has been designed. In these sorts of modelling exercises, as Derek would understand, a key issue is the scale or size of the problem that you're trying to solve. Are we trying to solve for Australia or the entire Sydney network? Ultimately that comes down to how much computing power you've got and how smart are you in designing the algorithm to produce the answers. We would say, "Well, give us a few months and we could crack some of the very complex combinatorial network problems that exist out there." We have a very, very strong team that specialises in that mathematical programming area. So if we can't do it, then - - -

MRS OWENS: Then nobody can?

MR HORTON: Nobody can.

MRS OWENS: And you weren't tempted to buy in off-the-shelf solutions from other countries?

MR HORTON: The short answer is no. If you do that, it limits our ability to build our own technology and provide solutions which are tailor-made. There is a danger in bringing in off-the-shelf packages from overseas that have inbuilt assumptions, subtle or otherwise, that don't reflect the situation in Australia. So our approach was to design something from the ground up. The second issue is that our RailPro approach is not a detailed operational planning or engineering system, it doesn't simulate the minute-by-minute or metre-by-metre movement on the track but, rather, takes a high-level economic and strategic view of the problem or the opportunity. It therefore complements some of these other tools that we have seen that come from

overseas, which are very much more about detailed simulation or engineering approaches to managing rail. They're very important, but that's not what we're about. We're more about the strategic planning level rather than the detail of operations.

MRS OWENS: Right. I'm fascinated by that because I think if anybody comes to us and says, "You can't introduce some of the things you are saying probably should be considered because the technology is not there or the R and D hasn't been done," I think it's very worthwhile for us to understand what your product can do, and that there is a way through this.

MR HORTON: Yes.

MRS OWENS: I'm reasonably optimistic that the industry will go in this direction. As the industry is changing, as you said, we are seeing enormous changes with new companies coming in. The other place where I think there may be some degree of receptivity to this sort of approach would be Tasmania, where Tasrail has been privatised.

MR HORTON: Yes.

MRS OWENS: They may not have a lot of modelling that needs to be done because it's probably a very simple system, but I think those sorts of new owners will come in and there will be an expectation that these sorts of tools, if they're available, are used in the system.

MR HORTON: Yes.

PROF SCRAFTON: And these organisations will be more receptive to outsourcing and planning issues of this sort.

MR HORTON: Yes.

PROF SCRAFTON: They will have neither the resources nor the inclination to do the big in-house deals.

MR HORTON: Yes, it's the way to go.

MRS OWENS: I think that's all that I had to ask you. Was there anything else you'd like to say, Jay?

MR HORTON: What's the next step in the inquiry?

MRS OWENS: The next step is we have got another couple of weeks of hearings. We've got hearings in Perth and Adelaide and Melbourne. Then we go away and we look at what everybody's been telling us, we read the submissions, and the team will then look at whether we need to make any major changes to the report. We usually do change our report, we don't just go through this as just something we have to go

through. We do listen to what people say. So we will be making changes to the report, and then it's submitted to government in early August, and then it's up to the government to decide when to release the report.

MR HORTON: Okay.

MRS OWENS: Is there anything else you'd like to tell us, or any other comments you'd like to make?

MR HORTON: No. We look forward to the ongoing development and deregulation of the industry.

MRS OWENS: Okay, good. Thank you very much and thank you for coming today. I am now going to conclude the hearings here in Sydney, and I am adjourning till 9.30 on Tuesday, 18 May in Perth. Thank you.

AT 2.16 PM THE INQUIRY WAS ADJOURNED UNTIL
TUESDAY, 18 MAY 1999

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