



HOUSE OF REPRESENTATIVES

STANDING COMMITTEE ON COMMUNICATIONS, TRANSPORT AND MICROECONOMIC REFORM

Reference: Role of rail in the national transport network

PORT HEDLAND

Tuesday, 21 April 1998

OFFICIAL HANSARD REPORT

CANBERRA

HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON COMMUNICATIONS, TRANSPORT AND
MICROECONOMIC REFORM

Members:

Mr Neville (Chair)
Mr Peter Morris (Deputy Chair)

Mr Ross Cameron	Mr McArthur
Mrs Crosio	Mr McDougall
Mr Hardgrave	Mr Randall
Mr Hollis	Mr Tanner
Mr Lindsay	Mr Wakelin
Mr Marek	Mr Willis

Matters referred for inquiry into and report on:

(1) How current administrative, institutional, operation and pricing arrangements can be improved to promote effective and efficient use of the national rail network, and to investigate the role of the Commonwealth and states/territories in achieving consistency in these areas.

(2) The opportunities to increase the participation of the private sector in the rail industry.

(3) The opportunities to maximise access to, and utilisation of, the rail network.

(4) Effective investment and ownership arrangements for the rail network.

(5) Characteristics of international best practice in rail operations.

WITNESSES

**NETTERFIELD, Mr David James, General Manager Railways and Ports,
BHP Iron Ore, PO Box 231, Port Hedland, Western Australia 6721 966**

**ROSS, Mr Patrick Lionel, Railroad Manager, BHP Iron Ore, PO Box 231,
Port Hedland, Western Australia 6721 966**

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Role of rail in the national transport network

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Present

Mr Neville (Chair)

Mr Hardgrave	Mr McDougall
Mr Hollis	Mr Peter Morris
Mr Lindsay	Mr Willis
Mr McArthur	

Committee met at 10.33 a.m.

Mr Neville took the chair.

NETTERFIELD, Mr David James, General Manager Railways and Ports, BHP Iron Ore, PO Box 231, Port Hedland, Western Australia 6721

ROSS, Mr Patrick Lionel, Railroad Manager, BHP Iron Ore, PO Box 231, Port Hedland, Western Australia 6721

CHAIR—I declare open this public hearing of the House of Representatives Standing Committee on Communications, Transport and Microeconomic Reform in its inquiry into the role of rail in the national transport network. Appearing before the committee this morning are representatives of BHP Iron Ore. We understand that BHP runs one of the most efficient railways in the world and uses the latest technology.

In opening these proceedings, I would emphasise that, in addressing the terms of reference, the committee's role is not a lobby group to the Commonwealth government or, for that matter, to any other government in support of individual rail projects. The committee's role, under the terms of reference, is to investigate how rail could operate better now and in the future, and to report its findings and recommendations to the parliament.

On behalf of the committee, I welcome BHP Iron Ore appearing before us to today. I have to caution you that, although you are not under oath, committee hearings are legal proceedings of the parliament and warrant the same respect that attaches to the House of Representatives. So, on that note, again, I welcome you to this committee meeting. You have given us some additional information today. Is it the wish of the committee that the document be incorporated in the transcript of evidence? There being no objection, it is so ordered.

The document read as follows—

CHAIR—Mr Ross and Mr Netterfield, you have not made an actual submission to the committee. I understand that Mr Ross would like to give a 15-minute overview of the company's operation, and I understand that that is acceptable to the committee. Are you going to lead with an opening statement, Mr Netterfield?

Mr Netterfield—Certainly.

CHAIR—Perhaps you could lead with an opening statement and then Mr Ross could give his presentation.

Mr Netterfield—First of all, welcome to the Port Hedland site of BHP Iron Ore's operations. We welcome the opportunity to host this visit and to show you what we have in place here in Port Hedland and the railroads of BHP in the Pilbara. As I understand it, this morning Mr Ross escorted you around some of the local railroad infrastructure, so that should have given you some indication as to what sorts of technologies and initiatives are in place. Without wishing to take up too much more valuable time, our process from here is for Mr Ross to actually run through with you in some more detail some of those initiatives, and then we will be open to questions. So welcome, again, to Port Hedland.

CHAIR—Mr Ross, would you like to give us your 15-minute presentation?

Mr Ross—Thank you, Mr Chairman and members of the committee, for the opportunity to appear before you today. As indicated by the chair, we understand that the committee's purpose in convening this public hearing in Port Hedland was prompted by the fact that BHP Iron Ore Railroad had been previously identified in the course of its deliberations as a private rail operator providing an example of best practice in rail operations. So, on this basis, we are not here making submissions per se as to the specific issues or concerns BHP Iron Ore may have as a commercial entity, but we are here before these proceedings in an attempt to assist the committee in its deliberations by identifying what sorts of best practices, efforts or techniques we within BHP Iron Ore Railroad apply in our efforts to achieve that best practice status.

Overhead transparencies were then shown—

Slide 1 is a geographical map which provides an overview of the BHP Iron Ore Railroad network. As can be seen, there are two separate lines emanating from Port Hedland. The first is commonly referred to as the Newman mainline and runs in a north-south direction terminating at Newman, some 426 kilometres distant, with branch lines extending to Yandi and Jumblebar mine sites. The second line is commonly referred to as the Goldsworthy or Yarrie line and it runs in an east-west direction terminating at Yarrie, some 200 kilometres distant, with a short branch line running off to Nimingarra mine.

