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Official Committee Hansard

**HOUSE OF
REPRESENTATIVES**

STANDING COMMITTEE ON COMMUNICATIONS,
TRANSPORT AND THE ARTS

Reference: Managing fatigue in transport

THURSDAY, 7 OCTOBER 1999

SYDNEY

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HOUSE OF REPRESENTATIVES
STANDING COMMITTEE ON COMMUNICATIONS, TRANSPORT AND THE
ARTS

Thursday, 7 October 1999

Members: Mr Neville (*Chair*), Mr Gibbons, Mr Hardgrave, Mr Hollis, Mr Jull, Mr Lindsay, Mr McArthur, Mr Mossfield, Mr Murphy and Mr St Clair

Members in attendance: Mr Gibbons, Mr Lindsay, Mr Mossfield, Mr Murphy and Mr Neville

Terms of reference for the inquiry:

- . Causes of, and contributing factors to, fatigue.
- . Consequences of fatigue in air, sea, road and rail transport.
- . Initiatives in transport addressing the causes and effects of fatigue.
- . Ways to achieving greater responsibility by individuals, companies, and governments to reduce the problems related to fatigue in transport.

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Committee met at 8.30 a.m.

CHAIR—I declare open this public hearing of the House of Representatives Standing Committee on Communications, Transport and the Arts in its inquiry into the management of fatigue in transport. I welcome everyone here today to this public hearing in Sydney, the sixth in this inquiry's program of public hearings. In opening the proceedings, I would like to emphasise that in addressing the terms of reference the committee has not prejudged the issues, nor is there any element of a witch-hunt. Members want to hear a full range of views and consider initiatives which are being developed or could be developed to better manage fatigue in transport.

Managing fatigue is a very important issue in the workplace and it has ramifications for all of us. Under the terms of reference the committee is asked to inquire into and report to parliament on managing fatigue in transport, focusing on four areas: the causes of and contributing factors to fatigue; the consequences of fatigue in air, sea, road and rail transport; initiatives in transport addressing the causes and effects; and ways of achieving greater responsibility by individuals, companies and governments to reduce the problems related to fatigue in transport.

New South Wales is a key participant in developing and adopting important initiatives to address the management of fatigue, particularly in the spheres of rail and road transport. Witnesses in today's program include government, industry and union representatives from all transport sectors—air, road, rail and sea—including major players such as Qantas and BHP. In addition, we have witnesses who are engaged in important research into how to address the issue of fatigue in transport and in the general workplace. I would like to thank all those who have given generously of their time to come here today and assist the committee in its work. It promises to be an interesting and a very informative day.

Before proceeding, I would like to advise all witnesses that although the committee does not require them to give evidence under oath, committee hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. Any false or misleading evidence is a serious matter and may be regarded as a contempt of the parliament.

[8.33 a.m.]

LANG, Mr Iain Bruce, Federal President, Australian Licensed Aircraft Engineers Association

RYAN, Mr Chris Linden, Senior Industrial Officer, Australian Licensed Aircraft Engineers Association

CHAIR—Welcome, Mr Lang and Mr Ryan. Would you like to give us a short opening statement for five or 10 minutes? Then we would like to break into an interactive activity based on questions.

Mr Lang—I thank you for the chance to appear before this committee. We believe we have valuable information to provide for the committee's consideration. I would like to add some additional information over and above what we provided in our written statement, so I will be tendering some new evidence and documentation.

In terms of our executive's position before this committee, we have represented that we believe it is necessary that regulations be introduced to govern shiftwork and hours of duty for licensed aircraft engineers. We believe that, with the rewriting of the regulations in Australia currently being undertaken by CASA, there is a need to incorporate into those regulations human factors in aviation maintenance for all certifying licence holders to deal with the matter of fatigue, which is one of the human factors. I have some documentation produced by Boeing which goes to human factors in aviation maintenance generally which I would be glad to provide.

We also believe there is a pressing need for CASA to establish regulations limiting the duty hours of certified licensed aircraft maintenance engineers and it would be of great benefit I believe to identify fatigue as an identifiable workplace hazard, creating then an overseeing code of practice for shiftwork rostering. I believe one of the main contributors to fatigue in the aviation industry is in fact shiftwork and the impact of rostering.

I note with interest that the major airlines and the regionals have made a written submission to the committee. I would draw the committee's attention to the way in which those submissions were framed. The airlines see themselves as responsible corporate citizens. They ensure that they meet the regulatory guidelines and requirements that are provided for them to meet, but there is no doubt that with the impact of global alliances and deregulation in the airline industry, there is a constant emphasis for cost-effective work practices and that may mean reducing their existing work practices down to the level which the current regulations provide. We believe there are implications for safety in that.

We note with interest that since the committee's work has begun there have been certain measures taken by both the major airlines to initiate programs for fatigue management with respect to shiftwork. I think Qantas should be commended on the document that they have produced just recently, *Understanding shiftwork*. I do note, however, that the document, apart from the glossy cover, is in reality just a research paper from Drew Dawson in toto. There is no change to an existing document that has been on the Internet for a long period of time.

So other than the cover, there is nothing about Qantas or anything specifically about aviation maintenance in this document.

I would also tender to the committee the fact that Qantas has a business interest in pursuing fatigue management. There has been emphasis in the Industrial Relations Commission about a current workplace change arrangement that is being done under Commissioner Wilks to change work practices and to change shift rosters. Qantas has an agenda to increase the amount of night work that LAMEs are currently performing over and above 50 per cent of their rostered shift. So there is a very clear corporate interest in rationalising their rosters in the light of research being provided.

An unpublished paper which will soon come to the public domain is a survey conducted for BASI by Alan Hobbs recently across all the airline industry. His survey will be published before the end of the year. It has revealed some very interesting elements about the aviation industry with respect to one of the questions in the survey which asked LAMEs: 'What was the longest shift you worked in the last 12 months?' Of the LAMEs who are working in the industry, less than 10 per cent responded that the longest shift they worked was less than of 12 hours duration. More than 40 per cent, and up to two-thirds, said that they had worked 14 hours or longer in a single shift performing aircraft maintenance. I think that is a very interesting statistic. It supports the association's view that, due to the deregulation or lack of regulation about duty hours, people are working very long hours. We believe that is an unsafe practice.

Additionally, one of the questions on the survey asked people to bring forward maintenance errors or incidents that they had been involved in during the course of their work and to give some explanation of what had occurred and how it had occurred. In the survey, 175 separate maintenance incidents were identified by LAMEs, and 20 per cent were attributed to memory lapse of the engineer performing the work. That has been identified by Alan Hobbs as being related to the pressure and the fatigue those engineers were experiencing at the time they performed their work. There were other elements in those maintenance areas which related to fatigue. I think there is overwhelming evidence that there are very serious fatigue issues in the aviation industry with respect to licensed aircraft maintenance engineers. We would ask this committee to address those in its recommendations to the parliament.

CHAIR—Did you want to add anything, Mr Ryan?

Mr Ryan—Not at this stage.

CHAIR—I will start on that Qantas report. You are saying that it is just a reprint of a Dawson paper.

Mr Lang—That is correct.

CHAIR—It is not related specifically to your industry at all?

Mr Lang—No. In fact, I downloaded off the Internet the document which I have here, entitled *Understanding shiftwork*. That has been available for a number of years. I would

recommend the article as it is an excellent paper. We have certainly provided it to our representatives. I have used sections of this document in making my submission and providing background information about shiftwork—it is an excellent document. I think Qantas should be congratulated on providing it to its workplace as guidelines and information about shiftwork.

CHAIR—I congratulate you in making it available, but what is your comment on not relating it to the specifics?

Mr Lang—I am going to the issue that Qantas have not done specific groundwork respective to the industry and to their business. The depth of their commitment to addressing fatigue as an issue is still an open question.

CHAIR—You were saying right at the beginning of your evidence that, since this inquiry started, both airlines have started to address the matter of fatigue. Do you believe that is in response to the inquiry or do you think it is coincidental?

Mr Lang—I believe it is in response to the inquiry and the general press coverage that this inquiry received in the early stages.

CHAIR—Did you say that two-thirds of those surveyed by BASI had worked 14-hour shifts or more?

Mr Lang—Of longer duration than 14 hours. We are quite aware of people on a semi-irregular basis working 20 hours and up in a single shift.

CHAIR—And you say 20 per cent had memory lapses?

Mr Lang—In maintenance incidents that they volunteered to the BASI survey.

CHAIR—The crash of the Viscount between Winton and Longreach was because some sort of oil device had four settings within the wrong place. That was put down to something similar. Do you know the incident?

Mr Ryan—No, I am not familiar with that one.

CHAIR—It is interesting.

Mr GIBBONS—During the survey they reported a lot of incidents which were attributed to fatigue or pressure. Can you elaborate on some of those incidents? What sorts of problems were there?

Mr Lang—I did not perform the survey and I have not seen the raw data. I had a briefing from Alan Hobbs on the initial outcomes. I believe he has also provided that to Ansett and Qantas in just a private sphere. As I said, it is as yet unpublished. I guess I am stealing his thunder to a certain extent, but he has approached our organisation to make those survey results widely available to our membership because he believes some very large concerns are being raised about the industry through the survey.

One of the issues that he identified through the survey is that the aviation industry as a whole tends to have what we call a blame culture. Generally, if people find something incorrect, they will tend to cover it up rather than disclose it in maintenance records because they are afraid that another one of the brethren would suffer disciplinary action. So there is a general cover-up within the industry of those sorts of matters to prevent disciplinary action. It is called the blame culture. In a survey like this, where people can freely express what has happened without fear of retribution, more things are brought to light.

That is one of the reasons I would recommend the introduction of a human factors in aviation maintenance program. There is a program produced by Boeing called MEDA which allows people to identify all the causes in a maintenance incident without fear of retribution. Qantas have introduced something similar to MEDA, but they still have disciplinary action as a tack-on at the end of it if they do not like the outcome. There is still that blame culture of punish the LAME; do not address the system. That is just a general industry problem.

Mr GIBBONS—You attributed the increased awareness to this committee. What else are they doing that they were not doing in terms of trying to address fatigue? Apart from putting a glossy cover on a paper that has already been produced by somebody else, is there any other tangible thing that they are doing which you believe is in the right direction?

Mr Lang—One of the things that they have done is to make some research material available to people. I think that is good. One of the things about shiftwork is making information available to people so that they can cope with shiftwork. That is very valuable.

One of the other things they have done since some of our submission became public is to go over their time records to identify how many hours people are working. I think there have been some surprising outcomes to management. They have not been aware that people were working 24 hours in a single instance. But there are no procedures. There are no policies within either of the major airlines or the regional airlines to prevent people from doing so. There is no requirement within the regulations to prevent people from continuing to work. We believe that is a major oversight.

Mr GIBBONS—I would imagine that with the regional airlines a maintenance engineer would be responsible for the maintenance of a whole aircraft, whereas in Qantas and Ansett there would be specialised maintenance engineers. You would have an engine maintenance engineer who would be different from an electrical maintenance engineer, or are they multiskilled? If they are going to have to work 14 to 15 hours, one would hope that they would be addressing the major mechanical components of the aircraft in the early part of that shift. If they have to fix the video recorder or something inside the cabin, one would hope that would be done as a last resort. Is that the case? What is the average?

Mr Lang—Let me quickly brief you on how the licensing system works. Currently, within the parameters of the existing regulations, there are five categories: airframe, engine, electrical, instrument, radio. Within the general aviation area, which is very small planes, people tend to be five category, so you would be able to certify for the entire aircraft. When you get to a regional operator, operating Dash 8s or Embraers, you would then be splitting into what we would call a mechanical person and an avionic person. So you would have one person looking after airframe engine and the other person looking after E, I and R—

electrical, instrument and radio. That is exactly the same system in the major airlines: you have people who are airframe engine or you have electrical, instrument, radio. The new regulations, as they are being formulated, are moving away from the five classes into mechanical avionic, which would be the new designations.

Mr MURPHY—What do you think can be realistically done to tackle the untenable situation of people being seduced into working long hours and therefore putting safety at risk?

Mr Lang—There is a range of things that can be done. There are two elements to fatigue, in my view. One is the time during which the work is performed and the other is the duration the LAME is at work. Within those, there are two issues. One is shift patterns, the hours in which people are rostered to work, and the other is manning levels of qualified LAMEs to do that work.

Obviously, if you have insufficient numbers of qualified staff to keep the airline operating, you have got to continue to utilise that person more regularly. That means he is probably going to be restricted in his leave. He is probably going to be called in on a regular basis. A call in is where you have gone home from your regular shift and suddenly there is an operational problem and you are called at home to return to work. That, of course, breaks up your rest break. It causes people to have what we call a nil 10, which is a nil 10-hour break between shifts. That again goes to the fact that you have an insufficient number of specifically qualified people on a certain type of aircraft. Both those issues are areas where the airline has direct control.

Obviously, in our role we try to raise those issues on a regular basis. But we always come up against issues such as: what is cost effective; how much money do we spend on safety? Those issues are always in the forefront. There is a continuing push to drive down the way of cost-effective maintenance practices. One of the elements that the airlines continue to push is to have people working more night shift. They continue to try to allocate people specifically to night shift so that they can reduce the numbers of LAMEs overall. If they reduce their numbers during the day, they will have them there predominantly at night. We believe that permanent night shift is not the way to conduct airline maintenance operation. There are real concerns and, as an association, we have voiced those concerns on many occasions about permanent night shift.

CHAIR—Could you give us a few examples of why not? Given the cost of aircraft and the fact that they have to fly predominantly during the day and that a lot of airports have curfews—so by their very nature, the nights are when a lot of the maintenance has to be done—explain to us why you say this, and if it is being abused, where it is being abused?

Mr Lang—One of the issues for us about permanent night shift is that people who are on a permanent night shift cycle do not really get what I would call adequate rest because it is very difficult to rest during the day. That is just part of the research. Unfortunately, human beings are not robots. We cannot just go to sleep when we want to go to sleep and sleep for as long as we need to.

CHAIR—Is there a limit to the number of shifts you can do in a week, say 12-hour shifts?

Mr Lang—We have imposed the limit industrially; obviously you have to average the 38 hours. We have always mandated industrially that no more than two 12-hour night shifts should be worked in succession, and then there should be a minimum day break before working more 12-hour night shifts. So we limit it to two 12-hour night shifts.

CHAIR—If someone did two 12s and two 8s, they would have been doing 40 hours, would they?

Mr Lang—Correct.

CHAIR—Can they then do another eight and be paid overtime?

Mr Lang—There is unfortunately no ability for us to prevent overtime as an association. There are no policies within the airlines to prevent that.

CHAIR—For example, could an engineer work 12 hours Monday, eight Tuesday, 12 Wednesday, eight Thursday, 12 Friday—in other words 52 hours?

Mr Lang—On a rostered shift no, because you then get more. We have two rules: on 12-hour shifts, no more than two; on an eight-hour shift, we try to limit it to no more than three night shifts in a row—and there are reasons for that.

CHAIR—At the beginning of your evidence, you said that has been abused

Mr Lang—There has been abuse—

CHAIR—You said that people were working up to 14 hours.

