ROAD SAFETY COMMITTEE

INQUIRY INTO IMPROVING SAFETY AT LEVEL CROSSINGS

Melbourne — 31 March 2008

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Mr B. Nye, chief executive officer, Australasian Railway Association.

The CHAIR — Welcome to the public hearings of the Road Safety Committee's inquiry into safety at level crossings. All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1975 and further subject to the provisions of the Parliamentary Committees Act 2003. Having said that, any comments you make outside of the hearing may not be afforded such privilege. As you can see, we are recording the evidence taken today, and we will provide a proof version of the Hansard transcript at the earliest opportunity so you can correct it as appropriate. If you could just state your name and the organisation you belong to and proceed with your presentation, if that is okay, and we will ask questions as we go.

Mr NYE — I am Bryan Nye, chief executive officer of the Australasian Railway Association. Thank you for the opportunity to come before you. I thought I would start off with a brief DVD. It is only a minute. This is a train driver who was actually in a level crossing accident where somebody was killed. It is a New Zealand train driver.

DVD shown.

The CHAIR — Could we get a copy of that?

Mr NYE — Yes, we can, certainly.

Mr KOCH — Bryan, that was somewhat better put together than — —

I heard three train drivers somewhere in Brisbane the other day on one of the talkback programs. I felt theirs was a very subtle example of what can happen to the drivers, whereas I appreciated that very much.

Mr NYE — It is very difficult to get the drivers to talk about it. But, when you think about it, everyone you talk to actually has the same experience. That was just done last week for a dinner in New Zealand with the New Zealand Prime Minister. The New Zealand Prime Minister lost one of her nieces in a level crossing accident, so it has a high level of impact there. We actually just got that overall — that driver. When you think about, in Victoria alone last year there were 130 near misses. Every one of those drivers you talk to sees the drivers, the faces of the people in the vehicles. As part of that chilling bit, the other side of road accidents or level crossing accidents we just do not see.

Mr KOCH — The talkback I referred to, Bryan — you may or may not have heard it; I think it was on 3AW some time last week with Ernie Sigley. It is probably worth chasing it up and getting it, if you desire to.

Mr NYE — I only got that last Friday; I thought it was a good way to actually lead into the presentation because it is the other aspect that we do not tend to see. There is the human side to it. Thank you for doing this. I quickly just want to talk about the context and the dimension of the issue, the roll-out of the policy framework and the key elements of the actions we think are needed going through this. Just a little bit about the ARA — we have actually been around since 1894. We were based here in Melbourne until 2003. We were actually the secretariat of the railway commissioners. In my office I have all the minutes from the 1894 meeting. It is not relevant to this, but if you want to know about the problems of rail in Australia, it is intriguing reading. In 1897 we actually agreed to have standard gauge in Australia. What went wrong since then, it is fascinating. I am not from the railway industry; I just found it most intriguing to read it. We were reformed in July 2003 and moved to Canberra. We look after all railway operators, track owners — —

Mr KOCH — Were you in abeyance for quite some time?

Mr NYE — No, what happened in February 2003, they just closed the doors, said goodbye to everybody and started it again. It was non-rail staff. I am not a railway man; I was brought in to do a few things. We represent, as I said, the track owners, the railway operators or the manufacturers in Australia and New Zealand as well — 100 per cent of the rail industry under us, including all the Pilbara rails, the passenger rail, the whole network right across. It is a large organisation. I chair the Rail Industry Safety and Standards Board and also the Rail Skills and Career Council. The Rail Industry Safety and Standards Board is about standardising a whole series of codes of practice right across the country. If you understand rail as just coming out of a sector of government ownership to private sector ownership, it has challenges overall. A priority for us and a safety issue are level crossing accidents. I will quickly just go through these slides.

Overheads shown.

Mr NYE — This shows an accident in Lismore in 2006. One truck driver died. The real impact of that is that it cost the rail industry $30 million. That was a B-double truck going into that. This shows what happened at Kerang. Another truck, a B-double, went into the side of that train and 11 people were killed. You know that well. Last week, over the Easter weekend, two people were killed at this accident on Considines Road. What is really quite incredible is that later that day there was another accident further down the line, with another vehicle.

Why is it such an issue for us? Most years total rail fatalities are around 40 and of those around 36 or 37 are due to level crossing accidents, so overall rail is an incredibly inherently safe industry, but we are concerned. Our biggest issue is level crossing accidents. We have done quite a bit of work to look at the causal factors. These are causal factors, comparing those to other road crashes. I think the bit to really look at there is the driver error. That is the real difference: unintended error by the driver is the cause in a really high proportion of accidents. We cannot treat it just like it is another fatal road crash; it is a totally different set of circumstances. That is an important set of data that we are trying to emphasise.

Mr LEANE — Where you have alcohol and drugs, fatigue and excess speed, are they encompassed in that 46 per cent?

Mr NYE — No, they are not. They are just driver error.

Mr WELLER — The figures do not add up to 100.

Mr NYE — There are a few other risks. You are quicker than me; I have not added them up.

Mr WELLER — There are only about 80 per cent there.

Mr NYE — I can come back to you with exactly where the others are.

Mr MULDER — Does the driver error include actual risk-taking , like people who are prepared to race a train?