There are significant differences in these lines as they relate to such things as number and size of trains operated, distance between passing loops, method of train

control and maximum load capacity of ore cars, rail, bridges and so on. What they do share is a common owner operator, a common train control office and a common operating regime or philosophy.

My point here is that achieving best practice does not mean having the physical plant and infrastructure built to the same high standards everywhere. The prime focus of BHP Iron Ore Railroad has always been one of optimising efficiency by maximising the utilisation of track, locomotives and rolling stock—in short, using the minimum number of locomotives, ore cars and track infrastructure to transport the maximum amount of tonnes of iron ore from the various mines to the port.

In essence, we measure our efficiency by using a series of various key performance indicators, many of which you will be familiar with already such as locomotive productivity, wagon productivity, labour productivity and energy efficiencies. I will show some graphs later to demonstrate a comparison between BHP Iron Ore Railroad and various North American and Australian state railways.

Slide 2 is a graph showing the progressive growth in tonnes railed on the Newman line over the past 10 years from 25.2 million tonnes in 1989 to 59.5 million tonnes for year ending May 1998. We currently operate nine trains per day in each direction for a total of 18 trains on the line, and all operate with four locomotives and 240 ore wagons. It should be noted that the Newman mainline is a single track railway with passing loops, for the purpose of meeting and passing trains, spaced approximately every 35 kilometres. This has not changed since the railroad was constructed some 30-odd years ago.

On a comparable line in North America, for example, for the same level of rail traffic, trains would operate with only half the number of ore cars, thus doubling the number of trains and train drivers required to move the same level of tonnage. This would also require some double track sections to facilitate the meeting and passing of trains or, at the very least, passing loops spaced at 16 kilometres, as compared to our 35 or so. Passing loops are very expensive, given the cost of earth works, additional rail and sleepers, automatic or remote control switches and associated signals and signal appliances.

I will now refer to slide 3. As you will no doubt have found thus far in your deliberations, the load rating of the track and associated ongoing maintenance of the track is vital to the overall safety and efficiency of a railway. Track maintenance has always been a major expense on any railway. If the track is not maintained to a high standard, the utilisation of locomotives, ore cars and manpower suffer dramatically. Therefore, it is essential to do the right thing right the first time.

Our track is built to the highest standards as relates to the type, weight and metallurgical construction of rail, which is head hardened. As well, we use the heaviest of concrete sleepers, and our bridges are also constructed to take the heaviest axle loads.

We inspect our track for deficiencies at a minimum of three times per week. As well, we perform ultrasonic detection for broken or defective rails once every 10 days, as compared to other railways which may only do this once every three or six months. Deficiencies in track translate to temporary speed restrictions which cause trains to be delayed en route. Delays breed delays. Congestion results on track and at the extreme end of the line.

To avoid such delays, we operate with a hard and fast rule which stipulates that the maximum allowable temporary speed restrictions should not exceed four per cent of the total train run time. In other words, if a train under normal operating conditions takes seven hours, or 420 minutes, to travel from the port to the mine, temporary speed restrictions shall not exceed four per cent of 420 minutes, or 16 minutes. This is monitored on a daily basis and, if the 16 minutes is exceeded, appropriate steps are taken to bring it into line within 24 hours.

Maintaining efficiency levels in terms of everyday maintenance of the track is becoming increasingly challenging, particularly since we recently went to 18 trains per day. Given that train frequency averages once every hour and 20 minutes, our track maintenance forces are limited in terms of obtaining track time to perform normal maintenance. More significantly, our concrete resleepering program requires that we cancel one train per day in each direction in order to provide the resleepering crews with a minimum three- to four-hour window to install the sleepers. The fact that we have an access road running parallel to the track almost the entire distance helps a lot in terms of reducing track occupancy levels for other than trains, and track maintenance equipment and vehicles can be moved from point to point without interfering with train operations.

One of the reasons we pay such attention to the condition of our track is that we operate trains with the heaviest axle loads in the world. We currently operate at 35-tonne axle loads, which translates to about 115 tonnes of ore per car. We are pushing the outer edge of the envelope on axle loads and we are looking at ways to increase it to 37.5 tonnes. By comparison, other railways tend to operate at the 32.5-tonne axle loading while some are increasing to 34 tonnes. Simply stated, the more tonnes we can load in each car, the fewer cars we need to haul; the fewer cars we need to haul, the fewer trains we need to operate; and, subsequently, the fewer locomotives and ore wagons we need to purchase, operate and maintain—all of this consistent with safety, of course.

Slide 4 shows the train cycle for BHP Iron Ore Railroad, and cycle time is what it is all about. Cycle time is expressed in total time taken for an empty train to, firstly, depart the port and travel to the mines; secondly, load at the mines; thirdly, travel loaded back to the port; and, fourthly, unload through the dumpers and depart again for the mines. On the Newman line, we are currently operating within an average 30-hour cycle. This requires that, in order to operate nine 240 cars per train per day, we need ten 240 car train sets.