Mr Lang—Yes, not in a rostered shift. You are never rostered for more than 12 hours. You can be asked to work overtime and you then continue to work. In some circumstances, you might be on a 10-hour shift and, due to an inadequate number of qualified staff, the next shift may have no licensed person available. So you are requested to work an additional shift; you do a doubler. If it is a 10-hour shift, you are working 20 hours in the day. There is nothing preventing people from working for an additional shift on an ad hoc basis, but people are not rostered.

CHAIR—Is there a compulsory break after an episode like that?

Mr Lang—We mandate a 10-hour break.

CHAIR—Not a full day break?

Mr Lang—No. Industrially, there is a 10-hour break. In my written submission, I note that there is nothing preventing the airline from ringing you up after two or four hours and saying, ‘Please come in; we have got a breakdown. You are the only licensed person

available; we need you.’ The only penalty on the operator is that person then gets a mandatory four-hour overtime call in penalty but—

CHAIR—But no rest?

Mr Lang—No rest; there is nothing within the regulations or the airline policies that prevents them from being called.

Mr MOSSFIELD—Following on that line of questioning, what provisions are made for people ringing in sick and saying that they cannot come in? That would obviously require other people to work extended hours, double shifts and things like that?

Mr Lang—Yes. It would probably vary from airline to airline. I cannot claim to be an expert on every airline’s operating procedures, but I am unaware of any operator having specific policies that would have any direct addressing of that issue with respect to sick leave. If someone needs to be asked to continue to work, they will ask them to work overtime.

Mr MOSSFIELD—How long have 12-hour shifts been in operation?

Mr Lang—We assisted the industry in developing the 12-hour shifts back in 1988.

Mr MOSSFIELD—Have there been any changes in the industrial climate or in the way of performing the work over that period?

Mr Lang—There have been many changes in the industry. I alluded earlier to one of the specific issues in the industry—the global alliances, One World Alliance and Star Alliance. And of course there has been the deregulation by the government of the airline industry.

Through the avenues that these alliances make available to our domestic operators they now look at what the world’s lowest cost practice is and whether we can adopt that here and whether we can negotiate our way through the regulator and through the industry to achieve world’s lowest cost practice.

Mr MOSSFIELD—Are you still in support of 12-hour shift patterns?

Mr Lang—Just to give you a quick idea, we have had quite a bit of involvement with 12-hour shift patterns. One of the issues with the introduction of that is that we had George Singer come and look at the industry—at the type of work. His key recommendations about 12-hour shifts were that they were suitable for what we call ‘line maintenance’ but not suitable for heavy maintenance. Line maintenance is where aircraft come and go and there is nightly rectification of defects. Heavy maintenance is where you have major checks which are mandated on an hourly basis, where you are essentially pulling the aircraft to bits and rebuilding it. That is a heavy maintenance type layout. Twelve-hour shifts are unsuitable for heavy maintenance.

We are supportive of 12-hour shifts. One of the operational reasons for that is that it reduces the number of handovers that occur in the working day. Handovers are from one

crew to another crew and, historically, are a big problem. If you get an incorrect handover, all of a sudden you can have a maintenance incident. There have been numerous cases where that is documented. In fact, the use of 12-hour shifts limits the number of handovers. But we are not unqualified in our support of 12-hour shifts. We are trying to establish in our industry that 12-hour shifts are good, depending on the type of work. We believe that there is a need for adequate rest breaks and that there should be a napping policy for people in a 12-hour night shift environment. We believe that there is a need for overtime controls when 12-hour shifts are used. We believe that there should be proper rest facilities where people are being requested to work 12-hour shifts.

We have a range of other issues when it comes to permanent night shift. People should have medical examinations on a regular basis to ensure that they are not being fatigued, that they are not being compromised in their health overworking in that sort of shift pattern over a long period of time. I have heard 12-hour shifts called 'catch up'. You are always trying to catch up, because if you are working a 12-hour day shift you are working from six to six and, when you get home, you are pretty tired. All you have time to do, really, is eat and go to bed. Then, between the day and the night shift, you have a 24-hour period in which to organise all your responsibilities of life that are outside your work, but you have a night shift in front of you. The problem with that is that a lot of people will maybe get up late in the morning—say, eight, nine or 10—but then they will be awake until six o'clock the next morning and they will do their whole 12-hour shift at the end of their sleep pattern. Then, of course, once they get home from their first night shift, they go to bed.

CHAIR—It is a quality of life thing.

Mr Lang—You get the quality of life because you get a bigger break at the end, but you are always trying to catch up with your life.

Mr MOSSFIELD—I want to follow this through. What opportunities have you had to put those particular points to airline management, and what has been their response?

Mr Lang—We have put a lot of issues before both operators—

Mr MOSSFIELD—I am interested in those items you have just detailed to us.

Mr Lang—In terms of controls, the constant response is, 'We can't adopt uncompetitive business practice. If we make changes for LAMEs, they may flow through to other sections of the work force. We do not want to create night shift environments which in some way treat the LAME as a special class, because that could flow through our whole organisation.' So there is this flow-on concern. You raise them, but the bottom line is cost—whether there is any cost associated with it.

Mr MOSSFIELD—So they have not been very responsive, even though it creates additional fatigue which could, in the long run, lead to safety factors in your workplace?

Mr Lang—Correct. In private conversations, most operators are saying, 'We're prepared to take the risk.'

Mr Ryan—It is fair to say that, with regard to overtime, it is not merely the employer who is twisting the employee's arm to work overtime, of course—there are a number of our members who are happy to work these extended hours. We view that and we advise the members of the implications for safety and their own health, et cetera, but we have no power, of course, to prevent either the employer or the individual working the overtime if it is requested and identified as required by the particular airline.

Mr MURPHY—Chris, have any of the members ever complained to you of fatigue and the length of the shifts?

Mr Ryan—As a result of this inquiry and the information we put out to members over the last couple of months, we had a call yesterday from a member in one of the smaller ports. He was saying that because the manning there was at such a level, if there was an anticipated recreation leave relief requirement, someone may be brought in for two or three weeks from a larger port. But, if someone was off for, say, one week on sick leave, or on recreation leave for one week, that relief may not be provided. Then, because of the small numbers in the port and if there is an unanticipated illness or absence, he was saying that over the last two months or so there were a number of occasions when he had to work 21 hours straight because, if he did not, the airline could not operate. It would be extremely difficult for the airline to operate into and out of that port because he was the only person who could certify for the departure of the aircraft under those circumstances.

He was saying that it did not happen every day, but it has happened on a number of occasions in, say, the last two months. Obviously that is something we would be very keen to raise, and we have raised it in the past with the airlines to ensure that there is sufficient staffing and adequate relief arrangements in place and available so that this sort of occasion will arise less frequently than it currently does. It cannot be avoided completely because unexpected occurrences can occur, but we would be looking to airlines to take steps to minimise the possibility of these circumstances occurring, where people are required to work 20 or 21 hours straight.

CHAIR—To your knowledge, do any of the airlines, either provincial or capital city, have a structured program for fatigue management or fatigue control? I am not talking about just talking about it. I am talking about actual programs where the staff are involved in lectures, quality of life issues, lengths of shifts and all those sorts of things. Are you aware of any?

Mr Lang—There may be a policy procedure manual somewhere in a back office, but I have not seen one at a workplace.

CHAIR—It is not up-front—it is not happening, if you like?

Mr Lang—I am not aware of any workplace effort.

CHAIR—We want to know whether there is an absolute commitment in the airlines to have a fatigue management program in which the staff are involved that is not a blame oriented thing but a creative thing where the management, outside experts and the staff work

to achieve a much better quality in the workplace and a better quality of life outside the workplace. You are not aware of any structured program?

Mr Lang—As I stated in my opening statement, the airlines meet their regulatory requirements, and that is not part of them.

CHAIR—Would it be fair to say that it is probably more important in your industry than in any other?

Mr Lang—I think that, for our industry specifically, and the class of people we represent, it is essential for airline safety.

CHAIR—You can control fatigue in one of three ways. You can have occupational health and safety type regulations; you can have outright prescriptive hours, either laid down in some regulatory manual from some government agency or in an award; or you could have this fatigue management program. Which of the three do you favour in your order of priority?

Mr Lang—In my order of priority, I think that the regulations for duty hours should be in CASA's NPRMs—in the notices of provisional rule making for LAMEs—because then it is a specific industry applicable device directly mandated for licensed aircraft maintenance engineers. I believe that there should also be the overlaying of that, as a general requirement in OH&S, in identifying fatigue as an identifiable workplace hazard. Lastly, I would put provisions in the award—not that I in any way downgrade those positions, but the industrial relations climate is limiting and removing any sort of prescription within awards, so that would be my last preference.

CHAIR—What do you think of the idea of having fitness for duty tests? Professor Dawson has developed a test by which you can measure people's alertness or, broadly, their fatigue level—their ability to act appropriately. What is your view on that?

Mr Lang—I am aware that, within the airline industry and certainly within the American federal aviation body, FAA, they have alcohol and drug testing for the fitness for duty of engineering staff. We currently do not have that in Australia. I could not give you my association's policy on those issues because it is not something that has been debated since it is not in the Australian environment. But, personally, I would be supportive of mechanisms that ensure that people are in a fit state to perform certification for airworthiness. I think it is essential that people are in a fit state to carry out the sort of inspection work, rigging of complex control systems, troubleshooting of defects and identifying that is required of the licensed aircraft engineer. It is imperative that they are in a fit state of body and mind to perform their duties.

CHAIR—You said that not all the long shifts are necessarily driven by management; they can be driven by the employee's desire for overtime.

Mr Lang—They cannot manufacture overtime.

CHAIR—No, but does overtime cut in in your industry at the end of eight hours in a day, or do you have to go up to the 38-hour level before it cuts in? What is the method?

Mr Lang—The trigger for overtime is at the end of a rostered shift. Predominantly within the airline industry now, 12-hour shifts are the norm, so any overtime would be in excess of 12 hours.

CHAIR—And in excess of 38 hours accumulatively?

Mr Lang—The prescription of hours is averaged over a long period of time, so it would be very difficult to calculate in excess of 38 hours.

Mr Ryan—If it is a long cycle. The pattern of 12-hour shifts is two 12-hour day shifts immediately followed by two 12-hour night shifts—that is the standard pattern—followed by the four or five days rostered off, and you can see that you are working for two 12s and two 12s night immediately running together. This is the pattern that has been developed in conjunction with Dr George Singer that Iain Lang mentioned earlier.

CHAIR—But that is of itself 48 hours.

Mr Lang—Correct. In four days—

Mr Ryan—That is right, so there is a cycle which may run to eight or 12 weeks which, when you work out the average, comes out at 38 hours a week. So within that cycle there would be some weeks in which the individual would work for 48 hours and other weeks in which the individual would work for 30 hours. So it does average out. That is why it would be difficult to introduce a prescription whereby 38 hours in a given week was the trigger for overtime. Industrially, any hours beyond your normal rostered shift—be that an additional shift where you may be called in for a full 12 hours or four hours at the end of a shift or a four-hour call-in—would all be considered to be overtime because they would be in excess of your normal rostered hours.

Mr Lang—The cycle that Chris refers to is in fact 18 weeks in length. So it is averaged over an 18-week period, but you do have, as Chris has explained, 48 hours work within four 24-hour periods.

CHAIR—Forty-eight hours work in 96 hours?

Mr Lang—Essentially, yes.

Mr MOSSFIELD—You did indicate that, in some cases, it is your own members who are working additional hours. What steps are you taking as an organisation to educate your own members on the dangers of fatigue and the need to restrict hours?

Mr Lang—As an organisation, we have introduced representative training; in other words, our people who represent us in the workplace. As a component of that we deal with occupational health and safety matters and we provide all those representatives with shift specific information. We have generally provided information in newsletters. We make

specific research documents available to members and, where members seek our assistance, we provide them with all the assistance we can. While it is difficult for an organisation such as ours to put out a blanket statement, 'Don't work more than X amount of overtime,' we certainly have tried to encourage members not to work excessive amounts of overtime because one of the issues is that when people continue to work excessive amounts of overtime, it allows the employer to reduce shift numbers to the point where it almost becomes necessary to continue to work those sorts of hours of overtime just to meet leave requirements. Then people start complaining, 'We can't get our leave.' It is a vicious cycle.

CHAIR—I want to close on this point: It would be fair to say, would it not, that there is not a culture of fatigue management in place in the airline maintenance industry?

Mr Lang—I think that would be a very fair comment.

CHAIR—Okay. Once again, thanks Mr Lang and Mr Ryan for your evidence today. That Qantas book would be helpful to us.

Mr Lang—I am sure you could have it. Also, if the committee is interested in viewing the Boeing documentation on human factors—

Mr Ryan—That is the MEDA documentation that we referred to.

CHAIR—Could you liaise with Mr Cunningham from our secretariat on that matter.

Mr Lang—Yes, sure.

CHAIR—You mentioned a paper done by BASI. Have we got that?

Mr Lang—It is an unpublished document. I was working off notes I made from a private discussion.

Mr GIBBONS—When will it be published?

Mr Lang—It should be published before the end of this year—hopefully, in November.

CHAIR—On that matter and any others, if we require any further information we trust we can write to you?

Mr Lang—We would welcome such a request.

CHAIR—Within a few weeks you will receive a *Hansard* proof of today's proceedings. Thank you very much again.

[9.18 a.m.]

TERRELL, Mr Alan Ivor, Chief Executive Officer, Regional Airlines Association of Australia

CHAIR—Thank you, Mr Terrell, for coming today. I have to caution all witnesses that the committee does not require evidence to be given under oath, but committee hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. Any false or misleading evidence is considered a serious matter and may be regarded as a contempt of the parliament. Would you like to introduce yourself and give us an opening statement?

Mr Terrell—The Regional Airlines Association represents a number of, but not all, regional airlines in this country from all the states. The membership of the association comprises the chief executives of the particular member airlines. We also have a large number of associate members who are, in general, suppliers to the aviation industry, be it engines, avionics, insurance, fuel, et cetera.

CHAIR—So essentially you represent the companies.

Mr Terrell—Yes.

CHAIR—At this point, would you like to make a five- or 10-minute statement, an overview of your paper, and then we might break into questions.

Mr Terrell—The association only put in a fairly brief submission.

CHAIR—Maybe you would like to speak to other concerns in the industry. I will put it that way.

Mr Terrell—Essentially, we believe that the system for regulating the hours worked by technical air crew—pilots and flight engineers and navigators—are adequate. They are controlled and governed by the Civil Aviation Safety Authority. Changes to those regulations do take place periodically, but after extensive consultation with the industry. We believe that system is working well. And whilst everybody is not happy with the regulations, as nobody ever is, in general the system works satisfactorily.

However, in the aviation industry the only people who are governed by specific regulations set down by the Civil Aviation Safety Authority and authorised by parliament are the technical air crew. Other people in the aviation industry are not governed by regulations set by an outside body in relation to hours worked, apart from normal industrial understandings. We are not suggesting that that is either good or bad, that is the way it is.

There are technical areas outside the flying of aeroplanes, and there are other callings involved in the operation of aeroplanes which are subject to various hours of work, fatigue and various other factors. The industry, of itself, does create long hours periodically in order to deal with unscheduled problems of whatever sort. The flexibility stemming from not

having specific regulations assists in dealing with those unscheduled problems in whatever way is proper.