Mr NYE — Yes, it does, and I will come to some of those as well. It is interesting where some of these came from. What is really quite disturbing are the active controls, where you actually have the boom gates in place, flashing lights and everything else there: 50 per cent of the deaths occur there, in daylight and in fair weather conditions. It is those elements overall that we are really trying to actually focus on. Everybody is focusing on those unprotected level crossings. In fact where we have everything going for us, we have more than 50 per cent of the deaths occurring. That is something that is really quite disturbing. These are national figures. Our key is that we are after the four Es. One is education and the others are enforcement, engineering — I will come to that in some detail — and enough is enough, no new crossings. We are going to get more rail out there and we just do not want any more level crossings.

Mr KOCH — Do you have figures state by state or is everything national?

Mr NYE — Yes, we can break that down for you. Somebody has given me the figures for the number of accidents from 1892. Rail has a whole history of people who collect that type of data, so we have some quite accurate data going through. We want to complement those with technology to increase level crossing safety. We believe there should be no deaths at level crossing accidents. We have to get to that.

The CHAIR — Just in relation to the near misses , how do you collect that data?

Mr NYE — From the drivers. We get them to report back to us and we do that on a company basis. Those 130 were with Pacific National alone, with freight trains here in Victoria. In trying to get that data we have a real program in place, because sometimes people are reluctant to report that, but that is the type of data we need if we are going to really start hitting the improvements that we need.

Mr TREZISE — Could you add another E — elimination of excess crossings?

Mr NYE — I suppose that is covered by 'enough is enough'. Obviously in the ideal situation you have no level crossings, but throughout the world there are level crossings. Even where you have high-speed trains doing 300 kilometres an hour, there are level crossings, so we are not unusual. We think we have a big problem, but we have 9000 crossings that we know of in Australia and there are 40 000 in Canada, where they have a lot of incidents. There are level crossings everywhere. It is just what you do about them. That is part of the program we are going through.

This shows some of the stuff we have done in the industry. We now have national visibility standards on external lighting on all locomotives and reflective materials down the sides of locomotives, and we are trying to improve the colour schemes, to make them more visible overall so that national standards come into place. It will take some time and there will be some exceptions. Some of the heritage rail will never get up to those standards, but all new locomotives and all new rolling stock must be built to the new national standards.

Mr MULDER — There is nothing mentioned about wagons in terms of reflective materials.

Mr NYE — It is exactly the same. Wagons have reflective materials as they are being built, not going back and retrofitting. It is done only when they are being refurbished. We are pushing very strongly on a national rail level crossing behavioural strategy. We are looking at driver behaviour. We have just finished a national road user survey, which I will talk about. An education and enforcement pilot was done here in Victoria and it was quite interesting. We have had a national workshop where for the first time we got all the traffic authorities in the same room to look at those involved with level crossings working together. That was a coup in itself, to get them all in together.

Mr KOCH — What are the outcomes of those?

Mr NYE — I will go through some of that.

Mr KOCH — They are now completed?

Mr NYE — Yes. We have now been pushing and have had National Rail Safety Week in every jurisdiction across Australia and including New Zealand. It is launched by the ministers. That is trying to up the ante in talking about level crossing strategy. Obviously we are pushing a national approach, where we think is the best bang for the buck. Recently we had a national ITS workshop, which was quite interesting. It was looking at what technology is out there to help us. We have established a working group to try to look at what technology is applicable and how we can take it forward.

Mr LEANE — Will the working group be producing a report?

Mr NYE — We hope to work over the next 12 months and look at some of the technology. Currently we have a cooperative rail research centre, that we established just six months ago, running.

Mr LEANE — Where is that?

Mr NYE — It is a virtual organisation, but it was co-funded by the industry and the federal government, with $100 million over seven years. One of the key projects is level crossings. Its first task is looking at what research has happened around the world, trying to understand what others have done. I will talk a little bit more about that because there are some quite interesting innovations overseas.

Going back to that national road users survey we did, it was a survey all around Australia. It gets quite frightening, as one in four engaged in risky behaviour. That means they ignored signs, went across signs and admitted that they had done that. Even some more detail is that people did not know what the punishment was and did not even realise that there were fines for breaking the rules at level crossings. That was overall and that was one element of the survey. Something interesting also coming out of that survey was the education program. Some of it was done in Colac and Ararat, which are areas of interest to some of you. We examined an area where we had a stop sign and recorded whether people were stopping at the stop sign. Over the period of the trial nobody stopped at the stop sign.

Mr LEANE — Not one?

Mr NYE — Not one — there was no recorded stopping at the stop sign.

Mr KOCH — Was that a stop sign that recently replaced a give way sign?

Mr NYE — No.

Mr KOCH — Was it historically a stop sign?

Mr NYE — Yes. They were both on quite well-used auxiliary roads, where you think people know. Part of the thing was then to put a policeman there after and do a community campaign to talk about the importance of it, and add some enforcement. Then we started to get some change in driver behaviour, particularly around the stop sign. That is where we had some change. The give way sign was totally ignored; we could make no change to any driver behaviour. Part of our thinking is: how can you enforce give way signs where there are trains? To me it just does not make much sense logically. It is a road traffic authority issue, but you cannot give way to a train. You naturally want to give way to a train. It is not something you can enforce. It was interesting in that campaign, looking at the driver behaviour and enforcement. Unless we had some enforcement to change the behaviour, we had not that much impact. That is what we want to talk a lot more about.