Our prime objective is to not exceed that—in other words, stay with nine trains per day and reduce the cycle time to optimise the utilisation of the plant. To do that, we wish to limit what expense we incur because, if we add trains to the grid, we would do it at some considerable expense to upgrade the line—construct six or so additional passing loops as well as 30 to 50 kilometres of double track through the Chichester Range and at other locations.

We will now move to slide 5. How do we propose to reduce our cycle time from the current 30 hours? It will not be easy. It will require a lot of effort in a number of areas. Here are some of the areas to which we will be directing our focus. We want to reduce the time that equipment is at Port Hedland. That means we want to accelerate the time it takes to progress it through the dumpers, to dump it, to inspect it and to make the train up. Totally, we want to reduce it from the current 10 hours to six hours. We are also looking at increasing the speed on the mainline five kilometres per hour from the current 75 to 80. We are also looking at increasing the loading rates at the mines so that the trains can be loaded faster at the mines and at reducing the dwell time.

Slide 6 outlines other innovative initiatives, including video imaging. You saw this morning an example of how we are undertaking to use technology that would enable us to inspect our wagons. There are many components. As they are in motion entering the reception area at Port Hedland on each trip—cameras are being set up at the yard limits—inspections are to occur daily, and reports of any faults will be monitored on a real-time basis by car examiners at a central location and the appropriate steps will be taken to repair the car in place or to switch or shunt the car out and take it into the shop to repair it. This will reduce our total dwell time at Port Hedland.

We are also installing, as a pilot, electronically controlled pneumatic brakes. This is for enhanced safety. The current air brake system is over 100 years old. I am not suggesting it is not safe but, for the types of trains, the length of trains and the weight of trains that we haul and the fact that we would like to go to longer trains—300-car trains—it is imperative that we put some technology on board that will assist the drivers to manage that train in a reliable way without fear of having it come apart because of the inherent delay in air brake systems in applying and releasing the brakes the length of a three-kilometre train. AC locomotives—we have ordered eight 6,000 horsepower locomotives. They will replace the 4,000 horsepower locomotives currently in place. Our intent is to now use three locomotives on a 240-car train as opposed to four. It also will bring the benefit of less maintenance.

I will now refer to slide 7. You will be aware of the international benchmarking that was performed by the Bureau of Industry Economics in 1995, and in their report comparison was made between the various North American railways and the state-owned Australian railways. No comparison was made with private railways. We have reviewed the report, and the following overheads will serve to compare BHP Iron Ore Railroad with the best and the worst railroads in North America and Australia.

Slide 8 portrays locomotive productivity at net million tonne kilometres per locomotive. As you can see, the best Australian was at a rate of 77 NTKs per locomotive. The worst Australian was at 46. BHP Iron Ore, in 1994, was at 411, and we have since made a 30 per cent improvement, bringing us to 536.

The next slide shows wagon productivity at net million tonne kilometres per freight wagon. The best Australian in 1994 was at 2.3 net million tonne kilometres per freight wagon. The best North American was 5.6 net million tonne kilometres per freight wagon. In 1994, we were at 8.8. We have since made a 24 per cent improvement to 10.9, as at 1997.

The next slide details labour productivity at net million tonne kilometres per freight employee. The worst Australian measured at 1.5 net million tonne kilometres per freight employee. The best Australian was at 3.2 net million tonne kilometres per freight employee. BHP Iron Ore Railroad, in 1994, was at 41 net million tonne kilometres per freight employee, and since that time has made a 34 per cent improvement to 55.

The last slide shows the current energy efficiencies. We are big users of fuel. This is measured in megajoules. In 1997, we were 13.0, whereas the other railways were on a sliding scale down to 0.6. So we are able to operate with the trains that we haul with the minimum of fuel utilisation.

So, as can be seen, BHP has achieved best practice in many areas. While it certainly can be debated that our comparison with North American and Australian railways is somewhat weighted by the fact that we operate and maintain what is primarily a hook and pull railroad as compared to other railroads which provide both hook and pull and industrial type service, the fact remains that there are many similarities, and we at BHP do tend to operate more efficiently. But the gap is closing quickly and more needs to be done.

We can learn from others, and we will continue to focus our preferred attention to finding ways and means for optimising utilisation of plant facilities even further in order to enable the transporting of ore from the various BHP mine sites without having to consume significant and increasingly scarce capital resources on rail capacity issues. This concludes our presentation, and thank you for the opportunity to make a representation in this manner.

CHAIR—Thank you, Mr Ross and Mr Netterfield, for that very interesting presentation and also for the visual experience that we have had today of your operations. As we have said to you, and as you have confirmed in your own presentation, in coming to see you today we are not so much looking at where you fit in the Australian mainline experience but at what efficiencies you have gained that might be an indication to the committee of what other railways around Australia might seek to achieve. Certainly, their problems are quite different from yours.

You have a very efficient operation just bringing in ore and sending it overseas on a continuous belt type operation, whereas many are subjected to other pressures—different crops, different times of year, different conditions of track inherited by private companies and so on. Despite that, we should ask you the question we have asked all operators: where do you see the Commonwealth fitting in to rail in Australia? You have the experience of rail. Your company has other operations in Australia. Where do you see the Commonwealth's role?