The industry itself is conscious of the requirements of other categories of ground staff in doing a good job and it recognises that there have to be some limitations on the amount of hours worked, but on occasions there will be extensive hours worked. It will continue to deal with the specific problems that creates using its own measures and practices.

For example, a major piece of maintenance on an aeroplane may be scheduled to be finished by 6 a.m. but is not finished because unforeseen problems have arisen. The people working on that will want to get it finished, so they may have to work for another two or three hours. To change to another crew is probably not advantageous because that adds time and detracts from the continuity of the skill being exercised. We are very conscious of the fact that if that involved changing an engine or something, then the final inspection of that engine should be done by somebody who is not stressed by fatigue and not subject to potential errors because they are fatigued.

CHAIR—You probably heard before, in previous evidence, the suggestion that two things are happening in relation to maintenance crews. One is that extended long shifts are becoming the norm rather than the exception, and the other is the inference that the size of a maintenance crew in provincial Australia is such that there is the requirement to do long shifts because you are the only person available, that there is no relief. Is that the experience of the companies you represent?

Mr Terrell—I cannot speak specifically for each company because I do not know the finer details of some of their operations. But, essentially, the shift patterns that engineers work, be it eight-hour shifts, 12-hour shifts or anything in between, are set by agreement with the personnel involved, sometimes under industrial pressures, sometimes by general agreement. They are only exceeded if circumstances require it.

CHAIR—I understand that, but that was not my question. I am asking whether a culture is developing whereby people have to work the extra time because there are not sufficient maintenance crew available. Have the organisations you represent done a survey? Is there a known shortage of maintenance crew in provincial Australia?

Mr Terrell—I do not believe so, no.

CHAIR—So it is not a matter of supply, it is a matter of rostering.

Mr Terrell—Yes. One of the problems that arises is that the work required to be done is not always constant, that it varies from day to day, week to week, month to month, and therefore to have a set system of a set number of people working a set number of hours does not always work. There will be occasions when the pressure of work is too much for the existing staff, and at other times there will not be enough work for the staff and they will have an easy shift.

Mr MOSSFIELD—You do acknowledge that in some cases there is a need for excessive overtime to be worked and you have said that fatigue can then become a problem.

What particular management programs are in place to address the issue of fatigue in your section of the industry?

Mr Terrell—The first level of control would be amongst the engineers themselves. Most people who work in the industry are sensible enough to know when they are getting tired and sensible enough to know when that tiredness is such that their performance is deteriorating. That is the first level of protection.

The next level is supervision. Whilst there are not always supervisors on in every category at all times, they are in a position to review what has happened subsequently, and sometimes during the course of events, but certainly subsequently. If they are concerned that a period of work has been excessive and as a consequence there was some risk of deterioration of performance, then that would be the second level of control, if you like.

On top of that, the general management is obviously concerned also. The cost of having an accident because of faulty maintenance, or even having an incident because of faulty or improperly carried out maintenance on an aircraft, is such that an airline wants to avoid that at all costs. It is much more expensive to have an accident than not to have an accident, or to have a lot of extra engineers.

Mr MOSSFIELD—You do also mention that you consider that people should not work more than 14 hours without adequate rest. When you refer to adequate rest, is that a complete break with people going home and having time away from the workplace, or is there another—

Mr Terrell—No, I think you can have adequate rest breaks if you just go off and have a meal, or sit down and read a magazine or something like that, and withdraw yourself from whatever you are doing and properly relax, which is the same principle that applies to aircrew. They still are limited to eight hours duty time, but they could actually be operating a flight pattern that is 14 or 15 hours in duration and they have what is called adequate rest, which may be a bunk, it may be just a 10-minute break for a meal, whatever.

Mr MURPHY—On page 1 of your submission you state that the regulations governing the operation of the aviation industry should basically be unaltered. I am interested to know your views because Qantas have raised concerns about the proposals. Would you like to tell me why you think that those regulations should not be changed?

Mr Terrell—No, I wanted to make the point that the regulations are being changed all the time—not frequently, but they are changed—but the responsible organisation that makes the changes is the Civil Aviation Safety Authority, which answers to the minister of transport, who, in turn, answers to the parliament. That system is satisfactory, so I do not believe we should be looking for another body to set those sorts of regulations.

Mr MURPHY—Even if Qantas might have problems? You think that the system works well?

Mr Terrell—I have not seen the Qantas submission. I am not quite sure exactly what they said in relation to that.

Mr GIBBONS—Do you believe the measures you outlined before are adequate to deal with fatigue in the industry you represent? You said there were three tiers in measuring how to address the problem of fatigue. Do you personally think that is adequate?

Mr Terrell—Certainly as far as aircrew are concerned, yes. They are not adequate for other categories.

Mr GIBBONS—I was going to say that you were the only person who had given evidence to that effect since this inquiry has been going.

Mr Terrell—I am sorry.

CHAIR—Do you want to comment on that? Feel free to comment. We do not want to put you in any tight corners.

Mr Terrell—I am a little surprised because we have worked under this system in the industry for as long as I have been in it, which is over 50 years. It has varied, but it has always produced an adequate result as far as aircrew are concerned, and I do not think the system should be changed.

Mr GIBBONS—Don't you think times have changed with the pressure of competition, with more competition?

Mr Terrell—Yes, sure. But just because there is more competition does not mean you should change the system for controlling the way the personnel operate.

CHAIR—Do you represent the regional subsidiaries of Qantas, like Eastern and Sunstate?

Mr Terrell—No. Qantas's regional airlines are not members. They are closely associated, and their chief executives attend most of our board meetings as guests, but they are not members.

CHAIR—What about Airlink and NationalJet Systems?

Mr Terrell—NationalJet, as of this moment, is not an associate member.

CHAIR—To get the question in context, do you represent the Ansett affiliates?

Mr Terrell—All of the Ansett affiliates, yes.

CHAIR—I would like to pursue a line of questioning. Does your association itself have or are you aware of individual airlines within your association that have a fatigue management program? By that I mean not just a written document but whether it is pursued as an ongoing, interactive thing between management, staff, unions and perhaps even families. Are you aware of any?

Mr Terrell—I think the answer to that is that each airline has its own systems and they would vary. I think there are some regional airlines that are very conscious of that.

CHAIR—My question is quite specific: are you aware of any interactive program involving management, staff, unions and perhaps families, or the community, or something like that, where there is an ongoing pattern of fatigue management? It might involve lectures, health programs, discussions about rosters, napping, all those sorts of things. Are you aware of any?

Mr Terrell—I am aware of one regional airline that does that, yes.

CHAIR—That is doing that?

Mr Terrell—Yes.

CHAIR—Would you like me to put that question on notice so you can check with the others?

Mr Terrell—Yes, certainly. I would be happy to do that.

CHAIR—You could come back to us on that.

Mr Terrell—I am not aware of the details.

CHAIR—I know this next question might put you in a bit of a spot because you cannot, off the cuff, speak for every airline. Broadly speaking, in your association's view, should hours be regulated through occupational health and safety measures or by one of the government airline regulatory bodies or by awards or by the fatigue management programs I am talking about?

Mr Terrell—It is difficult to answer off the top of my head.

CHAIR—Do you have a policy position in your association?

Mr Terrell—No, not that we have tried to define at this stage as a group.

CHAIR—Will you be meeting over the next four weeks?

Mr Terrell—Yes—we are meeting next week.

CHAIR—Could you put that question to your colleagues and inform the secretariat of what the broad policy of the association is in respect to those four areas?

Mr Terrell—Certainly.

CHAIR—The other thing that troubles me is that we have a very strict regime for pilots. I travel with regional airlines a lot and I have been stranded, not because anyone was being bloody minded but because the pilot had exceeded his hours and any incremental amounts he

could have tacked on above that, so we have had to wait for another pilot or to overnight somewhere. I have experienced that. It seems to me we have got a very strict regime in respect of that, but very little is said about other aircrew and maintenance personnel. Would you like to comment on that?

Mr Terrell—That is very true.

CHAIR—Why has the industry allowed that just to trot along without ever being challenged?

Mr Terrell—I am really not sure why it has happened. It surprises me that it has happened that way. If you look at the other categories of aircrew in the regional airlines there are only flight attendants, whereas Qantas has flight engineers and used to have navigators, and even further back had radio operators, all subject to the same flight time limitations as pilots. Flight attendants are not. However, by practice, in all the airlines that I am aware of, the flight attendants operate substantially to the same limitations as the pilots, and there are a lot of good reasons for that. Those standards have been achieved by industrial discussion, scheduling, rostering practices and what have you. The fact that there are no controls, if you like, over ground staff, non-flying staff, has always surprised me in the industry.

CHAIR—Is it your experience that the exemptions that can be granted are being used more and more as a matter of course rather than as an exception to the rule?

Mr Terrell—What do you specifically mean by exemptions?

CHAIR—Exemptions under rule 48, for example.

Mr Terrell—Against flight time limitations?

CHAIR—Yes.

Mr Terrell—In my understanding, as far as the regional airlines are concerned, the limitations that the operators work to are normally more restrictive than the limitations set by the legislation as a result of industrial agreements. Exemptions against a regulation would or should normally only be granted if there is mutual desire on behalf of both the pilot body, let us say, and the management of the airline to apply that exemption. Generally, CASA would not grant an exemption unless both those conditions applied. I do not think the prevalence of exemptions that are disadvantageous to fatigue and safety—

CHAIR—Are exemptions growing or diminishing?

Mr Terrell—No, I do not believe so.

Mr MOSSFIELD—Some of the submissions that have been put to this inquiry have indicated that increased commercial pressure within the aviation industry has the potential to lower the level of aviation safety unless the effects of fatigue are recognised and addressed. Would you like to comment on that and would you consider making any recommendations

to your own organisations relating to the need to have a more progressive fatigue management program within their industries?

Mr Terrell—We certainly had planned to discuss fatigue anyhow at our next board meeting, which is on 20 October, and I will add to that discussion the specific questions I have been asked to present. We do believe that the question of fatigue is clearly of importance not only because there is a Senate inquiry, but because it is critical to the safety of the operation.

Going back to the first part of your question that deals with the commercial pressures and so on, the regional industry in this country is somewhat different from the international operators and to some extent the domestic operators in that, virtually, without exception, regional aircraft stop flying at about 10.30 at night and do not start again until 6 o'clock the next morning throughout the country. It might vary slightly, but there are very few night services operated.

As a consequence, the requirement to specifically deal with maintenance problems has a fairly clear time scale and can be rostered and scheduled fairly well and this relieves a lot of the commercial pressure that, say, an Ansett or a Qantas might experience because there is an overseas operator coming in. As such, I do not think some of the problems that the domestic and the international operators face with regard to fatigue apply to the same extent to regional airlines.

CHAIR—In your submission, you propose that the duty hours of 14 hours should be enforced across the industry. What is your comment on that and specifically how would that relate to appropriate periods of rest? How would you envisage 14-hour shifts to be worked?

Mr Terrell—I think a 14-hour shift would apply to a specific period of duty. I am not suggesting that 14 should become the norm. I am suggesting that is the absolute maximum—I hope that is clearly stated there—and that you would not go beyond that, just as a pilot cannot go beyond X number of hours, regardless of what that does to the service or anything else like that. I do not believe there is any suggestion that there would be regular 14-hour patterns but that a pattern or the duty period could go to 14 hours under certain circumstances. But that would then have to be followed by whatever could be termed an adequate rest period and that, again, would depend on what period of the day or night the 14 hours went into.

CHAIR—You also mentioned in your submission that you believe processes and practices should not be altered. CASA is suggesting that there might be some alterations to practices. What is your reason for opposing that?

Mr Terrell—By practices, I mean the practices under which change is made.

CHAIR—I see; I am sorry.

Mr Terrell—I have got no difficulty with change—

CHAIR—Not the practices themselves?

Mr Terrell—With the practices themselves being altered, but I think that should remain the prerogative of the regulator.

CHAIR—I see. That is the general view of your association?

Mr Terrell—Yes.

CHAIR—Are there any other comments you wanted to make, Mr Terrell, in response to our questions?

Mr Terrell—No, I do not think so, Chairman.

CHAIR—Thanks very much for that; it has been very helpful. Regional airlines play a very important part in the fabric of our transport in this country and many of us here have reason to use them a lot. We appreciate that they have difficulties that some of the bigger airlines do not have. Nevertheless, we need to understand where you and your members are coming from. I trust, if we have any additional questions, we can put these to you in writing?

Mr Terrell—By all means.

CHAIR—Thank you very much.

[9.47 a.m.]

CRUMLIN, Mr Pdraig, Deputy National Secretary, Maritime Union of Australia

CHAIR—I welcome Mr Crumlin as the representative of the MUA. Thank you for attending. We appreciate the important role that you play in transport across this country. I have to caution all witnesses that, although you are not under oath, the committee hearings are legal proceedings of the parliament and warrant the same respect as the proceedings of the House itself. Any false or misleading evidence is a serious matter and may be construed as a contempt of the parliament. Would you like to give us a five- or 10-minute overview of your organisation's submission and then we will break into a question and answer segment?

Mr Crumlin—The submission reflects some of the submissions we have made to other inquiries, particularly to the 'Ships of shame' inquiry, the review inquiry into safety and standards, the progress report of AMSA and the second 'Ships of shame', the sequel inquiry. It also generally reflected some of the things that we have said in the inquiry called the FASTOH inquiry, which is an acronym for Fatigue and Stress and Occupational Health in the maritime industry, as well as general submissions to STCW and IMO, International Maritime Organisation inquiries into fatigue. Our report also refers to an International Transport Workers Federation report into fatigue in the international shipping industry.

The gist of our observations and submissions is that fatigue is happening in two areas in the maritime industry, both internationally and in the domestic industry. The Maritime Union of Australia is also able to speak on issues relating to towage and various aspects of the transport chain with the import authorities. So it is a wide-ranging synergy of areas with which we interface.

The priority, however, is the maritime industry. Our comments are directed, firstly, to the multiplicity of issues facing seafarers in the current industry. You have got issues of, firstly, the deregulation of the international industry and some of the fatigue problems that come along with that. That is generally outside the area of regulation other than via AMSA and some of the port state control aspects that AMSA have got. But you have also seen, due to the continuing deregulation of the shipping industry here in Australia, encroaching participation by those international economic forces and shipping forces into the Australian and interstate and intrastate transport chain.

Australian domestic shipping is protected by what is known as part VI of the Navigation Act in which something known as cabotage basically protects the domestic industry from, if you like, the international industry. Our submission also goes to the continuing deregulation of that industry and points to a number of reports that have been before the federal government. Firstly, I think there was the Shipping Reform Group report 1996. There is subsequently a task force report into further shipping reform before the federal cabinet at the moment. Both of these reports have not resulted in any addressing of the fundamental issues facing the Australian shipping industry. Our submission argues that due to the lack of progress in this area fatigue continues to be a major issue.

The bottom line is that the Australian industry is forced to compete under unequal economic terms with an international industry which is not regulated in itself and where we

have got no effective ability to regulate. It is an industry that pays no tax, that is largely crewed out of the Third World and that, as identified in the *Ships of shame* report, adopts Third World standards of regulation for wages and other regulatory overviews with regard to crew because of the enormous economic differential or the competitive gap, as it is generally known in the modern world. As that becomes greater and greater, then there is intense pressure on the Australian industry to reduce crew size and to work longer hours. There is a lack of investment within the industry so the ships are getting older. The maintenance is becoming much larger.