Some of the technology we are looking at is in roles and options, road traffic management, and road user enforcement. On road traffic management I will talk a bit more about the advance warning signs, traffic lights and rumble strips. On the advance warning signs we are very particular. They are the flashing ones you will have seen before you get to a ramp and the new, modern signs. On traffic lights, we want more trials because we think that people will naturally stop for a traffic light; that is part of their culture.

We think some more evaluation should be done on that. The Dutch have done some work on that, and they think people tend to follow road signs more than they do level crossing signs. And there is a road issue — cars moving across the rail track, and we think there is some value in doing some work on traffic lights.

Mr KOCH — Would you use amber lights or just red and green?

Mr NYE — Yes, amber lights.

Mr KOCH — So you would not have people racing in to cross in front of a train?

Mr NYE — As part of the Canadian behavioural strategy they looked at, there are three key elements that people attempt. People under 25 who think they are invincible race the train. There is a real problem in New Zealand; they want to speed up and try to get ahead of the train. Male drivers in their 50s tend to drive on auto and do not tend to look around and notice things, and most of the truck drivers are in that age group. And mothers with children in the back who get distracted. They are the three. We have not done any of that work in Australia, but I would see there would be any difference in the Australian experience.

Mr LEANE — Did you say you would not include an amber light?

Mr NYE — No, we would not; we would have exactly the same.

Mr MULDER — Is there any idea of the costs in terms of a set of traffic lights as against the flashing lights.

Mr NYE — It is cheaper. It is interesting. Just on the boom gates, Holland has just got new boom gates that come totally across the whole road. The reservation about doing that in Australia is capturing somebody in the middle where you have got a queuing problem, particularly here in Melbourne where people queue across. What happens if they are caught? You can actually drive through the ones I have seen in Holland. They are actually quite light but they come right across the road. The Russians have had an interesting experience. They have a much more innovative way: a steel plate comes up in the middle, and you cannot go through it, but it has some other consequences as well.

Mr LEANE — Bryan, if you take a passive crossing now — are you saying that you would put in a set of traffic lights without a boom?

Mr NYE — I think we have to do some more work on that. Boom gates seem to be creating some problems. In certain areas you have to have boom gates.

Mr LEANE — So it would only be cheaper if you put a set of traffic lights without — —

Mr NYE — Yes, traffic lights, instead of sometimes stop signs and looking at where the risk is and what you really want to stop. There are some other things around the world about speed reduction that I will come on to. We think very strongly about better use of camera technology. Everybody talks about red light cameras, but the camera technology today is really advancing. You can have cameras in the roads actually filming and picking up the numberplates as they are going across, whereas red lights are only triggered on speed, and enforcements — I think some of the modern camera technology will be there. We are putting cameras in a lot of the locomotives, but, to be blunt, that is for insurance reasons so we can record the people coming through. It will not help beforehand; it will be a post-incident reporting thing.

Mr LEANE — How do you pick up their numberplates?

Mr NYE — It actually picks it up.

Mr LEANE — It is on the side of the — —

Mr NYE — Yes, it is on the side; it just sits above the road. Probably one of the things I think with the intelligent access programs, GPS in vehicles and the intelligent transport tracking systems, our greatest concern is with trucks. Historically when a car hit a train — and still today when a car hits a train — the car has come out second best. Our greatest concern is with the bigger trucks, the B-doubles and soon to be triples. If they hit the train, the train will derail, and the potential there is not to lose 11 people, as you did at Kerang — you could lose 200, because they can take the whole train out. That is why we are so paranoid about it; we do not want that to happen. We think now with the ITS in some of the trucks, they actually have alerts to tell you there is a level crossing coming up and to slow the speed down. As well there will be greater enforcement for breaking the rules of truck driver behaviour. People talk about Wi-Fi systems going into the trains to alert people coming up the level crossing; it will send off an alarm in the truck. That is fine. But you would have heard about the Ghan. A B-double truck went into the side of that; the driver was deaf. There are no medical standards for truck drivers. You do your first medical when you are 80. For train drivers we have a totally different fail-safe approach; we do a medical every two years. There is a whole raft of different safety regimes you have to look at. We think the intelligent use of transport in trucks overall — the technology is here right now. A lot of the trucking companies already have it in place. Western Australia is doing a trial with 200 vehicles through their GPS systems, warning people to slow down. We think that is a great use of technology.

Mr KOCH — Is that tied to any one company, or it is totally random?

Mr NYE — Totally random. Speed reductions — of interest, in Canada there is not a level crossing where there is a road speed above 80 kilometres an hour. The one that you had down in Considines Road the other day, the road speed was 100 kilometres an hour. We just think we should be reducing road speeds straight across the board, right across Australia to 80 kilometres an hour on all auxiliary roads 300 metres before level crossings. You cannot continue to have that risk. We have been pushing strongly for that. There is lots of talk going around, but actually getting it happening is quite a challenge.

Mr KOCH — But again it has got to be policed. It is all very well just to put the sign up, but there has got to be some enforcement.

Mr NYE — Exactly right.