Mr Netterfield—We are a site perspective. Our focus is the site and the operations here of moving ore from the mines to the port and vice versa. I would think that, within that sphere, we have not seen any impact one way or the other of government relationships with railroad across Australia.

CHAIR—Excise on fuel does not worry you?

Mr Netterfield—I am not talking about tax; I am just talking about operations from an operations perspective. It is very difficult for us to answer that question from our perspective here at site. I think BHP Transport has made submissions to your committee on behalf of BHP.

Mr HOLLIS—What about things like safe working? You have your signalling system there. Is it comparable to other safe working systems? You do not have a unique safe working system, apart from the solar part of it, I guess. Is your safe working system, say, comparable to other safe working systems? Is there an international or a national agreement that you agree on that?

Mr Ross—Signal systems vary from property to property based on the plant, the capacity that people are trying to achieve and the number of trains that are operating on it. So it is basically one of an introduction where you have a single track line such as ours and passing loops every 35 kilometres and trains operating in relation to each other by signal indication. The signal system that we have is solid state. It is certainly built to the highest standards and maintained to the highest standards. If it fails, it fails in the fail-safe mode. It does provide for the level of traffic that we are currently operating.

If we were to look at the need to add capacity to the plant—that is, passing loops—we would have to also add capacity by way of the signal system. Our signal system is designed for the traffic that we have. If we put more trains on, we would have to put a more sophisticated traffic handling system in place because of the need to use a system to space trains, separate trains and optimise utilisation of the plant. It is a good system, but it is not built to handle 30 trains a day like some that are built in the state railways which handle suburban trains operating at 10- or 15-minute headways. A signal system allows you to do that. The signal system that we have allows us to operate what we are operating.

Mr HARDGRAVE—I suppose the other side of it, Mr Ross, is that you have a single purpose too. This is a single purpose railway we are talking about here.

Mr Ross—Yes, that is correct. We are, as the chairman said, basically a belt, a continuation of the mine production to the port. We are a mobile conveyor belt.

Mr HARDGRAVE—There is no doubt about the efficiencies and so forth, although I am not sure we are comparing eggs with eggs because passengers tend to weigh less than coal. So, when you start to try to relate it to multipurpose railways, the figures start to flatten out. With great respect, you have shown us impressive numbers this morning. Can you help me out here? What do we learn from here to apply to, say, public owned railways? I suspect your preventive maintenance program might be one first step. What else do we learn from this place that can be applied universally to Australia's national rail network?

Mr Ross—I cannot speak for the other railways because I have not studied them and I have not been on their property. So I do not know.

Mr HARDGRAVE—But you are a railway man, so you understand what a good railway is—and, by your measure, this is obviously a good railway.

Mr Ross—Yes, it is. I think the key here is that we have an environment that is hook and pull. We have an environment where we are able to structure and design our service unfettered. Therefore, we are able to optimise the utilisation of our plant by operating trains in relation to each other as a conveyor system to the mine and the port.

Within the industrial area, or at least within railroads that operate within the Commonwealth, they, of course, have a mixture of hook and pull. They have a mixture of dealing with industrial customers, handling the onesies and twosies, marshalling those cars and putting them together. It is, as you say, a bit of apples and oranges. But it really comes down to our ability to very significantly influence the operation by virtue of running it as a schedule.

Mr HARDGRAVE—If somebody decided they wanted to run a tourist train on your track, what sort of position would that put you in? Is anybody sort of floating any ideas of access to your network?

Mr Ross—Not to sound facetious or anything, I think a tourist train would have very little draw up here. It is a featureless terrain out there. There is not really a great attraction.

Mr HARDGRAVE—Forgetting that, let us just say that, in theory, the concept of access to your network would, of course, be a matter of great debate—access to the public infrastructure. With the reverse argument applied here, what sort of effect would have it

have on the operation of the railway?

Mr Ross—As my colleague said earlier, we came here to talk about best practices and to speak to these issues from a site perspective. We respect that you have questions and issues that, obviously, have come before you, but we really did not come here prepared to address that as a policy matter.

Mr HARDGRAVE—Perhaps, though, if you have nine trains going one way and nine trains going the other—in other words, movements of the conveyor belt, as you have suggested—having something else on the conveyor belt is not really going to help your operation, is it?

Mr Ross—From my perspective, I would passionately argue against it. The reason being that, as I said earlier, we are a conveyor belt upon which the mine, the port and the export of ore relies. If we become congested, or if we get shut down for whatever reason, the whole line stops. It is not a situation where you can get through several days of outages and life goes on. We have a vital role to play in the successful operation of the mines and the port.

Introducing someone else into the train grid has some logistical challenges. As I said, we are currently having to limit the number of trains that we operate in order to allow resleepering to take place. So there is no latent capacity. This is not an underutilised line, as you may have seen at other locations. That being the case, to introduce some other train to the grid would create problems. It would eat up a train path that we do not have right now.

It would also require the train to negotiate its way from point A to point B and meet at least four opposing trains. Someone would get delayed along the way, and delays breed delays. That would backup to the point where our objective of operating more efficiently would become one of having to add capacity in the form of passing loops, signals and so on. It is a step process. We are at the point where we really cannot afford to have more trains on line, otherwise we would not be spending the money that we are to put electric brakes on cars in order to extend the trains to 300 cars as opposed to introducing a 10th or 11th train.