What we are generally finding in the Australian industry through lack of clear policy is that an industry that is essential to the economic fundamental—I think 99 per cent of the imports and exports of Australia are carried in shipping. I guess the East Timorese issue brings into clear focus the other national interest issues of a formidable, extensive and structured domestic shipping intrastate and interstate service. What we are seeing are seafarers carrying that burden by basically extending their productivity and extending their ability to be able to develop an efficient industry in the face of the unequal differential.

There was one report four years ago by AMSA that I think would be of great interest to your group and to the inquiry called the FASTOH report. Unfortunately, the FASTOH report was truncated as I guess—

CHAIR—How is that spelt by the way?

Mr Crumlin—F-A-S-T-O-H. That is an acronym for fatigue, stress and occupational health. It was a report that was commissioned by AMSA, the regulatory body within the transport sector of the shipping industry in this country. The FASTOH report started with a literature review—basically the coordination of literature—and there was a report that followed on from that.

The second phase was a questionnaire that went to seafarers themselves about the types of environment they worked in and the types of stresses they were dealing with. That covered some of the points I made before.

The third phase was to be a physical testing. It was quite a comprehensive approach to fatigue considering obviously the enormous economic and environmental consequences of a failure aboard a ship. We have seen that recently here in Sydney with the oil spillage aboard that Italian flag vessel. It is quite clear even at this early stage that that was a fatigue issue and partially contributed to by a failure basically to go through a procedure of crossover valves, from my understanding. It was directly linked to fatigue.

We have seen this study, of enormous importance in understanding fatigue in the unique environment of shipping in particular, truncated two-thirds of the way through. I cannot comment on the reasons why that happened other than to say there seems to be a policy stasis currently within the federal government, as I indicated before, in the area of shipping reform, partly to do with a changeover in a number of people heading up the portfolio. Also, from my observations, the Patrick dispute last year seemed to dominate transport policy in this country for a long period of time, I think, to the detriment of the shipping perhaps and some of the other very important aspects of the transport policy portfolio in this country.

But whatever the reasons, the FASTOH report was truncated. Obviously after phase three of the FASTOH report there would have been an overview report, presumably drawing together all of the conclusions about the industry itself, its uniqueness and some of the pressures. Obviously that is a long way from being finished.

The final aspect of our submission is basically directing itself to the issue of the ILO conventions. I do not want to sound overly critical of the policy making ability of the current federal government but, in all of these areas, there seems to have been a long gap in the last four or five years in the momentum that was gained since the war towards a bipartisan approach to addressing all of these regulatory aspects of shipping, considering their enormous economic importance to the Australian community.

There are a number of ILO conventions that are mentioned in report after report, including a number of AMSA reports, the last AMSA annual report and a number of inquiries. ILO convention 180, which is the convention addressing seafarers' hours of work and the manning of ships, and ILO convention 147, which addresses itself to minimum standards within the international industry, have been recommendations voted on by successive Australian federal government representatives in Geneva. But when it comes back here to Australia there has not been an ability to translate those recommendations into an adoption of those particular conventions.

That is the third leg of our submission. We are caught between an internationally unregulated industry and an Australian industry that is seeking to compete on unequal terms and doing that by extending the working hours, reducing its crews and trying to absorb that economic differential. But the international industry, in certain aspects, is better regulated than our own because many countries have adopted ILO conventions 180 and 147, whereas Australia continues to be lagging in that area.

The only other thing we can address ourselves to is the issue of towage. As part of the competitive environment in this country, the increasing drive to lower our infrastructure and general micro-economic costs, we are seeing those competitive pressures coming into areas such as towage and stevedoring. There is no submission in stevedoring, and we are limiting ourselves to that sort of transport chain. What we are seeing at the moment is a move in the towage industry to 24-hour rosters or stand-by rosters; the issue of active and passive time where people are on call on a regular basis to meet the continuation of operations within Australian ports; and the drive to reduce overall costs within that segment of the chain, which is bringing down, extending the working hours and extending the rosters. Currently, there is a process where there is also a reduction in sizes of towage itself.

You are also seeing in that particular sector an exacerbation of all of the issues of fatigue, basically following on from some of the economic conditions that have already been identified, from my observations, by the last couple of speakers and earlier in your inquiry. Sorry, that is a little bit longer than 10 minutes but there was a bit to cover.

CHAIR—What is your organisation's general view of the various areas of fatigue control? Should it be by occupational health and safety measures? Should it be by transport regulatory bodies? Should it be by prescriptive hours or prescriptive awards? Or is there room for a culture of fatigue management being mandated, perhaps in all maritime

organisations, as something that they have to attend to, perhaps as part of their quality assurance—they do not get quality assurance unless they have attacked it? What is your view on that?

Mr Crumlin—I guess you would have a holistic approach that would bring all elements within a scope. But certainly if you have not got a regulatory framework or you are relying on aspects to ameliorate fatigue on the employer or on the ability of the employer and the employees to negotiate, you tend to see, because of the intense economic condition under the new global circumstances, a gradual drawing out and weakening of any standard. They are the clear observations. This is because they have been driven. We are talking about the survival of these businesses, particularly in an environment that is so competitive—shipping and towage—because of the enormous strains on that area that you can already see, as is indicated generally around the world as well as in this country. I think the reason that there needs to be such a strong regulatory overview and framework is that failure in the shipping industry has such enormous consequential damage to the community and other businesses that are interfaced or linked to it. So it is a combination of things.

I think that there are some moves. As I indicated before, AMSA has taken a very positive approach via FASTOH. There is a very good occupational health and safety piece of legislation in this country called the Seafarers Occupational Health and Safety Act that empowers employees as well as employers and develops a regulatory framework. But one of the problems is that unless there is active or proactive support for those ongoing initiatives you tend to find that the world moves away from you and a critical problem can be reached. I suggest to you that is what is going on in Australia at the moment, merely because all the momentum in those areas generally stopped three or four years ago when the federal government withdrew the subsidies to the shipping industry and started a series of inquiries into what to do next, and yet there have been no conclusions. So what you are finding is that some of that regulatory framework is starting to weaken in the interim.

As I indicated, these initiatives are ongoing. The international shipping industry, in particular, is such a competitive hothouse because it is genuinely deregulated. Australia has always had a very prominent role in the international regulation of the shipping industry. The *Ships of shame* report indicated—and I think the very high profile AMSA has also in the IMO and ILO—the great respect that Australia has in the development of international policy. That is now starting to weaken because basically we are not on the ball. We are not being as responsive as we were perhaps five or six years ago.

Mr MOSSFELD—What conditions contribute to fatigue in the maritime industry? You can put them in order of priority. Is it the length of shifts, the inadequate rest breaks between shifts, adequate breaks in total between shifts or the length of time people are at sea? Have you got any comment on how fatigue would relate to those sets of conditions?

Mr Crumlin—The first issue in shipping is that it is an isolated workplace. It is away from any community support groups. There is no counselling. You do not return home. You are contained within your working environment seven days a week for large blocks of time. Due to the competitive pressures I indicated before, those blocks of time are becoming longer and longer. We are now seeing international seafarers being at sea for up to 18 months aboard the one vessel.

Mr MOSSFIELD—Without a break?

Mr Crumlin—Yes, 18 months straight without a break. Due to the technological revolution, you are also seeing very quick turnarounds, particularly in this country due to some of the issues in stevedoring. Where ships used to be alongside for seven days, and there would be a period where people could relax, they are now turning around in eight hours or 12 hours or 18 hours. That is in general within the shipping industry in Australia.

The ships are getting older. We are paying tax in this country and no other country really is paying tax on its shipping. What is happening is that, if the employees and their organisations are sitting down with the employers and looking at ways to reduce the competitive gap, there is no other way to do it than basically sail with fewer people and work longer hours. So we are starting to see Australian seafarers working up to 16, 17 and 18 hours on the trot, day in and day out, without breaks because the award provides for a seven-day week working industry. You are required to meet whatever essential maintenance and safety needs there are.

It is no good saying, 'I'm tired', on a vessel if a piece of cargo carries away or you have to moor the vessel. Ships do not go to anchor because everybody is tired. They have a time they have to be in port. They have to discharge that cargo and they have to get out. That is the linchpin upon which the modern international economy swings around.

You have all of these pressures lengthening the working day. Seafarers are removed from counselling; they are removed from a lot of the other areas that would ameliorate stress within the workplace that a lot of workers would take for granted. They do not return home to their families, other than in blocks of leave. All of those issues build towards a uniqueness and perhaps something that is not currently being recognised.

Mr MOSSFIELD—What steps is your organisation taking to promote fatigue management amongst your members?

Mr Crumlin—We are working more—and I think we see the appropriate way of working to be through the industry—with AMSA and FASTOH to be able to develop an overall environment. We are caught between a rock and a hard place because, if we go back to our members and say, 'Perhaps we don't think that it is safe for you to work 13, 14, 15, hours on the trot', the Australian industry is that less competitive and, basically, we are developing an argument where they will not have work. That is why we are saying that, at least in the current environment, there should be a level playing field for subsidisation. We should be able to go in and compete, not have a whole lump of tax.

There is very little that we can do in that area. We support something called the Seafarers Assistance Service. That has been established by the industry to address stress and fatigue because a lot of these problems with stress flow into family dysfunction. People come home from long periods of time at sea very stressed and then try to recreate a family environment.

There are some things that we can do to counsel them when they are on their leave, but it is very difficult under the current environment to do much about what is going on when

they are at sea, other than have the industry and AMSA develop that. That is why I say it needs to be a holistic response from employers, employees and the government. AMSA's responsibility is to understand the issues and to be able to develop a regulatory framework for it. The general direction of the FASTOH report was to finalise and draw some recommendations together but, as I indicated, that has been a truncated process.

Mr GIBBONS—You referred to the likelihood of a 24-hour cycle for the towage area. How many hours in that 24 hours does the industry envisage would be on the actual vessel where they are performing manual work or waiting to hook up to a vessel to take it in?

Mr Crumlin—In towage, you may be slowed down by weather. You may be slowed down by a vessel breakdown. You tend to find that towage workers themselves are on a 24-hour stand-by. Their roster varies from area to area but is from a week or 10 days up to five weeks where they are on 24-hour stand-by. Single crews are required to meet the needs of any extraordinary breakdown. This gets back to the international regulation. One point I should make is that STCW, Safety Training and Certification for Watchkeepers, an international maritime standard, provides for nothing longer than a 14-hour day and a 10-hour break.

We are finding here in Australia both the unwillingness of the government to adopt the ILO convention and the federalism thing. You can put that in federal legislation, but it is not reflected in state legislation. Particularly in towage, for all work under the state legislation, you have not got those types of even basic regulatory constraints that every other maritime industry in the world works under. I think the Australian Institute of Marine and Power Engineers submission went to that point.

Those guys are working on a 24-hour basis and it gets back to the same thing. If the work is required to be done under the current competitive environment, then you are required to do it. We are finding in some cases that people are working four or five weeks. This gets on to the issue of active and passive time. Say you are required 24 hours a day to turn up on your tug. In a lot of areas they have beepers. If the beeper goes off, you are required to get in your car, drive to work and meet that particular need. There is an argument in active and passive time that these people feel and are under stress and they are under that workplace stress seven days a week, 24 hours a day.

Mr GIBBONS—Obviously. Can you explain the actual tasks to the committee? They have been called; the beeper has gone off; they have gone on to the vessel; they have gone out to meet the vessel they have to escort in, and there is a problem. They are out there hours waiting because of, say, a backlog in the port.

Mr Crumlin—That used to be more the case before beepers. That is the idea of beepers. If there is a cancellation the beeper will go again and then say, 'Hang on; there is a hold-up in the port, the ship cannot get away. There has been a breakdown.' That vessel has gone back four hours. Finding someone who is awake, alert and ready to go to work has not ameliorated that problem because they are then sitting back at home waiting for another three or four hours. Then there is the time they go back again and again and again. In many instances you will see that they have not been down the tug. They have not done what could be defined as actual physical work and yet they have sat at home for 12 hours as this thing

went back and back, so you could imagine the state that they are in by the time that they are required to—

Mr GIBBONS—To perform the task.

Mr Crumlin—They are all issues around a unique combination of circumstances.

Mr MURPHY—Do I detect some sort of acceptance by the MUA of the economic imperatives overriding safety if potentially you could get a situation where someone might be working up to 24 hours?

Mr Crumlin—We are placed in a situation where quite often ships are in isolation—let me give you an example. The *Australian Enterprise* was in Singapore two weeks ago. Three seafarers were paid off. One was for compassionate reasons—someone died at home or there was serious illness—and another person was injured. The vessel then went to a port in China where it loaded 60 containers. It then went another two hours to another port and loaded 60 containers and then went another two or three hours to Hong Kong. So in that period of time you have had, firstly, a unique combination of things: a reduction of 40 per cent of the work force—there were seven people aboard this vessel, three have gone and they are now down to four operationally. It is only the MUA component. Then over a period of time those people were required to meet the needs of that vessel. I had to go up there over an industrial issue and meet with them. When I arrived on board they had been actively working for 24 hours. I am not sure that is an acceptance. To do anything else under those circumstances would have left the ship in jeopardy. It was at sea or it was in a mooring situation.

It is not just a matter of everybody saying, ‘We have had enough. Our 14 hours are in.’ because a watch needs to be held and cargo needs to be monitored. The vessel cannot sit alongside because there is demurrage and an economic cost to the company. So, basically, those people just have to manage. That was an extraordinary set of combinations but they had to manage that situation. So I would not describe that as an acceptance.

I would say that that is just a reflection of the modern shipping industry. Everybody is doing that in modern shipping. There is no regulatory overview other than IMO, STCW and perhaps port state control. If you go to China, there is no port state control. The Chinese are not interested in regulating on behalf of the international industry, whereas Australia is an excellent area because of a proactive AMSA and a regulatory body that actually sends surveyors down there and tends to police these things. I think it is more a reflection of the international environment than it is an acceptance by the MUA.

Mr LINDSAY—You are a very experienced person in industrial relations. I picked up on what you said earlier in relation to the government being able to put constraints in federal legislation that may not be reflected in state legislation. In a way that is a side issue to this but it also could be a very important issue in relation to what this committee might recommend. Could you amplify that? Could you indicate the concerns that you see there and what you think the system ought to be?

Mr Crumlin—My observations are that in safety and occupational health and safety, of which fatigue is obviously greatly more amplified under the current environment, then there

needs to be a single legislative approach. Whether or not that approach is then mirrored—you have mirror arrangements within the states—whatever the mechanism, there needs to be a single approach in accountability to these things.

Mr LINDSAY—Your union would support that?

Mr Crumlin—Definitely.

Mr LINDSAY—In terms of other areas where there is supposed to be mirrored legislation—for example, native title—the mirror legislation tends to be different in every state. Do you accept that that happens?

Mr Crumlin—It becomes a matter of interpretation then.

Mr LINDSAY—Yes, and it is horrible.