Mr KOCH — Enforcement is a lot of the issue more than the signage — —

Mr NYE — Education and enforcement. We think it is very much like seatbelts and drink-driving; you cannot have one without the other. You can have a great education program, but you have got to have some enforcement with it — and targeted enforcement. Every road traffic authority would know where the risky level crossings are. There is a hierarchy of risks.

Many of you will have seen some videos taken of some of the ones here in metropolitan Melbourne. There were 200 incidents in a day, where people were breaking the rules around level crossings — queuing across and going around the boom gates. Pick it up and have a crackdown at certain areas. You have got to do it. But overall speed reduction — we have got to do something about it; we cannot continue to have cars and trucks travelling at 100 kilometres a hour and unable to stop at level crossings.

Mr LEANE — You did your survey, and you had zero per cent stop at the stop sign at a level crossing; it would be interesting to see what percentage of drivers reduced down to 80 from 100 when they come to an 80 speed sign. You would have to be pretty optimistic that it would be a much better percentage of people than zero who actually do obey an 80 kilometre speed sign compared to what they are — —

Mr NYE — People at the stop sign did slow down. It is the risk mitigation — getting people to come from 100 down to 80. Even if they get down to 85, the element of risk — from 100 to 85 — is so far reduced that it is worth doing those things. You want people to slow down. If you are slowing down, you know there is a risk, and you will be a bit more observant. People just ignore them. As we all know, there is a move to more rail out there. It is already happening. There is the regional fast train, greater use in metropolitan areas, and you are not going to be able to change the level crossings with upgrades very quickly.

Mr KOCH — Is there going to be more rail or more frequent existing rail — —

Mr NYE — Both, I hope. That is another part of my job!

Mr KOCH — The latter one I can read very easily, but more rail — I am wondering.

Mr NYE — We will get the Melbourne to Brisbane inland rail once we get a freight line through Sydney, but that is a different subject.

Mr MULDER — Bryan, a quick question on that: I think it was reported that in Kerang recently the booms were down for a very long time. When you have a safety system in place and it loses its credibility in a region due to the fact of malfunctioning, does that impact on the attitude of people who live in that region to obeying those safety measures?

Mr NYE — It does, yes. That is part of the challenge of this education — 'There was not a train yesterday. I have gone through the stop sign for the last five years, and there has not been a train'. A driver in Western Australia at the end of last year lost both legs. He was driving an unlicensed truck and towing a bobcat behind. He had gone down the road; he was on that road where the level crossing was; he had gone through it repeatedly, but never stopped. Just once he went through, and he did not stop, and the train cleaned him up. It is that issue. How do we get people to be more attentive when there is a train coming? There is some technology to help with that.

One of our concerns, I think, overall is that level crossing accidents cause only 1 per cent of road deaths around the country, so it is low on the priority list, but they have the potential to be catastrophes. That is what we just cannot afford to have. Unfortunately we tend to respond when there are catastrophes.

I do not want to be sitting before any inquiry when 100 people have died, and that is what our concern is — a B-double or a B-treble at the side of a very fast train; you have got huge potential. We just cannot wait for that happen, so we are making a real song and dance about it.

The lack of effective and efficient enforcement — we really think that is important. We think you can do that by targeting an education program; and target it at where you know there are some problems.

Mr KOCH — Brian, 30 years ago in New South Wales there was a penalty of $200 if you went through a railway crossing — they all had stop signs — and there were enforcements up there. You could drive from Victoria to Queensland, but you would always stop at a railway crossing in New South Wales because you just did not know where they were, and it was really well enforced. Now all that has gone.

Mr NYE — Yes. But New South Wales has upped the fine to $500 whereas in Western Australia the fine is still $120.

Mr KOCH — Driving through New South Wales I would not even be aware of it, but I know it used to be $200, but a lot of those stop signs now have been removed just to flashing lights or something else.

Mr NYE — I will get onto stop signs. I think sometimes when you have the big trucks stopping at a stop sign that might be the wrong approach.

As to lack of a national approach, we have one rail network across Australia now and we are trying to work as a national industry. We want a national approach. We think such things as education would be pushing Victoria to take the lead on this — and it has been doing quite a good job on pushing that issue — and they could all do a little bit of education, pool all the funds together. You do it all together. If you do all the research together, you would have a better impact. Somebody has to take the lead and somebody has to step up to the mark, and the circumstance happens to be that, because of Kerang, and Victoria is very focused on this, we want them to push the whole issue nationally.

Technology costs: I think sometimes we baulk at this technology cost where some of it is not that expensive

and we can do it quite quickly. The high cost of active crossing infrastructure is about $500 to put the whole active suite in there. There are some alternative solutions to doing that, and some of them are cheaper, but we do not tend to want to look at some of those. ITS and trucks and some of those to give drivers warning is probably cheaper. We need the better use of the ITS. The technology is there. We have GPS in all our freight trains now. Most of the big trucking companies have GPS in their trucks. Why are we not using it?

Mr LEANE — I noticed, and I do not know if you read it, but one of the professors from MUARC made a statement in the newspapers recently saying that trains should have transponders on them sending out a signal to vehicles. There is an issue with that as far as most of our tracks running parallel with roads, so you would be getting the message constantly.