Mr HARDGRAVE—So really you are saying that you would end up like every other railroad in Australia.

Mr Ross—But the other railroads in Australia, with all due respect, are railroads and that is their core business. We are a mine site. Our role is to provide a service to the mine to keep that assembly line going. When we start backing up, the mine starts backing up, it starts standing people down, crushers stop and trucks stop. It is not something that we would in any way be able to do without some significant ramifications.

Mr Netterfield—To get back to your original question, which was what lessons you could take away, taking into account the difficulty of applying the lessons in a broader environment, we can see that this sort of environment, which is very specialised and very much A to B, does breed the efficiencies that we have. It comes hand in hand, so it is not that we have set out to build the best railroad because it is a nice thing to do. We have built the best railroad because it is an absolute necessity to mine iron ore at the prices that we sell it at—to dig it out, to rail it, to ship it and to make a return on the asset.

It really is the integration of all of that that, along the way, happens to generate a very efficient railroad. If there was no money in it in the sense of creating a value, we would not be in the business of making the world's most efficient railroad.

CHAIR—What is the replacement value of the railway?

Mr Ross—I have never calculated it but, roughly speaking, I would say in the order of \$1.5 billion.

CHAIR—In your presentation today, you never at any stage drew a comparison with any of the other railways in the north-west in the Pilbara. Was there any reason for that? What are your load factors compared with some of your other competitors, for example?

Mr Ross—That is a good point. First of all, we are very much in competition. We are friendly competitors, but we are very much in competition.

CHAIR—But these figures you have given us are largely on the record.

Mr Ross—Yes, they are.

CHAIR—Do they have figures on the record as well on tonnages, train frequencies, loads and so on?

Mr Ross—Not that they would publish them to us. There are certain things that are common knowledge, and you have asked the question and we are obliged to provide you with that information. But do we sit down with our colleagues down the road and talk about productivity levels, costs and so on? The answer is: absolutely not.

Mr PETER MORRIS—But they are your benchmark. The rest of those figures are not comparable. Therefore, the presentation you made to us is literally irrelevant. The only thing that is comparable with you is: how more efficiently can Hamersley get a tonne of iron ore on board a ship than you? How do you measure that?

Mr Ross—I suppose we do not have—

Mr PETER MORRIS—You go to the same customers. You deal in the same market. You bargain against each other. That is the real test.

Mr Netterfield—In the end, it is the bottom line. It is the ‘NOPAT’ (Net Operating Profit After Tax) the shareholder returns. That is what measures it.

Mr PETER MORRIS—Do not dodge it like that. I am simply asking you how you measure how well you are getting iron ore from the iron ore mine on board the ship as against Hamersley. That is your real test. How do you measure it? You would know what it is.

Mr Netterfield—I am not sure that we know—

Mr PETER MORRIS—Of course you know what it is. Are you telling us that you are here in this business—the largest export business in the country—and you do not know what your competitor is doing?

Mr Ross—What we do learn is through hearsay. It is not something—

Mr PETER MORRIS—Oh, you are talking to us!

Mr Ross—I am speaking as the Railroad Manager here, sir.

Mr PETER MORRIS—We have great respect for your competence and your ability. We are indebted to you for the tremendous performance and presentation you have given to all of us this morning, but we also have great respect for your competence in a very tough market. You would not have that competence and achievement if you did not know what your competitor was doing. You can tell us.

Mr Netterfield—What is your specific question?

Mr PETER MORRIS—How do you measure your costs of getting a tonne of iron ore from an iron ore site on board the ship as against Hamersley?

Mr Netterfield—We do not have access to their costs. We have access to their published data, like anyone else.

CHAIR—We believe you are world’s best practice, but to make that claim you must have measured yourself against some operation, if not in Australia then elsewhere. Your market intelligence must tell you that the XYZ mine in some other country has a very good performance and can sell iron ore at a certain price on the international market. So, if you do not measure yourself against Hamersley, what do you measure yourself against?

Mr Netterfield—All the producers sell at the same price. What we do not know is what their costs of production are.

CHAIR—Is there is a cartel, is there?

Mr Netterfield—No, the price of iron ore is benchmarked and set in contracts around the world. So we understand pretty much what everyone is selling their ore for, but we do not necessarily understand what their costs are or how their costs break up.

Mr McDOUGALL—Can I take that in another direction? If you do not know what your competitor is doing, why are you not better off getting out of the railroad business which, as Mr Ross said, is not your core business and contracting out the whole operation? Will that come in cheaper than what you are running it on at a per tonne rate to get it from mine site to the ship?

Mr Netterfield—To come back to your point that it is not core business, it is not core business in the sense that the mine is the core business, but it is an integral part of the mining business.

Mr McDOUGALL—But not every mine in Australia, whether it is coal or metalliferous, owns its own railways. For argument's sake, Rio Tinto in the Hunter actually started building its own trains and now contracts it out to FreightCorp because it has found that it gets a better return on the capital investment of the train by leasing it out than it does by running it itself.

What I am saying is an extension of what we are talking about. Sure, you know what your costs are. You have your capital costs, running costs and maintenance costs, so you know your cost per tonne. Is it cheaper for you to do it that way, or is it better and cheaper for you to contract it all out and be more competitive and make a higher profit margin?