Mr Crumlin—And that itself has got a whole process which, in our general observation, is draining resources. The irony is that in a world where we are seeking to make economies—everybody is trying to develop a more dynamic economy and a more competitive arrangement—we are dealing with having a number of bureaucracies and mechanisms and, quite often in the maritime industry, a number of inquiries. You can have federal and state inquiries into the same matter because of the juxtaposition or overlapping of responsibilities in that area.

Mr LINDSAY—And that whole system leads to uncertainties as to what the outcome might be if there is an initial, say, federal legislation. You cannot be certain what ultimately might happen through the state system.

Mr Crumlin—It certainly opens the ground for contradictions in outcomes and potential loopholes.

Mr LINDSAY—How would you feel if there were no state system, that it was just a single overarching federal system in these issues?

Mr Crumlin—I think in shipping that that would be the ideal situation, as long as the regulatory overview is of the high standard—and that then becomes the issue. As I indicated before, there needs to be more of an industrial approach than perhaps, dare I say it, a political approach to some of these things.

Mr LINDSAY—I agree.

Mr Crumlin—If you can have that type of holistic legislation, that is the type of requirement. I certainly think that you would have an agreement from bodies like AMSA to that. They feel frustrated sometimes by state jurisdiction in a number of occupational health and safety areas and it creates a complexity of issues. It goes far beyond occupational health and safety because you get into workers compensation. How far does all of this go? It is a widening argument but, certainly, in terms of regulation, we would agree.

Mr LINDSAY—In relation to your earlier evidence, you have used the words ‘fatigue’ and ‘stress’. Do you see those as interchangeable?

Mr Crumlin—Absolutely. Fatigue itself is as much a mental as a physical state, and I think phase 3 of the FASTOH report was so important because that was a physical monitoring. That was the stage where we were going to sit down and see how people actually responded—what their reaction times were under various circumstances. Say that you were working 14 or 15 hours, then you got a phone call that the eldest child was very sick and in hospital, and you were in Hong Kong or in Japan somewhere. What is the physiological effect? I am obviously not a doctor—I might be a sea lawyer but not a doctor. What is the impact of that on stress and fatigue? And I think that was the third phase. The FASTOH report was at least attempting to break new ground constructively in this particular industry to be able to monitor these people to see how they reacted.

That is extremely important, particularly for deck officers. They have responsibility for these massive vessels, 200,000 tonne deadweight, and all of the oil and the consequences, a la *Exxon Valdez*, where one poor piece of judgment caused consequential economic damage. It is circumstances like that that help us understand the types of stress that these people are under. I think stress and fatigue are absolutely linked. How they are linked is a matter of inquiry.

Mr MOSSFIELD—You have indicated that a lot of the difficulty, of course, is in the overseas operations and the fact that they are not abiding by ILO regulations. What could we do in Australia? What could this committee do to recommend to our government a suggestion that would bring some pressure on these overseas companies to accept the ILO regulations?

Mr Crumlin—It is Australia that will not adopt the ILO conventions. I think Australia has had a number of clear indications from a variety of bipartisan inquiries objectively indicating that we should adopt ILO convention 180, which is seafarers’ hours of work and manning on ships, and also ILO convention 147 which is minimum standards.

I think the only other essential thing the government needs to do is establish an ability for the industry to compete effectively and on a relatively even playing field so that we are not seeking to address the competitive gap. There is no investment confidence because there is no investment policy within the industry. If we are going to have an efficient industry, we need younger ships, newer ships to keep the maintenance down. We certainly need to be able to deliver the labour cost efficiencies but only within a framework of what we generally accept to be safe within this community, and there needs to be some sort of overall policy making up that differential in the competitive gap.

So I think they are the fundamental things. All of the evidence from both the ‘Ships of shame’ inquiries and from the two reports on shipping reform currently before the federal cabinet indicate that Australian shipping requires that type of total policy approach urgently to address some of these issues.

CHAIR—Having heard that, have you spoken to managements around Australia about having an interactive fatigue management program?

Mr Crumlin—Yes. I think that shipowners generally are so aware of the possible consequence—it is a risk management process, isn't it—that they know that if their ship fails, the damage, other than through humanistic principles, and the problems that that creates for their business are enormous considering the capital intensity of a thing like shipowning. So yes, those things are managed, but again it is extremely difficult because of the intense competitive pressures and, because the ships themselves are quite often isolated and subject to their own little societies—how management interacts aboard the vessel, how the master is able to police occupational health and safety, the ability of the ship to act constructively and to develop a very affirmative process—a lot of those things are out of their hands. So I think that they are attempting to address it. But they are also saying that it is impossible for them to maintain any competitive advantage only by trying to reduce labour costs. They have just been placed in an impossible position.

CHAIR—We had Nolans Transport—and admittedly this was in the trucking field—appear before us, and they made the point that they saw fatigue management as an investment that added to their efficiency rather than detracted from it.

Mr Crumlin—That is okay if you are competing again on a level playing field. They are competing with other trucking companies that are all under the same Australian regulation. Labour costs are fixed. If it was a competitive advantage for them to have a total quality approach, their trucks are running safer, they are on time, they have got good morale, they are able to translate a psychological advantage into an economic advantage. What is happening in shipping is that we are not competing within an Australian environment. We are competing within an international environment where there are no regulatory constraints on key economic areas. That is the basic problem.

CHAIR—And that is why you want the two conventions?

Mr Crumlin—We need the two conventions and we need a policy that differentiates, even if it differentiates that if you move a container between Sydney and Melbourne there is no difference between doing it by road, rail or sea. Currently in this country there is a standard that is applied by road and rail, but it seems that there is a thinking that Australia finishes at the beach and it does not matter how that container gets there by sea. It can be in a flag of convenience vessel, a 'Ships of Shame' vessel, with 17 Filipinos that have been aboard for 18 months. Other than AMSA's port state control to have some element of regulation in that area, you might as well be transporting that container from Sydney to Melbourne in the Third World. Until that is effectively addressed for intrastate and interstate, until our domestic transport services are seen to be Australian and under Australian control and regulation, we are going to have that ongoing problem.

CHAIR—Just going back to the tugboats for a minute, we have received some evidence on this. Part of the problem is that a tug has to be on stand-by at certain times for certain vessels and the crew have to be on board. What is your union doing, or what is your level of cooperation with management in making sure that if they are on board there are proper rest facilities and the like?

Mr Crumlin—Most tugboats have sleeping facilities. They have that, and they have the facility to cater, so that is not a problem. But at the other end of the stick there is currently a

move to reduce the crewing levels. I guess you hear a lot about crewing levels and rosters and the amounts of people to pad a roster out, so the people there I think have a capacity to look after themselves, and that is built in.

It is more the issue of the extended hours, the active-passive and the ongoing competitive pressures to reduce the overall crew sizes so that you are in rosters, you are getting fewer people to spread more evenly across the available roster system, and you have also got fewer people actually aboard the the tugs themselves doing a wider range of tasks. We see that as a potentially explosive area in escalating occupational health and safety problems because it is a matter again of balancing the needs of the enterprise against the needs of the employees within the enterprise. I guess that is one of the fundamental things that you are coming to terms with, as I think all of us are in the modern industrial environment. And there are enormous pressures in towage in that particular area—just as there are in stevedoring, trucking and other areas. But certainly there is an ability for them to look after.

One of the big problems is the capacity in that type of broken-houred roster to find the ability to get to sleep. You may have eight hours, but what if you have been up for 12 or 14? Mostly in the awards there are 18-hour exhaustion clauses, generally across the board, so it is illegal under the award to work longer than 18 hours. Eighteen hours is an enormous amount of time, and even the international convention, convention 180, provides for no longer than 14 hours, but in our awards it is 18 hours with a minimum break of eight hours. If you finish on the 18th hour and then you have those eight hours off, what if you cannot get to sleep, or you are in such a state of fatigue that you are unable to trip yourself over? Currently, under the existing industrial arrangements, eight hours later you can be called out to do a further 18 hours.

It is extraordinary. I think five or 10 or 20 years ago, when these things were put into awards, there was a comfortable crewing level, there was a long turnaround in shipping and there was a lot more built into the overall system. What we are finding in the last 10 years is that the current environment has been so stringently applied we are padding out more and more, going right up against the exhaustion clauses. In doing that we are finding that those exhaustion clauses are not really well designed for the modern environment. There is a whole range of issues.

My offsider just indicated that, for example, in Sydney today one of the deckhands went to work at 7 o'clock this morning and will be aboard the vessel, either working or on stand-by, through until 4 o'clock tomorrow morning. He will not leave that tug, other than maybe for two or three hours perhaps to go down the road or stretch his legs if there is a period of time to be gained. But that gives you a bit of an idea. So it is 21 hours. It can be argued that some of that is passive time, but if the passive time does not give you sufficient time to rest or to have some quality sleep, what is the use of it?

In a way I think there were so many belts and braces under the old award system that these issues never came up. Now, under award minimisation, what we are finding is that these basic facts have remained—18-hour exhaustion clauses, et cetera, passive and active time—and with no real interpretation about how they impact on fatigue. We are basically getting a work force that is coming increasingly under stress. Obviously your inquiry and your report are timely.

CHAIR—Mr Crumlin, thanks for your information. It has been very helpful. Thank you for your cooperation with the committee on this occasion, as you did with the previous committee when we produced the report, *Ship safe*. I hope that if there are any other questions that we need to address to you that we can address them in writing.

Mr Crumlin—Thanks very much.

Proceedings suspended from 10.34 a.m. to 11.02 a.m.

BARDEN, Mr Allan, Assistant National Secretary, Australian Rail, Tram and Bus Industry Union

JOWETT, Mr Roger Gavin, National Secretary, Australian Rail, Tram and Bus Industry Union

CHAIR—I welcome to the table Mr Allan Barden and Mr Roger Jowett of the Australian Rail, Tram and Bus Industry Union. Thank you for your attendance. Before we commence I have to caution you that these proceedings are proceedings of the parliament and must be treated with the same respect. Any false or misleading evidence is considered a contempt of the parliament. Are you going to lead, Mr Jowett?

Mr Jowett—Yes, I am.

CHAIR—Would you like to give us a five or 10-minute overview, then we will break into questions?

Mr Jowett—Yes, I would like that opportunity. Thank you very much. Mr Chair and members of the committee, the RTBU would very much like the opportunity to address you. It is very timely that the House of Representatives has made this opportunity available in terms of what is an emerging issue within the Australian railway industry.

To give the background to the Rail, Tram and Bus Union, we were formed in 1993 from an amalgamation of four unions in the rail, tram and bus industries. We are a union of some 35,000 members and because of the nature of our industry we provide services day and night, seven days a week, for 365 days a year. Therefore, our interest in fatigue through shiftwork and night work has been intense and longstanding. We estimate that 70 per cent of our members are regularly involved in shiftwork and/or night work.

There are a number of themes and issues which we would like to point out to the committee in our opening statement. The first—and this represents a benchmark for the rail industry internationally—is the intensive study done in the form of the *Australian railways shiftwork and workload study final report*. No doubt you have heard quite a bit about this study. We have noticed that there have been a number of references to it in evidence to this committee.

Our union was one of the originators of the study. It is a giant leap forward for the industry because it puts on the table for the first time in a scientific way, with thorough research, with proper methodologies and techniques, a well presented, reasoned research of the impacts of fatigue on railway workers. The union was a member of a consortia which financially backed the study. The union put its hand in its pocket to the tune of \$60,000, which was the price of entry. That certainly underscores the seriousness which the union places on this pioneering work.

We have had a three-year study—the first stage—and it has produced a number of results. Certainly the literature and the number of inquiries from a number of unions overseas in the rail industry suggest that this study has been very closely monitored in a

number of countries. We point to fatigue as an issue appearing in the literature. It is an issue impacting severely in terms of cost. The effect in terms of human lives in the 1990s has been examined, through this study, in a proper scientific and rigorous way. That point needs to be made.

The second point we would make goes to some peculiar features in structural terms which have impacted upon the union and its members during the 1990s and, in our view, have contributed to fatigue. The issue we point to is the national competition policy and its impact upon the railway industry and its method of implementation. As we know, national competition policy included open access on rail competition, and the structural reform of GBEs that has occurred in a number of ways across a number of states.

Another area which we believe impacts on fatigue and is a feature of the 1990s is the continuing industrial reform agenda, as seen in the Workplace Relations Act 1996, with its emphasis on allowable matters under section 89A of the act and on flexibility. That, of course, has impacted on work practices in a major way within the industry. Our documentation provides a number of instances of the impact, particularly on hours of work, upon our membership.

The second area which was identified during the 1990s is the intensity of the competition from the road industry and the competitive pressure that that has placed on a range of rail companies. Of course, that has resulted not only in price decreases for the corporate carriers of freight but also in an impact in terms of the extra competitive pressures placed on the rail industry. We believe that there is a knock-on or flow-on effect in terms of companies because of this intense competitive pressure to reduce costs.

In terms of enterprise bargaining negotiations, that has had an impact on a range of issues which are put on the table. A lot of those issues have to do with flexibility, hours of work, rosters, barracks detention, and a number of peculiar features of railway working, such as master rosters and lift up and lay back, which all impact on the work and family life of our membership.

The third area which we believe is illustrative of a significant change during the 1990s is changing social patterns. In that regard we have included material which refers to, from a lot of people's point of view, a welcome change in relation to the role of fathers in a family unit or in a relationship. Fathers now have more responsibility for looking after the kids, something referred to in the popular jargon as 'daddy time'. The material suggests that is a significant social change. It has certainly been impacted on in our industry. In relation to working people, the essence of whose work life is around rosters and around working any hour of the day or night, these are significant issues which need to be taken into account.

The fourth factor which we would like to draw to the committee's attention focuses on the issue of competitive neutrality. This has a number of meanings in a number of contexts. Within the railway industry, and indeed across the transport industry, there is a very strong view that what we should be looking at is fair competition between modes. If we take the example of road and rail, obviously there is not competitive neutrality when one mode is able to work many hours of work a week and the other mode is restricted.

A lot of the literature suggests that in the long distance road transport industry, drivers averaging 70 to 80 hours per week are not unknown. When we compare that with averages in the rail industry, there is a significant difference. Not only does that impact in human terms and in terms of safety and fatigue issues, but also there is a competitive aspect in terms of what we regard as fair competition between the industries. That raises a number of issues in terms of modal equality. It also raises a number of issues in relation to ensuring that there is fair competition between modes. Not only are practices in one industry deleterious to workers within that industry, but they also have knock-on effects and impact severely on competitors, in this instance the rail industry. That is a critical issue in terms of modal equality.

When one examines the competitive neutrality aspects and the history of fatigue management over a number of years, one can see that there have been sharp intermodal distinctions and ways and means of addressing the issue. From our perspective, when we look at the literature, when we look at the experience and go back over a number of decades, we see the aviation industry head and shoulders above the other modes. I think there are a number of reasons for that in relation to safety, international conventions, protocols and legislation, and they have led the way.

The rail industry has been somewhat slower. We have certainly put a lot of emphasis into it in previous years, but it was only during the 1990s, for the reasons I have referred to, that a focus has been placed upon the issue and ways and means of resolving it sought in the manner that we have set out in our submissions.