Mr NYE — There is that issue, and there is also the issue that so many people today drive with Ipods in their ears, and it does not interfere with the Ipod. It comes through the radio frequency.

Mr LEANE — It will not come through a CD, will it?

Mr NYE — Some will, but you can actually block it out, and if you look around anecdotally at the number of people who drive with their Ipods in their ears, playing that, it does not go through that. The technology is there, but that is not fail safe, and the risks with that would not make the rail industry any happier that we have mitigated the risk. We are not dismissing it. We have seen reports. We see them all, but we think there are probably more intelligent ways of dealing with it.

Mr LEANE — And that is with the GPS system?

Mr NYE — GPS. We import cars from Denmark, and Denmark has a system where they actually use that technology. It warns you when there is a level crossing. We take it out to meet the Australian design rules in our cars.

Mr LEANE — At the ITS conference I tried to find someone to tell me but could not find someone, that with the tom toms and the *Melway* GPS, the ones that I could just go to Dick Smith and buy and plug into my cigarette lighter, who actually makes the software in Australia that goes into that, and if we knew who did it, we could be asking them about — —

Mr NYE — I followed that up, and there are two companies only in Australia that do all the cyclone programs. It is not hard to do.

Mr LEANE — I would have thought it would be just be a couple of lines of code.

Mr NYE — It is.

Mr LEANE — And when it tells you to turn left and right, and all that, if you are 300 metres from a level crossing, it will say, 'Be careful. You are coming up to a level crossing'.

Mr NYE — The technology is there now, and the software is done in Australia.

Mr LEANE — But not to the point that the new software version — —

Mr NYE — It can be rewritten.

Mr LEANE — Good.

Mr NYE — We will track that down and pass that on. Some of the benefits of the technology are the increased infrastructure. It is cheaper to put intelligent technology in. One of the problems as you are going to get more active is the fail-safe implications. I understand rail operates totally under fail safe. To get it accredited it goes through a whole series of risk factors before it actually gets to operate.

The road does not operate to fail safe so we have this conflict overall, and in some ways we might have to be challenging some of the rail fail-safe technology. Some of the rail engineers and safety engineers would think I am speaking heresy to say that, but sometimes we have zero risk in rail, and we need to go that way to operate. That is why we want every level crossing to be zero safe, so we have to start thinking about that. I will get on a little bit to that when we get onto the technology about some of that further.

We think technology is an incredibly important thing to improve level crossings, and I think there is the technology out there to do it now. It can reduce the costs and there are some national ITS solutions for Victoria to lead.

This is the vehicle that hit the Ghan — the same vehicle that hit the Ghan. Part of the challenge of that, and I am talking about this fail-safe technology, is that if you stop that train at a stop sign, he is unable to get going again by the time he clears the level crossing. When I talk to road safety engineers, there is no in-between. You have got to either stop or go. We have to be clever about this — maybe slowing him down to 20 kilometres an hour if you can guarantee a sighting distance, or maybe it is just inherently unsafe to have him cross the rail because we measured that one and there is no sighting distance possible to have a train coming at right angles. You just cannot do it. You have to see the train 2 kilometres away, and that is only doing 80 kilometres an hour. Now, you do not want your trains going around at 80 or 60 kilometres an hour because you want a high-speed transport network, so overall you cannot have those vehicles cross a level crossing. There is just no safe way of doing it, so they are now altering that and putting a tunnel underneath

the railway to let it happen.
That is mining up in the Northern Territory. We think part of the work and the research has to be done with B-triples. We had a real push to have a B-triple network around Australia. No risk assessment has been done at level crossings for B triples — none. If the networks are going out there putting lines on the maps, we think part of the challenge is they cannot get across in time after they stop.

Mr LEANE — They just cannot move.

Mr NYE — They just cannot move. People say, 'Well, let's slow the railway down'. Your sighting distance is still not enough to do that.

Mr LEANE — Even at 80?

Mr NYE — Even at 80. And do you want to slow your rail network down? No. Today you either put more trucks on the road or more freight onto rail, and I think I know what the community wants; I hear it every day. Our whole emphasis is we want zero deaths at level crossings. We think it is achievable and we want to go back to those four Es. Engineering has an aspect and part of that is intelligent transport systems and technology and education. The Canadians reduced their number of crossing incidents by 40 per cent through an education program with enforcement. We think we can do the same.

Mr LEANE — What did their operation program look like?

Mr NYE — It is called Operation Lifesaver.

Mr LEANE — Was it television, radio?

Mr NYE — The whole lot. A lot of schools. You will see everybody wears this Operation Lifesaver. They had a real problem with trespass and suicides, and that is part of that as well. We have not touched that yet because we want to sort out this major problem, then we will go into that further on. Ice hockey in Canada is probably the biggest sport. Ice hockey players are regularly on the TV talking about, 'Stay off the tracks, it is unsafe', and they do a whole series of that. That is a big program that they are taking out. They have also had a direction in 2006, a national approach right across Canada, and then they are taking it up to the next level, so we think there are some great examples in doing that.

Mr LEANE — And they have reduced — —

Mr NYE — Forty per cent with a behavioural strategy.

Mr LEANE — Nationally, so 40 per cent less — —

Mr NYE — Less incidents.

Mr LEANE — Through?

Mr NYE — Through education programs.