Mr Netterfield—Arguably not at this stage because we have not done it. Why would we not do it if that was the case?

Mr McDOUGALL—Mr Morris started the point which I wanted to come at.

Mr PETER MORRIS—I want to come back to the ship side of it too.

Mr McDOUGALL—I just want to come back to the access thing for a moment. We are looking at a map and seeing a pretty big, expansive area, and we come back to the principle that Part IIIA of the Trade Practices Act did not distinguish between privately and publicly owned infrastructure. I heard what your answer was before, but let us say that the future brings further development in that area, which may prove that you should link to those networks from other areas for other purposes—it might be cattle or it might

be other mining sites—and utilise part IIIA of the Trade Practices Act. What would you do in relation to an access agreement to be able to utilise those facilities to maximise the development of the total area? What is your position in relation to that?

Mr Netterfield—We would have to respond at the time on the particular thing being put to us under the responses available under the act. But it is very difficult for me to sit here and say what we would do in any particular circumstance.

Mr McDOUGALL—Working on the basis then that this has all been put into operation with an agreement with the state government, are we to assume, therefore, that the whole area you operate is one mining lease or a series of mining leases?

Mr Netterfield—It is a series of leases.

Mr McDOUGALL—Which interconnect the whole thing?

Mr Netterfield—That is right.

Mr McDOUGALL—I would assume that, through that agreement, there is some sort of leasing arrangement in relation to the land that the track sits on and in relation to how that whole thing operates. Through that leasing arrangement, or whatever it is, would that give the right to other people to get access to that same infrastructure?

Mr Netterfield—There are matters of access that are contained within the leases.

Mr Ross—As I understand it, the legislation does provide for third party access, but there are certain procedures that have to be followed that are obviously in the interests of both parties to come to a mutual agreement on. I am not suggesting here today, because I said earlier I would passionately argue against third party access, that we would, or I would, in any way contravene the law. I am very mindful of it and respectful of it. But, from a purely logistical standpoint, it is not a question of someone applying for access to a line that has all sorts of latent capacity. We do not have that capacity, and a third party on board would compromise our ability to meet our mandate to efficiently transport ore from the mines to the port. That would be to the detriment of everyone.

CHAIR—I have a question of a geographic nature. I noticed in the maps of the area that there is not a great distance between Parallel Ridge on the Karratha line and your operation. This is not your map; it is just another map we have been given. Has there ever been the suggestion to link the three systems?

Mr Netterfield—Not to my knowledge. That is not to say it has not happened, but not to my knowledge.

CHAIR—Not for backup, efficiency, flooding or whatever?

Mr Netterfield—No. The same comment that applies to railroad also applies, essentially, to port and processing facilities in that those facilities, generally, are at or near capacity. There is also a difference in the way the various competitors have chosen to treat their ore.

CHAIR—I was just going to ask you that question. Do all three operators use the same method of crushing and size?

Mr Netterfield—They use the same method, however where they do it is different. Hamersley have chosen to crush and screen to final product size at their mine site and, essentially, they haul finished product whereas we haul from Newman and on the Yarrie line what we call run of mine, which needs tertiary crushing here at the port. So we need crushers and screens here at the port. We have that facility here, but neither of our competitors have those at the port.

CHAIR—What about Robe? What do they use?

Mr Netterfield—They are a single product shipper making only one fines product whereas we are making a number of products here at the port.

Mr WILLIS—Gentlemen, is it not the case that you operate under agreements with the state governments in which you agreed to carry state freight and even passengers for a reasonable charge provided it did not interfere with your basic operation? Is there not an agreement essentially to that effect?

Mr Ross—I am not familiar with that agreement. I am not suggesting that it is not in place but, if it is, I am not aware of it. Certainly others would be and we can take that on notice, if you like.

Mr WILLIS—Our understanding is that there was such an agreement entered into back in the 1960s. If you are not aware of it, can I just go on to ask you: is there any party currently seeking third party access to your line or lines?

Mr Netterfield—Those issues are not raised normally at the site level, but my understanding is that discussions have taken place from time to time at our Perth office with other iron ore venturers. I do not know where those discussions stand.

Mr WILLIS—Are you aware of what state those discussions are in?

Mr Netterfield—No, but I think the proponents, for instance, of the Hope Downs project have been talking to all of the iron ore producers in the Pilbara. They have been talking to BHP Iron Ore. They have been talking to Hamersley. They have been talking to Robe.

Mr WILLIS—But the map that Mr McDougall referred to makes it quite clear that it is you they are really wanting to talk to rather than Hamersley. They are near your line, not Hamersley's.

Mr Netterfield—Not necessarily. Hamersley are extending their line now into Yandicoogina.

Mr WILLIS—So you think that extension would take it closer to Hope Downs?

Mr Netterfield—It would take it very close to Hope Downs.

Mr WILLIS—You are not able to give us any information about the state of those discussions at this stage?