An issue under competitive neutrality which we want to bring to the committee's attention is not only intermodal issues but also intramodal issues. For example, what we have on the east-west corridor is a range of competitors, some of whom have been an integral component of the *Australian railway shiftwork and workload study final report* and are committed to outcomes. They have put in place fatigue management indexes and have worked closely with the union in identifying ways and means of addressing the issues. But on the other hand there are companies that are not part of this study. There are companies that are not persuaded in relation to fatigue management indexes or control systems or a systems based approach to the issue.

From our point of view, unless there are mandated issues for companies to address, we run the risk not only of lack of competitive neutrality between modes but also within the modes. That is an important issue because some companies can be tempted to get a competitive advantage in what is an era of intense competition between carriers on rail. We would point out to the committee that there needs to be a level playing field between these companies.

The fifth area which we believe demarks the 1990s from previous periods in terms of fatigue management and a fresh approach is that there have been a number of structural and institutional changes. In that regard, we refer the committee to the establishment of rail safety acts. Because of the application of national competition policy and instances of structural separation, in a number of instances on-rail competition has meant that the issue of safety regulation has undergone a dramatic change as safety becomes an issue which is adjudicated independently of the railway system compared to a previous era, when we had

vertically integrated rail systems, and those rail systems were responsible for a range of issues, including safety.

That has been separated out. There are requirements under the rail safety acts for accreditation of operator regimes. We believe that, as there has been in the civil aviation industry, there is the possibility—and we would say the desirable outcome—to mandate fatigue management regimes of sample rosters and review processes in the accreditation processes of rail companies. These can be done by independent experts or companies. In the airline industry, CASA has been strongly involved over a number of years.

There is an additional institutional change within the overall transport scene. That is the establishment on 1 July this year of the Australian Transport Safety Bureau. The press releases and comments from those involved in its setting up in early July suggest that the issue of human factors in relation to transport issues is going to be a pre-eminent focus of the work of this newly established body.

In conclusion, firstly, we believe that fatigue has been identified conclusively as a major risk for shiftworkers and night workers. Secondly, there is a strong association between hours of work and OHS outcomes and this is widely accepted within the community. Thirdly, and perhaps most importantly, we now have the evidence and the programs. We have the ability for policy makers or organisations to implement work related fatigue management regimes in a systematic and comprehensive way. That would be our prime focus in relation to the outcomes of this inquiry. Thank you very much for the opportunity to address you.

CHAIR—Thank you, Mr Jowett. You say you support the use of the fatigue management index. How comprehensively has that been used in the industry?

Mr Jowett—I have two responses, Mr Chair. Support for the fatigue management index, as indicated in a resolution of our national executive included within our submission, suggests that we support it as a tool for reducing fatigue management problems within the industry.

We emphasise that it is not a closed system. There are a range of other issues to address and not only the software program upon which the fatigue management is based. In relation to its comprehensive nature—and this gets back to a point in relation to level playing fields—if we have a look at the original consortia partners who in the early 1990s set up the major study, headed and supervised by Professor Drew Dawson, we had V-line freight; SRA, which is now FreightCorp; Queensland Rail; Australian National; Western Australia government railways and our union. If we look at the late 1990s, a couple of those have disappeared. In Victoria, for example, we have privatised a freight company which is now Freight Victoria. That company is owned by US interests and has not been involved in fatigue management. That same picture has been replicated in Tasmania and South Australia. As you may know, there are couple of privatisations on the drawing boards which have yet to be addressed.

In terms of the comprehensive nature, there is one employer. That is National Rail. It has applied itself most diligently in relation to fatigue management with the cooperation of the

union. There are a number of outstanding issues between ourselves and the company. FreightCorp and Queensland Rail are in the early stages of addressing fatigue management issues, but what we have overall is only the tip of the iceberg in terms of comprehensive nature. It is an issue which bedevils a number of modes. From the union's point of view, unless there is a flaw in principles and application of fatigue management regimes, we are going to be bedevilled by a set of arrangements by which some companies are serious about fatigue management and the other companies are able to be involved on a voluntary basis or not at all. That is of real concern to the organisation.

CHAIR—Do you know of any companies that are using the program in rostering? I know there has been a lot of talk about it and a number have embraced it philosophically. Do you know instances of where it is being used as a fatigue control mechanism in rostering, for example?

Mr Jowett—The one example that has been introduced is with the National Rail Corporation. That is where it is being used as a tool.

CHAIR—What about QR. Is that using it?

Mr Jowett—It is in the early stages. They have certainly embraced the concept and I have had discussions with the union in Queensland. There are some experiments under way.

CHAIR—Does this cause any tension? You are the national executive so you can take a fairly big picture. Do you find any tension with your subsidiary bodies or state organisations that in some ways this overrides traditional limitations that might be in awards? How is that tension being handled?

Mr Jowett—There are a couple of approaches to it. We argue strenuously that awards agreements should prescribe hours of work and put definite limits which should be seen as part of the fatigue management tools. As we have shown in some of our exhibits, there has been a degree of opening up of hours of work.

CHAIR—But Dawson has demonstrated, has he not, that sometimes if you have the appropriate hours on appropriate sequential days with appropriate days off, some of the hours that were previously prescribed to not go beyond eight or 10 can be exceeded, provided these other things are in place?

Mr Jowett—There are a couple of responses to that. When one looks at the material, those flexible hours have increased dramatically during the 1990s in a historical sense. You referred to eight and maybe 10. When one looks at awards and agreements that the union and various employers have entered into, there are many examples of up to 12 hours. That is still a relevant issue.

What concerns the union is that, because of intense competition, we are now seeing what we have not seen in the past, which is quite a number of instances of 12 hours being exceeded. In terms of fatigue management, awards and EBAs are one mechanism which strongly urge that the prescription remain. What we have seen in the 1990s is a range of

other features such as fatigue management being able to be added to the traditional prescriptions.

Mr MOSSFIELD—This is a similar question I put to people from America on unions. What conditions in your industry would contribute mainly to fatigue? Would it be the length of the shift, the period of the day the shift is being worked, inadequate breaks during the shift or inadequate breaks between shifts? Is there any pattern here where we could establish that fatigue has a greater impact?

Mr Jowett—There are patterns and there are areas of the industry in which the fatigue issue is more of a problem than other areas. The areas which we focus on at first instance would be the freight running side of the industry which involves a range of those issues which you have referred to. Length of shifts is a real problem. We have put evidence in to the committee of shifts greater than 12 hours. The union frequently monitors this and puts out survey forms independent of management in order to gain an overview and a snapshot of what the occurrences are of greater than 12-hour shifts. Unfortunately there are too many. For example, in Western Australia we have rosters of our members working where not only are they long shifts of 12 hours—and, as I have indicated, too many instances of greater than 12 hours—but also weekly numbers of hours. For example, when the union examined rosters of our members located at Avon in Western Australia, we saw a range of examples of rostered hours, and of course that does not include work on days off or rest days. It is a very conservative figure of between 45 to 60 hours, and that is before hours in addition to that are worked.

In our industry we see fatigue coming from the whole gamut of factors—length of the day, length of the working week or fortnight, flexibility of rosters and, when workers are booked off for rest days, the issue of roster committees. All in all, the fatigue issue is not confined to one issue. We would say it is multifaceted.

Mr MOSSFIELD—In your submission you indicate that there is evidence that rail safety has deteriorated, and you quote a number of examples of accidents and other things. Can we at all establish a procedure where near misses are recorded that may relate to fatigue? We do not want to wait till an accident happens; we want to get to it before then. Can we register near misses where fatigue may have been a cause and then take the appropriate action?

Mr Jowett—You touched upon an important issue. Certainly there have been avenues by which this issue has been brought out, so there is the Rail Safety Act. In New South Wales there is currently a review of the act. Included within the act is the provision that it be reviewed every five years. In New South Wales we have had, unfortunately, 11 rail related deaths in the last two years, which is really at historically high levels.

In terms of incident reporting and investigation, there has been a committee at a national level, which includes the union, looking at the framework for incident investigation and changing the parameters. That is one of the areas in which recommendations have made an alteration to the statistics, both in a quality sense and a quantity sense, including those near misses.

Also, the union has been advocating a cultural change from the old pains and penalties method of discipline within the railway industry, which I think you would be familiar with, to an approach which is of a no blame, no fault direction which has been evident in the airline industry for a long period of time and which enables incident reporting, which enables confidential conversations to occur between, say, BASI authorities and the individual worker. We have been certainly promoting the need for 1800 numbers for near misses, various incidents and occurrences, to be reported on a no fault, no blame basis.

Mr LINDSAY—Mr Jowett, in no particular order, your union also covers tram and bus operators.

Mr Jowett—Yes, it does.

Mr LINDSAY—Do you have any evidence of fatigue in those particular parts of your industry?

Mr Jowett—We do not have direct evidence. As you would be aware, those cover the passenger systems of various cities only. The roster cycles tend to be better known, planned in advance.

Mr LINDSAY—You are not seeing problems there?

Mr Jowett—Not direct problems. One area which needs a caveat placed on it is the impact of privatisation, contracting out, on bus workers. We have been involved in a number of circumstances of privatisation of formerly government owned bus services—for example, the Metro in Western Australia, and also the PDC, the public sector buses. What we have observed is that there is a worsening of conditions on contracting out. That relates to lengths of shifts, split shifts, overtime and worsening of conditions in areas such as long service leave and annual leave, which in a wider sense are areas where one can reduce fatigue in a general sense.

I put that caveat in there, but I also make the point that these issues need to be regularly monitored within the industry. I think we need to ensure that practical solutions apply across all forms of transport. Within the bus industry, when one examines it over the last 15 to 20 years, it has been the long-distance coach side of the industry where the fatigue issue, particularly in the light of a number of horrific crashes in the late 1980s, has been highlighted, and a number of work practices, such as two-up driving, have been the source of a lot of comment. In relation to the tram and bus side, no, there is not the same magnitude of problems but nonetheless in our view that should be actively monitored by departments of safety and also safety bureaux, and rosters and lengths of shifts should be subject to scrutiny as part of a systems management approach for those areas of the industry.

Mr LINDSAY—Does your union represent anybody in the long distance bus system?

Mr Jowett—No, we do not.

Mr LINDSAY—You heard the MUA evidence earlier—

Mr Jowett—No, we did not.

Mr LINDSAY—You did not. MUA gave evidence that in terms of the issues that this committee is examining there needed to be overarching federal legislation across the country and that there were problems with the mirror state legislation where the intention of the federal legislation may in fact ultimately change when it finally gets through the state system. Would your union support one, overarching, Australia-wide, uniform mechanism to address the issues that we are considering and not allow that to go through to state award-type systems and state legislation?

Mr Jowett—That certainly would be our strong preference.

Mr LINDSAY—You mentioned long service leave, which surprised me. Is the link there that changes and conditions cause employee stress? Is the word ‘stress’, whatever it means, interchangeable with fatigue, in your view?

Mr Jowett—That is a tricky one, being a non-medical person. I can get myself into all types of trouble. I think there are some aspects of fatigue and some aspects of stress which overlap, but also there are aspects which stand separate.

Mr LINDSAY—Your evidence indicated that railway workers are predominantly male.

Mr Jowett—Overwhelmingly—worse than the black coal industry.

Mr LINDSAY—You do not have to answer this question, but do you have any evidence that would suggest that male workers suffer more stress than female workers, for example?

Mr Jowett—We are not in a position to say. One needs to take into account that the composition of the railway work force probably has at least two features. One is the gender composition—six per cent are women—and, in terms of where those women work, most would be non-shiftwork areas. So that is an issue on which we do not have a basis for comparison; we are unable to say. The other aspect is the age of the work force, which, in a cross industry sense, is relatively old.

Mr LINDSAY—Your evidence places some emphasis on national competition policy and its impact. On the one hand, national competition policy could be said to lead to a level playing field, which is what you were advocating earlier in your opening address, but, on the other hand, you are saying that it also leads to bad things. How do you resolve that apparent difference in your evidence?

Mr Jowett—I would want to have some discussion with you about how it levels out the playing field, because I think that gets back to some comments I made earlier about competitive neutrality, some views of Hilmer, the subsequent legislation and the competition principles agreement about what competitive neutrality was. In our view, it has not been addressed in terms of structural change, to GBEs or in terms of the underlying principles for open access. So, from the evidence, we do not think that it does lead to a level playing field.

We think that at the moment the railway industry is going through an intense period of change—what we would call a destructive competition phase—and what we will see, we believe, within the time frame of two to five years is a shake-out. I think we would put on hold whether or not there is a level playing field. What concerns the union is that, in a number of areas, we are seeing new entrants to the industry and, in terms of the volume of operators, a substantial increase in historical terms. But what we are seeing is that only some operators are addressing these issues—hence the union’s emphasis on, in this instance, a level playing field and coming back and agreeing with your question relating to federal overarching legislation which would be applicable to all.

Mr LINDSAY—It has been my experience across many areas that national competition policy is blamed for some things—and it is erroneously blamed—and I make the following statement in a non-political way: National Competition Policy was introduced by the former government—

Mr Jowett—Of course.

Mr LINDSAY—and I guess it had the support of the unions, but—

Mr Jowett—Not at all.

Mr LINDSAY—Not at all?

Mr Jowett—Not support of an unqualified kind. As a member of the ACTU executive and a number of ACTU committees, and given that our industry in a number of ways has been at the forefront of national competition policy, we would have to say that we have many, many qualifications based on experience of the damaging influence of what we believe the application of NCP to our industry has been.

Mr LINDSAY—Have you seen any positives out of National Competition Policy?

Mr Jowett—You would have to give me time to think about that one.

Mr LINDSAY—Okay; it is not relevant to this inquiry. In your opening statement you talked about the impact on allowable matters that the new Workplace Relations Act 1996 has had. How do you link those to fatigue? Can you give me some specific instances?

Mr Jowett—Sure. In our submission to the committee, we instanced consultative mechanisms and, in terms of allowable matters, those not being enabled to be included in awards but becoming the focus of bargaining to be included in enterprise bargaining agreements. So I think we have two comments in relation to those consultative mechanisms. Firstly, because of the allowable matters contained in the legislation under section 89A, that consultation has been removed and placed on the bargaining table. Also, what we have noticed during the 1990s is that a number of employers are reluctant to follow traditional arrangements within the industry where there has been a developed consultative apparatus. A number of new entrants are saying, ‘The act gives us the ability to avoid traditional arrangements of awards and agreements,’ and we have instanced AWAs and a number of examples. Also, in relation to these either formal or informal consultative mechanisms, there

has been a reluctance and a shying away from a number of employers to take up those practices.

Mr LINDSAY—I notice that you referred to a previous report of this committee, *Tracking Australia*, where you specifically said that you are concerned about the condition of the mainline interstate corridors.

Mr Jowett—Yes.

Mr LINDSAY—And your evidence is that that adds to fatigue problems in the industry. Would you like to amplify that?

Mr Jowett—A practical example might assist. We have a limited investment program being initiated by the federal government—\$250 million over four years. A portion of that is being allocated to the Melbourne-Adelaide corridor, and when there is investment we find that that upgrades the infrastructure. In terms of curves and gradients, it addresses those issues and also, importantly, it addresses the question of transit times.