Mr LEANE — And not, no — —

Mr NYE — They are doing both. They are doing upgrades as well, but no more than we are because they have no new breakthrough that we have not done. In fact they have slowed all level crossings. No, there is no 100 kilometres an hour anywhere near a level crossing, they are all down to 80 right across the network. So that is really it. I am quite happy to take any questions, but I am not a rail expert, so please no technical rail questions, although I get them all the time.

Mr MULDER — On the issue of fail safe, we have had a number of discussions here about it and trials have been conducted with other types of technology that are not fail safe. We would imagine that they would require some sort of legislative protection if we decided to go down that pathway, if the committee were to make recommendations along those lines. What are your thoughts about how the industry would react to level crossing protection that did not actually stack up as being fail safe? Let us face it, at the moment what they have got is an electricity supply with battery backup at level crossings. If both crashed it is not fail safe, really, in real terms. So how do you think the industry — —

Mr NYE — I think today it is a changing industry and there is far more non-rail input at the senior level, and they would probably take a far more pragmatic approach. The public challenge for them is looking at the risk. To be blunt about it, you cannot afford to have level crossing accidents that cost $30 million every time. You need to mitigate that risk. In that incident the rail insurer paid for it because the trucking company only carries $2 million in cover.
The one on the Ghan cost $21 million. We are talking about $100 million in level crossing accidents overall, so how do you mitigate that risk? Anything to bring the risk down, the rail industry would look at quite favourably. It is the risk that we are trying to reduce. You cannot get a 100 per cent guarantee, and rail, as a passionate operation, wants a 100 per cent guarantee because people demand a 100 per cent guarantee. People expect to get onto a train and get there safely. They do not think that way when they get into a car.
So we have two different cultures, and it is a question of how do we mitigate that risk? Ultimately we need to get rid of all the level crossings. That would be perfect, but we know that that is not going to happen. It is not physically possible.

The CHAIR — Are you aware of any jurisdiction that has a non-fail-safe policy?

Mr NYE — No.

The CHAIR — Anywhere in the world?

Mr NYE — No. We are a long way behind some of the Scandinavian countries, particularly Finland. It is doing a lot more research and looking into some of the technology being used there. We are trying to look around the world at what is happening and what we can do to do it better. Personally in terms of boom gates and flashing red lights, we have to think beyond that because that is not hitting the mark.

Mr WELLER — What are some of the things that we should be trying then?

Mr NYE — Things like the ITS — the intelligent transport system — particularly in trucks. With cars, more and more cars are getting GPS devices. Also different camera technology and enforcement, the red right triggers on speed. Camera technology today would enable you to tell if somebody did queue across a crossing. If you see some of these videos that are taken, it is frightening. In the one done at Nunawading, you can see people queuing across the level crossing and people passing each other at level crossings, going around the boom gates. A bit more public exposure of that would be good. It is quite frightening.
There is one in New Zealand that is even worse. I have seen the video footage of a school bus at a level crossing. The boom gates are down, the train goes through, and because the boom gates did not come up the bus starts to edge around the boom gate to go through with the schoolchildren on the bus. Another train was coming the other way and it missed by a foot. We just cannot afford to have one of those accidents.

Mr TREZISE — Bryan, this is an important point. We talked about the catastrophic accident that could happen, mainly with the heavier vehicles — the B-doubles and now B-triples. I presume that organisations like your own association are working closely with the trucking industry, with major trucking companies, to address education of their drivers?

Mr NYE — We have a particularly good liaison with the Victorian Transport Association. We have done some public workshops with them. I cannot say universally across Australia that that is happening, but particularly in Victoria driver education — responsible trucking companies say there is no excuse for bad driver behaviour, so they do something about it. The challenge for us is not the major trucking companies, it is the local farmer or something like that, where the local farmer might do a little bit of trucking of grain around the wheat harvest season. They are the trucks that we are getting more concerned about, and if we can get to the major companies — —

Mr TREZISE — So the Tolls of the world, the Linfoxes and those types of companies?

Mr NYE — Fine. They are very adamant about driver education and responsible behaviour. It is not those. But they are only a small element.

Mr KOCH — Bryan, how many of the little cockies trucks are in these level crossing smashes?

Mr NYE — Very few.

Mr KOCH — I am a regional Victorian and I can tell you the incidents of cockies trucks being in level crossing accidents are nearly zero. It is the highway use with the larger trucks that we have to do a lot more work on. I know there are better and worse operators — and that flies in the face of a comment made by Ian earlier this afternoon about closing a lot of these low-use railway crossings, but they are not the problem areas.

Mr NYE — Both are. Okay. There were 17 — —

Mr KOCH — But it has got to be by degree; we have got to start somewhere, and I think we have got to start in an area where we are seeing a higher incidence and greater loss of life. That is not on these lesser-used crossings, by majority. The other thing that I think has been very effective is putting up orange lights probably half a kilometre from a railway crossing, especially where there is a sighting issue for both transports and the car-travelling public. Possibly unlike yourself, when you say people want some certainty when they get on a train that they are going to survive to get home, when I step into my car I anticipate that I am going to get home too. It is a two-way street, but I think we have got to centre our efforts on the majority of our problem areas. I certainly agree with the association's intention of working through a lot of what is available and actually putting the resources into it. I think there is a limitation on resources going into level crossing safety. That is one of our major concerns.