Mr Netterfield—No, I cannot tell you where they are at. As I understand it, they have approached all of the companies. In fact, I can recall seeing a paper presented by one of the principals of the Hope Downs joint venturers to the Japanese steel mills probably two years ago. He was arguing to that forum that any of the lines was available to Hope Downs. However, he was stating that there would perhaps be a preference to use the southern ports, either Dampier or Port Walcott, on the basis that the port of Port Hedland was already heavily utilised. This became more a port issue rather than a railroad issue. In fact, DRD have done some work recently on that very issue of the capacity of the Port Hedland port and examined that question in relation to other developments in the Pilbara.

CHAIR—Could you get back to us on that point about what it says in the state agreement about passenger and freight access?

Mr Netterfield—Yes.

Mr WILLIS—From an operational aspect, Mr Ross, you have been making it very clear since we got here this morning that you see great problems in anyone else coming onto the line because it would mean considerable additional costs for you, even with your own expansions, let alone with anybody else on the line. Presuming that new operators or other operators on the line were prepared to pay their share of any additional costs that that involved, does BHP have any sort of intrinsic opposition to the concept of third parties so long as they do not interfere with the efficient operation of their production?

Mr Ross—Just to make sure there is no misunderstanding, there is a law, there is an agreement, and we certainly are committed to abiding by the law and whatever agreements and requirements apply to us. My concern with additional trains was stated within the context that, whether it be someone else or our own trains, it would be more cost-efficient for us to expand on the length of the trains and stay at nine trains per day each way as opposed to adding a 10th into the grid and then finding ourselves having delays en route and having to get into capacity expenditures that, under the circumstance,

is a step process. We are operating at a level now that lends itself to what we are railing. To go beyond that and to be efficient, we have to spend a lot of money. So it is not within the context of somebody else coming on board; it is even ourselves. We do not want to go to a 10th or 11th train for those reasons.

Mr WILLIS—But, if somebody else came on line and was prepared to pay for the additional costs involved, do you have any intrinsic opposition to their being on the line?

Mr Netterfield—We would have to work within the agreements that we have.

Mr WILLIS—I would have thought so.

Mr Netterfield—Going back to the Hope Downs people, they are talking to the right people in Perth. But they would not raise those sorts of issues here with us at site.

Mr WILLIS—Let me just make the additional point that, from the point of view of the nation, if another company which has mining potential, a mining operation, cannot get that operation going because it cannot get access to a line which is nearby without building its own, which might be prohibitively expensive, the nation misses out on that development, which seems to me to be a very adverse thing for the country. So we see a very positive plus for the country in the concept of third party access where there are two lines which could possibly be utilised in getting another mine started which otherwise might not come on stream.

Mr Ross—I cannot disagree with you. That is the spirit and intent of the law and agreements which allow us to be here. The only caveat I would raise is that it is not a simple matter of just adding a train to the grid. It is a step process. There are significant implications to it and significant expense. We should not be compromised as a result of that.

CHAIR—That point is not lost on us.

Mr LINDSAY—Gentlemen, are you aware of a proposal to run a railway line from Kalgoorlie to Port Hedland?

Mr Netterfield—No.

Mr Ross—I am not.

Mr LINDSAY—The proposal is to service the tremendous mining activity that occurs in that corridor. I guess the proposers of that railway line might be looking at hooking on to the end of your railway line. So, again, you get a national interest perspective. On the one hand, you are balancing the servicing of the other infrastructure in Western Australia but, on the other hand, you are trying to satisfy the situation where you

are basically running to capacity at the moment without further expenditure. How would you handle that if the government came to you and said, 'It's in the national interest to run a railway line from Kalgoorlie to Port Hedland. We'd like access to your track'?

Mr Ross—Again, that is a question that we really did not come here prepared to speak to in an articulated way. Again, from a Railroad Manager's standpoint, I would say that the railroad infrastructure is obviously a very costly one. It is a very expensive one. It is a large investment. It is an introduction that BHP or its predecessors had to pay in order to get into the mining business here. Obviously, it was an investment that takes time to have a return.

If there are other railways that want to link in, the only caveat that I would personally attach to that is, yes, that is possible but, in the course of that, we would want to make sure that we are kept whole and that our future ability to grow and handle more business because we have resources that are untapped—and our profit will come from growth—is not compromised. So, if someone were to add a line to it and we took a snapshot which said that we are okay now and that two years from now we will be able to rail more ore but we will not have capacity, who pays for that? There has to be a discipline within whatever arrangements are made to keep BHP whole and safe from harm for the future, otherwise we would be compromised.

CHAIR—And within a growth factor.

Mr Ross—That is right.

Mr LINDSAY—Mr Ross, could I seek your private view on railways, not as an employee of BHP? You have talked about hook and pull operations. Just looking at the Australian rail system as a whole, do you think that it would run better if there were operators who were hook and pull operators and that at each end some other entity did what needed to be done with the passengers and freight?

Mr Ross—My knowledge of Australian railways is very limited. The only exposure I have had to railways here has been BHP. My experience with railways has been North American, and it is a different operating regime. It is a different commercial environment that prevails. If you look at railways as an industry, railways can be profitable only if they are operated safely and efficiently. Also, that only happens if they can achieve economies of scale.

The Australian continent is not unlike the Canadian one where the population is concentrated in cities that are very far apart. The only way to make a railroad profitable in that environment is to have hook and pull railways that haul from city to city under one operating regime and to have the ones who are operating in the spokes handling all the grunt, push and pull and onesies and twosies operating in another operating regime. That is the North American model.