Mr LINDSAY—So your evidence is that the fatigue is because the trains have to travel slower, so there are longer transit times and the staff—

Mr Jowett—That is the direction—

Mr LINDSAY—I understand that, thanks. When you gave examples of some accidents, you mentioned the accident in the Hunter Valley. The inquiry into that accident found that the rostering pattern of the drivers caused sufficient fatigue to reduce alertness to a significant degree.

Mr Jowett—Yes, that was one of the main findings.

Mr LINDSAY—I guess that is relevant in relation to what has happened in England. At this stage, it may have been a similar situation; we do not know.

CHAIR—Has that been suggested?

Mr LINDSAY—No, it has not. That is why I said that we do not know.

Mr Jowett—I think we will hear a lot more about it.

Mr LINDSAY—Yes. But you see that as a very significant—

CHAIR—I have to caution you there. We cannot speculate that the English matter follows anything. We certainly can talk about the Hunter Valley matter.

Mr LINDSAY—Back to the Hunter Valley matter.

CHAIR—We have to be a bit sensitive. The English situation is in the very early stage, and I do not think we should pontificate about it until we get a bit more data.

Mr LINDSAY—Thank you, Chairman. Going back to the Hunter Valley, do you support that particular conclusion?

Mr Jowett—That was what the evidence showed. There have been discussions between our organisation and the employer FreightCorp about the findings and addressing those outcomes via such issues as rostering—fatigue management indexes. I would also like to add that it is a sign of change in the industry in terms of the way the investigation was undertaken, which was, as it were, with a fresh set of eyes. One of the potential features of the newly formed Australian Transport Safety Bureau is a multimodal approach—learning from the experiences of modes—which has placed concentration on this issue for quite a period of time and has come up with solutions and the transferring of those to other modes. Of course, our preference would be the overarching legislation which you referred to before.

Mr LINDSAY—Does that then link back to something that was said in earlier evidence in your written submission? You gave an example of a short-line operator who does not have a fatigue management regime. Should all operators have fatigue management regimes?

Mr Jowett—Unequivocally, yes.

Mr LINDSAY—That is your recommendation. Does that then go across all modes, in your view?

Mr Jowett—In our view it should go across all modes to avoid the competitive neutrality level playing field, and of course there are issues of public policy because of the amount of people who are being killed, particularly in the roads sector. Also, we have seen from recent events that when there is a rail crash it can be catastrophic.

Mr LINDSAY—I would like to finish on what is a human matter. The final part of your evidence says that night shiftworkers feel they are forgotten if communications are not frequent and effective and that reduces staff morale. Staff morale links into stress, I guess. What kinds of things are you seeing among your members that might back up what you have said there?

Mr Jowett—In terms of morale among night shiftworkers, when one looks at the turnover in the industry at the moment we can see a mobility we have not seen before in a number of areas of the industry. We are seeing new operators come in—there has been a dozen across Australia in the last five years—and there has been that mobility between companies. We are seeing it in terms of redundancy lists that are put out by a number of rail enterprises and the length of the list those employees put their name to. To us, that is indicative of wider issues. Also, in terms of being the ‘forgotten people’, there is the issue of family and work life, and that is the one where we are really noticing the change. You can see it when we have our report back meetings of members. They are held, by and large, at hours to suit the membership, and invariably a number of men come along with their young kids. That is indicative of a number of issues.

Mr LINDSAY—Thank you, Mr Jowett.

CHAIR—A few questions just to wind up. What is your view about alertness monitoring devices in cabins of vehicles?

Mr Jowett—I think there are a number of issues there. The industry has, as a result of incidences and experiences in the past, vigilance control mechanisms in most locomotives, and that is a standard which the union has supported. There is a wider issue, which we have brought up in our submission, relating to technological changes which enable enhanced safety devices. There have been a number of issues which have confronted the union in a new way as to getting agreement from the new institutions which have arisen within the industry. So we have had discussions with organisations such as RAC in New South Wales—the Rail Access Corporation—and discussions with various operators about enhanced safety devices. We certainly support, in terms of the hours of work, the move from double-manned trains to driver-only operated trains and technology, and increasing the level of safety for the operator, the business and the community by the application of technology. It has not been an easy course.

CHAIR—Thank you very much, Mr Jowett. That has been excellent evidence. Sorry, Mr Barden, you did not get much of a go today, did you? But no doubt you were there if the data was required. I trust we can rely on you if we require any more evidence and that we can contact you in writing.

Mr Jowett—Of course.

CHAIR—This committee has great empathy with the rail industry in particular, as you know, with *Tracking Australia*. Thank you for your kind comments on that. Once again, thank you for giving us your help today. You will receive a copy of the *Hansard* proof in the next few weeks.

Mr Jowett—Chair, on behalf of the union, we thank you and other committee members very much for the opportunity to put the views of the union and its members.

CHAIR—Thank you.

[11.48 am]

WILLIAMSON, Dr Ann, Senior Lecturer, School of Psychology, University of New South Wales

CHAIR—I welcome you here today. I have to caution all witnesses that, although the committee does not require evidence to be taken on oath, committee hearings are legal proceedings of the parliament and warrant the same respect as the proceedings of the House itself. Any false or misleading evidence is a serious matter and may be considered a contempt of the parliament.

Do you have any comments to make on the capacity in which you appear?

Dr Williamson—I have just been seconded to the new New South Wales Injury Risk Management Research Centre and will be its acting director for the next six months.

CHAIR—Would you like to give us a five-minute overview of your submission, and then we might break into questions?

Dr Williamson—My submission is made together with Associate Professor Anne-Marie Feyrer. We worked together for about nine years at Worksafe Australia, or the National Occupational Health and Safety Commission, as it is now called. We first started working in the road transport industry nearly 10 years ago when Worksafe Australia was asked by the Federal Office of Road Safety to take a slightly different approach to the issue of fatigue management for the long-distance road transport industry. It had always been regarded as a road safety issue, but they realised that there were occupational health and safety issues to do with fatigue in transportation, particularly for truck drivers. Also, Worksafe had not really done much work at that time with the road transport industry; it certainly has now.

We started from a base of having very little knowledge about what was what in the system. The first thing we did was a large national survey of almost 1,000 truck drivers to try to get an idea of whether or not people viewed fatigue as a problem for them and for the industry, what they did about it, when they experienced fatigue, what sort of work/rest schedules they were working and so forth. In particular, we were interested in whether or not there were some ideas that were actually in practice that could have been useful for managing fatigue.

Our approach has always been an occupational health and safety one—that is, to try to manage the risk factors that are likely to induce fatigue in the transport industry—so we have always been interested in trying to manage work/rest schedules. The approach has always been to say, ‘The major problem for fatigue, certainly in road transport and probably right across the board, is the fact that people do long hours. The road transport industry has some of the longest hours, if not the longest hours, permitted to be worked of virtually any other occupational group and, as such, that is the major consideration.

I mention in the submission that there are factors to do with drivers themselves. We think those are important. Things like sleep apnoea and sleep disorders have been mentioned by quite a few people around the place. We think that those issues are clearly there, but

when you look at the issue in the road transport industry it is really all about long hours—long hours, continuous hours, 24-hour work and so on. That is really what the issue is about. So our approach has been to try to look for better ways of managing fatigue. We are not going to reduce it totally—it will always be a problem in the industry. Driving is not the kind of task that we human beings are very good at doing for long periods of time. We have to face the fact that monotonous tasks are not things that we do very well. As a result, we have to work out ways of organising work and rest that will maximise our ability to pay attention and to do the task best. So our approach has been to look at work/rest schedules.

In the original survey we did with the long-distance road transport industry, we first did a survey with the freight sector and then we did a similar survey with the passenger sector. From there we have done a number of evaluations of different ways of organising work and rest. We have sent you copies of all the reports that we have done and of a number of papers that we have produced for the scientific literature as well.

We have looked at things like staged or team driving. We have evaluated two-up—two drivers sharing the driving. Currently we are looking at more strategic approaches that have been used as part of the fatigue management program approach that the Queensland Department of Transport has been trying to implement. First of all, we have been trying to evaluate whether or not the current regulated regime is a good fatigue management tool. I think I sent you that report as well. We are putting the final touches to another report for FORS which looks at yet another regulated regime and also a pilot fatigue management program regime, an alternative compliance regime. That report, unfortunately, is not quite ready—it nearly is. We will send it to FORS and we will send you a copy as well, if you would like us to.

CHAIR—This business of there being issues of occupational health and safety—in other words, not just the road safety angle, as you say, but the effects on the drivers' families and so on—

Dr Williamson—Indeed.

CHAIR—That is one angle. The other one is a fatigue management program. But neither of them work with some sort of rigour. How should that rigour be imposed? Should it be imposed by some sort of prescriptive requirement on trucking companies that there be an occupational health and safety compliance regime, or should it be that, as part of their quality assurance, they have to develop a fatigue management program? Are you familiar with Nolans in Brisbane?

Dr Williamson—I certainly am.

CHAIR—Probably of all the witnesses we have heard so far, they come closest to the ideal that people have been talking about. How would you regulate? What rigours would you impose to make sure it happens? We just cannot go around floating theories. There has to be some way of applying those theories to transport.

Dr Williamson—I totally agree with you. Anne-Marie and I have never been of the view that removing all prescription would be a good idea. We have been among the people who

have said the problem with the regulated regime is that it is too prescriptive. Quite often—and drivers have told us this and we have got data that suggests this—the regulated regime has been a cause of fatigue for some drivers because people work to it, rather than within it, and it becomes a de facto minimum that people do. That is a problem in itself. On the one hand we have what the drivers are allowed to do according to the regulated regime. But, on the other hand, we also have the issue of their operational needs. For example, Sydney and Brisbane are 14 hours drive away from one another, or thereabouts, and we need to take that into account as well. The FMP or fatigue management program approach takes an approach whereby an operator says, ‘I have this operational need to be met. I need drivers to do that. I will work out a work/rest schedule that will both meet my operational needs but also manage fatigue for my drivers. I can then demonstrate that in almost a safety case approach where I will show you what I am going to do to manage fatigue.’

The issue for us and for the industry is the fact that we really do not know what good fatigue management is. The regulated regime is based on no good scientific evidence. It is something that we think is okay, it has been going for so long, but it is not based on scientific evidence as such. The difficulty there is to be able to say, ‘If we are going to change that, how do we change it, what dimensions do we change?’ We know what the risk factors are: night work, long working hours, loading and unloading as well as driving, and so on. We can try and minimise those, but how much do we need to minimise them? How long should a break be? If I do a particularly long trip, should I have a longer break? If I do a long trip at night, should I take an even longer break? These are serious issues that will limit our ability to go into alternative compliance modes. The sorts of approaches we have been trying to take are to develop models that the industry can use that have got evidence that demonstrates that they do manage fatigue.

I do not know if any of you have looked at our last report to FORS. In that report we showed that, for the company they were working with anyway, a 12- to 14-hour regulated regime seemed to be managing fatigue and performance capacity within limits that we would normally regard as safe. That was in drivers who were rested at the beginning. We have not looked at what happens with drivers who are not particularly rested. We did that study with drivers who had had at least 25 hours break before we started evaluating them. But over a 14-hour trip it seemed to be okay. Over a regulated seven-day regime, doing 14-hour days, it seemed to be okay. We think, though, that the seven-day approach was starting to push it: by the end of a working week, we were starting to see fatigue increasing and performance capacity starting to deteriorate as well. So when we look at alternative compliance we have to use as the baseline: can we make it better, or at least no worse, than what we are currently doing? Until we have good data that allows us to make those statements, I think we are stuck with the regulated regime.

CHAIR—Companies have appeared before us that have said that they have fatigue management programs. But we have discovered when we went out on the road to places like Guyra, Armidale and Kempsey that people gave us evidence that when a truck, for example, comes into Brisbane from Sydney, it might not just be the 14 hours drive. The driver might be hanging around for three or four hours before he unloads his vehicle. Even though some might consider it a form of passive work, nevertheless he cannot get rest.

Dr Williamson—No, indeed.

CHAIR—How do you manage those—

Dr Williamson—I think an alternative approach would be trip based, that is, organising work and rest schedules on the basis that you know what the trip is going to be like and factoring in things like the waiting period, the hanging around, the loading and the unloading and all those sorts of things. It needs to be done more on a case-by-case basis, we totally agree. But in order to do that we really still do need to know how we balance work and rest effectively.

The example I probably should use is that we attempted to do an FMP evaluation in a simulation mode—and that is in our last report—where we took a group of drivers from one of the big transport companies out of Wagga that we had actually worked with before and put them into a motel room where we got them to simulate driving doing a fatigue management alternative compliance regime on a particular trip, and it was Wagga to Brisbane and back. The idea was that they would have 60 hours to do it, starting off with a six-hour break at either end, and they would effectively have a 48-hour period to go from Wagga to Brisbane and back, and they would do it in the motel room. We could not do it on the road because it was illegal.

They did two 16-hour days and had two six-hour breaks in between, and when we looked at what happened to drivers' performance over that, we could demonstrate very clearly that fatigue increased, their ability to do simple reaction time tests and maintain concentration on a task that required them to look for infrequent signals—the sort of thing that you do all the time on the road when you are driving and you are waiting for something to happen—was impaired. The drivers' capacity to pick up that sort of information was significantly impaired by the end of the second day. And it was significantly impaired compared both to what they had been like at the beginning and what we would regard as a standard for alcohol performance based on a comparison with alcohol consumption of 0.05.

So we really had to say that, while it was done in a motel room, sure, and not out on the road, we could demonstrate that that sort of length of trip with only a six-hour break in between was just unsafe. It should not have been put on the road. We need evidence like that to be able to tell us because drivers and companies want to do 16-hour trips. Quite often there is a need to do them. Let us face it, there are probably drivers out there doing 16-hour trips right now. The issue there is probably not the 16 hourness, but the break in between. Six hours was simply not enough time for drivers to rest, recuperate and recover sufficiently to do another 16 hour trip on top of it. We know that. We now know that from doing that research and we can now feed that information back to the industry and say, 'Let us now go back to the drawing board but not right back to base.' We are now a bit further along and we can start, perhaps, to look at doing it a slightly different way but giving people, say, 10 hours break to see whether they can recover with that. The whole thing is about meeting operational needs at the same time as managing fatigue. We have to balance those two. That is what the whole issue is here.

Mr GIBBONS—Based on your research, do you think fatigue is more of a problem with the smaller road transport operators rather than the large ones? Is there a bigger difference?

Dr Williamson—I think it is not as big as we would have thought originally. There is all this anecdotal evidence that it is the cowboys out there, and they are often the owner drivers. Right from the very start our research did not suggest that.

Mr GIBBONS—So the problem exists all over.

Dr Williamson—It is right across the board, it really is. Some of the points that we made in our submission—things like payment systems—can work for a company and still be paid trip rates. We now have evidence—we have just done some analysis which we have not published or anything. We always thought that if you pay people more to do more work that they will do more work—it stands to reason. When we have gone back and done that analysis, some of our research demonstrates that that is so. There are all sorts of influences that are not specific to large or small companies—they are right across the board in the transport industry.

Mr GIBBONS—What would you be able to do to ensure that the drivers do not bargain away the time off and put themselves through these exhausting driving stints just to get the extra money? How do we fix that?

Dr Williamson—You just have to have limits. You must have limits on work and rest. It would be nice to have ultimate flexibility, but I do not think we can trust anyone in the system to do the right thing. Fatigue is where a person says, ‘I will be okay, or he will be okay.’ You cannot always count on that. You must have some limits.