Mr NYE — I agree. Just answering that, there were 18 at the end of this year because there have been a series of unseasonable deaths here in Victoria and it is pretty hard to understand why. In fact it just comes out of the blue really because there is no statistical reason why it should be happening. But from Christmas on there were 18 deaths over 18 months. Eighteen truck accidents and 18 deaths in level crossing incidents. Twelve of those were major trucks — B-doubles — and six were small-type trucks. You are right. Most of the bigger trucks were within 20 kilometres of their home base so they knew the road well, and most of the drivers were over 50, and I think that is part of the challenge.

Mr MULDER — Bryan, we have been having some discussions. PN ended up pulling out of the grain harvest operation here in Victoria, and as much as that may lessen the chance of someone having an accident with a grain train the number of trucks that are going to be on the road and interacting with V/Line services at level crossings is, I think, a great concern for us — the thought or the potential of having one of those catastrophic events — because the risk profile at those level crossings is going to go through the roof. Do you have any thoughts on that?

Mr NYE — PN has made it quite clear that they will not pull out if they get a take-and-pay contract over a period of time, and already they are negotiating some of those in New South Wales and some in Victoria, so they are making commercial decisions. If we have a grain harvest — we said that last year, but I think for the first time in seven years and being a farmer myself it looks likely that we will have a grain harvest this year — there are not enough trucks to take the grain to harvest to start with, and the queues coming into the ports are just going to be unbelievable. It is a totally different subject, but yes, you will have more trucks, you will have more push and they will be pushing to the limit. The farmers will be trying to get their grain — —

Mr KOCH — Trucks will be bigger.

Mr NYE — They will be bigger and they will be trying to drive them for more hours because the demand is there. It is really going to exacerbate a very serious problem.

Mr KOCH — Very true.

Mr TREZISE — What is the ARA's position on additional lighting on trains such as low-profile strobe lighting?

Mr NYE — Strobe lighting came out of an accident in Western Australia. There was a big push there by the community concerned to put on strobe lighting. It was actually looked at overseas as well. The Australian Road Research Board looked at that and it is not effective at all. Strobe lighting does not increase any safety; in fact it causes more. You get more community concern about the strobe lighting than you do from its use. It did not reduce the number of incidents at all. Quite a bit of research has been done now. We have been asked that, and you see it in the media quite often with letters to the editor — —

Mr TREZISE — Yes.

Mr NYE — But research was done here at the Australian Road Research Board, so we do not rate any of that.

Mr LEANE — You are saying that railway people are reticent about doing anything that is not fail safe, or they will not support it. I would have thought the GPS stuff is auxiliary; it is not fail safe. I might not plug my unit into the cigarette lighter that day. What is the attitude towards that, or is it looked at as just an auxiliary thing that is not part of the system?

Mr NYE — I will just explain the reason that they are so keen. To be accredited to operate, you have to go through all their risk mitigation. The rail safety regulator says, 'You've got prove that you're safe' — bang, bang, bang, all the way through a whole series of things. That is what they have to achieve. If a decision is made by law or regulations that say that is the standard you have to get to, they have to do it. That is what I am saying on the fail safe. Sometimes we expect a higher level than you do from the road. I think sometimes we have to be a bit more pragmatic about some of these things and look at the real risk. With GPS, we should be using that technology now.

Mr LEANE — Is there an issue if there is a signal generated from the train? Does that all of a sudden fall into their systems?

Mr NYE — It does, and it also has major insurance implications. They are quite nervous about that issue. It puts an onus on them to make something safe that they have no control over. Part of the real challenge for the rail operator is to make sure they have a real agreement with the person who owns the track and the operator, that both of them check each other's systems to make sure that they both control the risk against each other. If you cannot control the risk of a vehicle coming out, you have trouble actually saying you are safe and that is their concern and also their insurer's concern. Most of them carry $250 million insurance. It costs PN $20 million for their insurance premium. They do not want that to go up any higher. That is one of the major concerns in that area.

Mr TREZISE — You mentioned the safety board before. What is the role of the rail safety board?

Mr NYE — There was no codification of standards in Australia at all, because they came out of state rail. I can give you an example of what is the real size in Australia. There were no national lighting standards. At the industry we have put in place a whole series of codes and standards. Rolling stock is the priority area, then it will go on to track. We are developing a whole series of standards for the whole rail industry. All rail operators and track owners fund it — it is co-funded by the government and the rail industry — and we are developing those standards for total application right across the industry. You could entertain people all night

on some of the differences. If you are signalling danger on track-side work, all jurisdictions except one use a yellow flag. One of the jurisdictions uses a green flag to signal danger. They are the types of things we are trying to standardise right across Australia: signalling systems, speed signs — all of those. It is massive, a huge task, after 150 years. We had little kingdoms of railways and nothing universal across the industry and that is not survivable today.

The CHAIR — Do you know how much funding the rail industry contributes towards providing technology for use at level crossings or to undertake research and development for new technologies?

Mr NYE — All the research and development to improve level crossings is actually done within industry. Funding is different in every state. In New South Wales it is funded by government because the rail track in New South Wales is owned by the government and it is funded through that. Overall if it on the rail territory, which is the actual rail permanent way, the rail industry will fund it; if it is on the road, the road industry funds the improvements. So boom gates are actually paid for by the road authorities.