Mr LINDSAY—That is what I needed to hear you say. In the current operations of your railway, are you having any problems with native title, natural heritage or the environment?

Mr Ross—Not to my knowledge.

Mr McARTHUR—Pat, you have alluded to it but, in terms of world's best practice and your experience in the North American railroad, how does the BHP operation here compare across the board?

Mr Ross—I hope it did not come across that BHP is best practice in its entirety. There are certain things within BHP in which, yes, we do achieve best practice, and I related to them—that is, the use of high-tech, the utilisation of equipment and the 35-tonne axle loads. But there are some things within BHP that, admittedly, we can learn from other railways within Australia and other railways within North America. On the whole, if I were to give a score to BHP railroad as compared to other railroads that I have been exposed to in North America, I would have to rate BHP railroad as among, if not, the highest.

Mr McARTHUR—How do you find the work practices and industrial relations with BHP rail?

Mr Ross—Fine. We operate within an industrial environment that contemplates a negotiated process. It contemplates a process of consultation.

CHAIR—Is it a workplace agreement, is it?

Mr Ross—No.

Mr Netterfield—We have an enterprise bargaining agreement.

Mr Ross—We work within that framework. For my part, I am certainly satisfied with it.

Mr McARTHUR—On the record, could you give us a comparison between the concrete sleepers, the steel sleepers, which you have tried, and the wooden sleepers and the relativity of the investment process? We have had a lot of discussion in this committee about that problem.

Mr Ross—Timber sleepers date back to when railroads were first constructed. The role of the timber sleeper, or any sleeper, is to distribute the weight and to secure the rail in such a way as it does not move under the weight of the train. With increased axle loads and weights, we have found that the securing mechanisms on timber sleepers have to be maintained quite a bit because of the nature of wood—they tend to get loose over time.

Concrete sleepers are heavier and the securing devices are such that they respond better to the axle loads and, therefore, require less maintenance. Less maintenance means more opportunity to run trains on them and less temporary speed restrictions.

We found that the steel sleepers were moving slightly under the heavy axle loads we are using. They operate and serve very well in an environment that does not handle the heavy axle loads that we have, the heavy trains, which is the majority of railroads. Ours is unique in that we optimise our train loads. Therefore, we have to optimise the plant that is in place. So our preference is for the concrete sleepers.

Mr McARTHUR—Would you say that your concrete sleeper construction, design and technology is world's best here, the plant we looked at this morning?

Mr Ross—I would say that our concrete sleepers are the heaviest in the world. In terms of design and construction, I cannot speak to that because my exposure to concrete sleepers has been limited to one or two railroads. I know that the environment here is more favourable than where I come from. The problems we had with sleepers over there were because of the extreme cold. A frost would form underneath the rail and the ice would then move back and forth and would actually erode the concrete sleeper. We do not have that problem here. We are very satisfied with our concrete sleepers.

Mr WILLIS—How many can you replace in one day?

Mr Ross—We can install on a mechanised process upward of 1,200 in one day, if we provide the track time. Unfortunately, we have not been able to provide them the track time, so we have had to cancel a train in each direction each day in order to achieve an average of about 794 per day.

Mr WILLIS—What distance is that?

Mr Ross—There are 1,666 in a kilometre, so we would be doing half a kilometre a day. We still have about 200 kilometres to do to have our total line on concrete sleepers.

Mr PETER MORRIS—Mr Netterfield, we have looked this morning at the overall operation and we understand the interdependence of each of the segments. We have looked a lot at the iron ore body, movements through the ore workshop and the detection of rolling stock. What about the other end of your responsibilities, the ship loading? I have noticed that Port Hedland regularly has a number of ships detained for being substandard. How do you overcome interruption in loading when ships are pulled up for being substandard?

Mr Netterfield—They are not pulled up at berth. They are normally inspected out at anchor, so it does not affect the berth at all.

Mr PETER MORRIS—So you do not have any ships pulled up during the loading process?

Mr Netterfield—Very rarely. The ships are inspected before they come into the berth.

Mr PETER MORRIS—Which does not happen elsewhere. So they are at anchor about 10 kilometres out?

Mr Netterfield—They are about 20 kilometres out to sea. In fact, you will see them on the horizon as you leave.

Mr PETER MORRIS—Yes, I have seen them.

Mr Netterfield—So they do not slow us down.

Mr PETER MORRIS—That is very interesting. I do not know of that practice happening elsewhere.

CHAIR—Thank you, Mr Netterfield and Mr Ross, for your appearance today and for your very frank exchange on issues. It has been a totally different experience from the ones we have had with other railroads, both private and public. That helps us put a more comprehensive fabric of the Australian rail system together and gives us a basis against which to measure a lot of our recommendations. We also wish to place on record the committee's appreciation of the hospitality of your company and your staff.

Mr Netterfield—Thank you.

Mr Ross—Thank you.

CHAIR—Finally, on behalf of the committee, I would like to thank not only the witnesses but also those in the public gallery today for their attendance.

Resolved (on motion by **Mr Willis**):

That this committee authorises the broadcast of the public hearing and the publication of the proof transcript of the evidence given before it at public hearing this day.

Committee adjourned at 11.34 a.m.