Mr WELLER — Following on, who is paying for the research?

Mr NYE — We are.

Mr WELLER — How much is that?

Mr NYE — On the first project, trying to work out around the world, we will work out with the rail industry itself how much it is going to do. It is a future project. Currently the research on that is about $100 000.

The CHAIR — Do you think there is a role for federal government to play in relation to funding some of that?

Mr NYE — I will be blunt. Now the federal government owns a lot of the track — 100 000 kilometres of track — through the Australian Rail Track Corporation. It is one of my members and a member of the rail research board. It is one of the five participants in it and is funding its part of the research. I think their view is that it is a road issue, not a rail issue — level crossing safety — and that is why we are really pushing for a better emphasis on the road authorities to actually look at level crossings.

Mr MULDER — Bryan, mentioned was made before about trains being conspicuous and easy to see. In Victoria at the moment we have got our V/Line fleet being painted the same colour as that wall, as against a winter sky, which you could possibly see at the back of it and which I find extraordinary. Nationally in terms of colour schemes for trains, what are your thoughts on that?

Mr NYE — That is a very emotive subject, I think, the colour of vehicles, but I think the brighter the colours the better they are seen, and retrofitting them as they are going through. I think dark coloured engines and rolling stock is a thing of the past. We cannot afford it anymore.

Mr KOCH — Mauves and greys.

Mr NYE — Yes. I think it is the history. I have tried to ask the rail industry why it coloured them all those colours, because when it had steam locomotives it changed out of that because of the soot, and it was easier to keep that way. Today it is no longer valid, but it is the cost of retrofitting.

Mr MULDER — I am just wondering how decisions are made even in this day and age to have a grey train with a splash of green and mauve going through a country setting. I find it quite disturbing, to say the least, that it is happening.

Mr KOCH — They are very hard to see, Terry, they really are, if you are not aware of it.

Mr NYE — I know it is an aside, but I pushed very hard in the Pilbara, and they started to put boom gates in the Pilbara for the iron ore trains. They had no deaths on level crossings. The first death they had was where they put the boom gates and the flashing lights at a level crossing. They changed the livery, the colours, and did everything possible to try to improve, yet their first death was when they put a boom gate in. So having the forced the issue, I will not go back up there for a while.

The CHAIR — Just going back to introducing new technology or in terms of research and development, do you think that there may be room for some sort of levy on trains and vehicles to accommodate some of that?

Mr NYE — I think you would find the rail industry pays safety regulation fees and access fees already to operate on the railway. I emphasise that it is not a rail problem, it is the road traffic problem. That is what we think it really is. If you think of the amount of money that is being spent on level crossings and road traffic — the budgets around them all — it is pretty low.

Mr LEANE — Bryan, with you being also the chair of the Rail Skills and Careers Council, if we wanted to vastly increase the rollout of existing technology and new technology on the rail system, will there be an impediment to the amount of people with appropriate skills to be able to do that?

Mr NYE — No. It would be interesting. People say there is a shortage; we do not have a shortage of train drivers. I think that is a myth. We will not have a shortage of train drivers. In fact train drivers will

become something that in 10 years time we will probably be seeing less of. I mean the Pilbara rail and certain metropolitan rails will not have train drivers in the future. The technology will be even better.

Mr LEANE — And there is not a skills shortage in the people actually putting in the technology?

Mr NYE — There is a skills shortage right across Australia in all those areas. We are suffering a skills shortage in engineers, electricians, rail signal engineers — in all those skills we have a critical shortage. We are investing $20 billion in rail infrastructure in Australia right across the country at the current time. That is a lot of money. To focus just on one state alone, you are spending a lot of money here in Victoria, but around Australia we are doing a lot, and the skills to do all of that is proving quite a challenge. But we are not unique; we are the same as the construction industry and the mining industry and others, and we are trying to work with them to see how we can do it better. The technology to do that — we can do that.

Mr MULDER — Bryan, your issue in relation to train driver shortages,— is that Australia wide, because we quite often get FOI documents that come back and show train cancellations due to, driver shortages and drivers being unavailable?

Mr NYE — It is probably not under level crossings, but it is actually the productivity problem rather than train driver recruitment. How many hours and shift times are some of the productivity issues, which is a huge subject that we are going to have to address as an industry. There is a 3-hour footplate time per shift for drivers sometimes. This is not the worst state, but they are the issues that are greater problems than driver training and driver shortages.

The CHAIR — Just to conclude, could you summarise what you consider to be impediments or barriers to the implementation of technologies that could improve safety at level crossings.

Mr NYE — The impediment, I think, is the will to do it. Again, nobody is going to volunteer to do it, and, if anything, I would encourage you to make people adopt technology and take the lead, and try to make them do it. That would be quicker, because there is no great will, particularly from the road industry, to do it. We will be adopting technology as we can on the road, but we cannot mitigate the risk on the other side. We cannot make the road and the rail industries lessen their risk, but I think there are certain things that you can do through regulation to actually implement technology a lot quicker. I think there is that lack of will to make it happen, and I would encourage you to actually force them.

The CHAIR — Thank you very much for your time.

Committee adjourned.