CHAIR—What do you think of the systems now being trialled in northern New South Wales where, instead of basing the transport company in Sydney or Brisbane, base it in the country, have the driver drive into the capital city and then back to his home rather than driving to Brisbane and staying overnight in a barracks or motel? What is your view on that?

Dr Williamson—It has possibly got some real strengths. The valuation we did of stage driving—this is mostly overnight mail express—where drivers would start, one from Sydney and one from Melbourne, and they would go to Tarcutta, swap loads or trucks, depending on which company they worked for, and then go back to their original bases, was alleged to manage fatigue because people were working from home. We did performance and fatigue measurement as well as looking at drivers’ feelings about that sort of approach and they definitely felt that was better than having to go to Melbourne and stay in some horrible motel or barracks. That certainly is likely to have an effect on reducing fatigue.

Mr MOSSFIELD—I was interested to know what could be done to educate drivers to recognise fatigue? You are making the point there that you will be all right and go. There is possibly a problem in recognising in ourselves the stresses that we are under. Should there be a national education program to educate drivers, or how can we overcome that?

Dr Williamson—Certainly, knowledge is an essential. You must make sure that every driver is aware of fatigue as an issue. They need to be aware of their own body signs when things are getting too hard. We have always been of the view that drivers are pretty good indicators for themselves of when they are too tired. The issue is to then take that information about themselves and counterbalance that against the other needs that they have to meet,

such as, the boss is going to be really mad if they do not get the thing there, or the fact that if they can just keep going for another hour they will be home. It is very hard for just knowledge to be useful there. It is a prerequisite, certainly, for education and for making sure that that information is there, but it is not going to solve the problem though.

Mr MOSSFELD—Would there be any value in having a national standard or code of practice as a reference point for fatigue management initiatives? Would you support that approach?

Dr Williamson—A code of practice as a basic guidance or advisory document is always useful. I am mindful of the approach that the resident medical officers and the AMA have used. I am not sure whether you are aware of them. They are the other occupational group that really is faced with very long hours and being permitted to do very long hours. RMOs are very similar to truck drivers in the same way that they do a lot of waiting around. They have now appreciated that they cannot keep doing that and they have produced a code of practice which attempts to take a risk management approach. It attempts to get roster schedulers and doctors, themselves managers in the health industry, to look at what they are doing to RMOs in terms of the number of nights and the hours they work consecutively, what sorts of breaks they have, the amount of on call and so forth. They have a scoring system that they are using. It is not entirely problem free and you would not want to use only that but, as a rule of thumb, it is one approach that you can use to make people think a bit more deeply about all the implications of what they are doing for fatigue. It has got some real merit and it is something that could be used in the road transport industry—in fact, in any transport sector.

Mr MOSSFELD—On that question, what training is there for truck drivers to take on the responsibility of driving heavy transport? Is there a training program or anything like that?

Dr Williamson—It is not an area I know an awful lot about. To my knowledge, talking about fatigue, some companies certainly do have in-house education.

Mr MOSSFELD—But there are no regulations covering it?

Dr Williamson—Not to my knowledge, but I am not the best person to ask.

Mr MOSSFELD—Take the example of a very inexperienced driver who does not recognise fatigue being given the responsibility. Even though he would have the appropriate licence he would not have had the experience. A person with a lot of experience in the industry would recognise fatigue symptoms and take appropriate action.

Dr Williamson—I would probably say that it is not so much recognising fatigue but recognising the way of pacing themselves. You talk to some drivers who say, ‘I can go for an hour. I come out of home and I am rested. But if I do not take a break an hour or two hours after I first start, I am history. The rest of the trip is really miserable and I find it a big effort.’ I think that sort of realisation about the ways of organising it for yourself is something that comes with experience. Possibly it is not something you can educate people about except to say to people that there are lots of ways of doing it.

I am always a bit careful about talking about these issues. They help, but they are not getting rid of the major problem, which for the road transport industry is the fact that we are asking drivers to drive very long distances. You can help to make it easier for them through these sorts of techniques, but I think the real target is to try and give them more rest in amongst the work that they do.

Mr LINDSAY—How well do you think the research that you have done would fit other modes of transport?

Dr Williamson—I think quite well. The sorts of approaches we are taking are to look at fatigue as an entity and performance capacity. We have tried to develop techniques that will allow us to measure changes in driving capacity. We have not been very successful at it because the difficulty there is that, if you put something into the driving task, you may well interfere with it to begin with.

We have little palmtop computers. A driver will finish driving and be about to take a break. As soon as they turn off the truck, they do a reaction time task, what we call a Mackworth vigilance task, which is an extremely boring test. On the screen of the little palmtop, they have an array of 24 dots arranged like a clock face. The task for the driver is to simply watch a cursor jumping from one to the next. That jumps at about one per second. Roughly about once every minute the thing will do a double jump. All the driver has to do is press a button to say they have seen that happen.

With a driver of a train or a truck—and perhaps in a plane—in modes of transport where you are sitting and waiting for something to happen and you have to react quickly, this sort of task is quite a nice analogue of the sort of demand on the person. We test them at the end of a period of driving and then again after they have had a break, which is usually a sleep break. We look at the difference between the two. We do not test them too often. The information we get from that would be relevant to truck driving, rail and lots of different modes.

Mr LINDSAY—I am very interested in this little palmtop computer because that really is a way of measuring fatigue. Has the industry been struggling with finding a way to measure whether a person is fatigued?

Dr Williamson—Yes, the industry and the researchers.

Mr LINDSAY—Have you developed that test yourselves?

Dr Williamson—Yes, we have.

Mr LINDSAY—Is that leading the world?

Dr Williamson—I think we are one of the few groups that have done it. David Dinges's work has been quoted many times. He has also produced a test which is quite similar. We think ours has some strengths that his does not because researchers always do think that.

Mr LINDSAY—If, for example, the policing regulatory authorities wanted to check if a driver was fatigued, do you think your test could be demonstrated to be suitable to reliably check the fatigue of a driver? It is a portable thing. You can just pull somebody up like a random breath test. This would be a random fatigue test. Would it work?

Dr Williamson—It possibly could. We would need to do a lot more validation, to look at how it relates to actual performance on the road. We have validated it against alcohol consumption. Before we started using these tests, we did some laboratory studies where we took a group of drivers and non-professional drivers and put them through two regimes. They came in one day after they had been rested and were given varying doses of alcohol to put them up to 0.1 per cent blood alcohol level. We tested them five times in that period, including at baseline and after they had had alcohol, up to 0.025, 0.05 and so on. We developed a curve of performance change on a whole range of tests, not just the reaction time and that vigilance test. We can demonstrate that alcohol affects at 0.1, 0.05, and so forth. We know that now.

We also got the same drivers to stay awake for 28 hours. They would come in after they were rested at the same time of 8 o'clock in the morning. We would get them to start testing and we tested about every two hours. We have the same kind of plot of their performance. We are able to compare performance at various stages of wakefulness or sleeplessness against alcohol. Just as other people have found, we found that about 16 to 18 hours of sleep deprivation produces an effect which is similar to 0.05. But the important thing to say about the test is that we need to do some more validation of that sort to demonstrate that this is really a useful technique. It is certainly shaping up to be quite useful. It is quite sensitive to changes in different work rest schedules. We can demonstrate that now.

Mr LINDSAY—With your knowledge of this industry, do you think that the industry would accept the concept of random fatigue tests?

Dr Williamson—I am not too sure. I think we need to be very careful about the information we are presenting to them. If we are going to do that to them, we have to be very sure that we have a useful technique. We need to do a considerable amount of development work before we inflict something like that on them. But it is something that the drivers could use for themselves as a check to see whether or not they are managing their fatigue. It is not something that you even need to use as a regulatory phenomena, but you could use it as an advisory kind of thing for drivers.

Mr LINDSAY—You talked about a Queensland fatigue management program. Are you aware of any other fatigue management programs?

Dr Williamson—No, that is the main one.

Mr LINDSAY—I put to you that Queensland's fatigue management program only covers the actual time of the journey. Should a fatigue management program cover the whole event from when you start work to when you go home? Is that your view?

Dr Williamson—Absolutely. Our view has been that the prescriptive regimes to date have really targeted acute fatigue, which is a brief period. The build-up is as important. A lot

of our reports have kept saying that. That is one of the approaches that we are trying to use in these evaluations of alternative compliance and the regulated regime. It is not just looking at a single trip because you have to look at what happens over time.

Mr LINDSAY—In your research, have you seen problems with the different regulatory regimes across Australia and how they link into fatigue?

Dr Williamson—We have not looked at that directly. There is a possibility that we might look at regulated and non-regulated regimes in Australia. We have been talking to the National Road Transport Commission and so forth about doing something of that nature. We have not done actual direct comparisons.

Mr GIBBONS—You have just highlighted a few areas where research could be done. Where else do you see the research in this area going from now on, apart from the areas you have just mentioned?

Dr Williamson—The major thing is to try to learn more about what work rest factors are going to be important and most useful for managing fatigue and to try to give that information back to the industry. We can start looking at other issues like whether or not there are particular individual factors that might be important.

CHAIR—What about external factors? For example, at Guyra we saw plans for a new truck stop that had a swimming pool, refrigerated trucks parked away from the others so that there was not the noise problem, and banking facilities so that the guy paying his home repayment did not have the stress of having to get to Brisbane to make a home repayment. Do those externalities have an importance, as well as the direct rest things?

Dr Williamson—They are important, but if you are putting them on a scale of between one and 20, I would put them fairly low. They operate on the smaller issues. The major issue is the freight task. The real issue is to try to manage that best.

CHAIR—Mr McArthur, one of our committee members who is not present here today, was very interested in your submission where you dealt with two-up drivers. Could you give us a little bit on that, and the idea of team drivers in road transport? By way of preamble, we had evidence from the shadow minister in Brisbane that, if you were driving a road train in 34 degree temperatures, you cannot just pull up when you want to to have a snooze, you would lose your whole load of cattle.

Dr Williamson—That is right.

CHAIR—Could you say if there are any applications in fields like that?

Dr Williamson—We are very interested in two-up, sharing the driving. On the face of it, it seems like a good idea. One bloke drives and the other one sleeps. On our very first survey we asked a whole lot of questions about two-up and found that about half of the respondents in the survey, nearly 500 drivers, had actually had experience of two-up driving, but only a relatively small percentage of them said they would do it again. The reason was that if you do not trust the person you are driving with you are not going to sleep. That

came out over and over again. If you are not paired up with someone that you feel comfortable with, this could be a ride from hell.

With that as background, we did an evaluation with a number of companies in Western Australia where we looked at single drivers and two-up drivers going from Perth to Broome. We made some extremely interesting findings. The major one was that two-up really could be a facilitating approach, that is, drivers, when they got to Broome had a sleep, an overnight sleep typically, a long sleep, and then did two-up back to Perth. They arrived about as fresh as they had ever been in the whole trip. They showed no real build up of fatigue. With two-up you can actually manage fatigue. They drive for four hours and then sleep for—

CHAIR—How does that extend to a team? How would you have team drivers? Most of these trucks are designed for two at the maximum. If you had a third one, the third one would have to be sitting up, not sleeping.

Dr Williamson—Presumably, yes, unless you had someone located, on a trip from Perth to Broome, in Carnarvon or Port Hedland or in some of those places along the way. That is what is done in rail: you have people who live somewhere else do a short hop rather than a long hop. All of that would be entirely feasible.

The thing about two-up, and this has become very obvious to us, is that in Australia it is pushed too hard. When you look how many kilometres two-up drivers do compared to the rest, it is two, three, or four times the distance that anyone else does.

CHAIR—So it negates itself?

Dr Williamson—Exactly, yes, it negates itself. Whilst we think it has probably got some real strengths, the industry is not using it in a way that is really allowing it to show its real strengths.

CHAIR—We did have evidence too that the cabins of some of these trucks—although they have been improved dramatically of recent years—involved battling against extraneous sound? Is that your finding?

Dr Williamson—A lot of drivers talk about that being a problem.

CHAIR—The sound problem?

Dr Williamson—Yes. The companies that we worked with have actually done quite a lot of work on selecting the husband and wife team, the two drivers. One company in particular is doing a lot of work trying to make sure that they had compatible drivers. It was also looking at the sleeping arrangements and trying to make sure that that was as adequate as possible.

Mr MOSSFIELD—You say in your submission that it is important to allow drivers to take some responsibility for fatigue management but that to do so drivers need flexibility. You are suggesting that that flexibility is not there. Although companies say that they do

allow drivers to take a rest, anecdotal evidence suggests this does not happen. What sorts of regulations do you think we could introduce, if that is a solution, to ensure that this flexibility that drivers appear to need is there?

Dr Williamson—Again, you could do it if you regulate it on an operation by operation basis. You look at the freight task, you look at the job that has to be done, and then you manage within that. The issue with breaks is that not one size fits all. You can increase the flexibility within those sorts of limits.

CHAIR—You were talking about testing at Wagga. Did you do this under control conditions?

Dr Williamson—As far as one can, yes.

CHAIR—Are you suggesting it should be done on the road as well? If so, what sort of protection in law would you—

Dr Williamson—This is a big problem. A simulation is always a simulation; it is never the same. In retrospect, having gone through that, we were really glad that we had not done it on the road because we would have had very tired drivers by day two. Alternative compliance regimes that are not that different to the regulated regime clearly could be done on the road. It is a matter of judgment as to what risks you are taking, how far you push the envelope. Ostensibly, an alternative compliance regime that we are trialling needs to have at least some credibility for fatigue management. On the face of it we think it is going to work and so we should be able to at least try it. This is a major issue. We have laws out there and our testing cannot really contravene those if we are going to be law abiding.

CHAIR—We saw the Clybucca site recently. One of the things that surprised us was that the McCafferty's operation was actually a two-up driver but the second driver did a lot of passenger stewarding, I suppose you would say, and shifting of luggage and all that sort of thing. I suppose it gets back to this business of the quality of the sleep environment, doesn't it? Have you done any work on that?

Dr Williamson—It is always a factor we look at. It is one of the things that we always ask drivers after every sleep break.

CHAIR—But have you, as a researcher in this field, come up with some suggestions to the transport industry for improving those facilities?

Dr Williamson—We have not done so specifically. We have talked about it in general.

CHAIR—But don't you think that is an important area in fatigue?

Dr Williamson—Yes.

CHAIR—The deputy chairman just said to me, 'We know the problems, we study the theory, but we are not taking the step from theory to the practical.' Is there something in that?

Dr Williamson—I think so. But along with quality go things like the time when the sleep is taken and so forth. For example, day sleep will always be of poorer quality than night sleep. Our advice to the industry has always been night rest where possible. If you look at what drivers try to do, they try to avoid driving between midnight and dawn, and that is the period that is hardest to negotiate.

CHAIR—Coming back to this idea of getting the theory into practice, we had some of these testing mechanisms—your mechanism, Professor Dawson's, and there are various other ones. What is your view of these being included in booze buses? I do not mean it in a draconian way, but what if a police officer had the right to issue you with a caution or with a statement requiring you not to drive for the next six hours and if you breach that then you would become liable for some more severe penalty. What is your view on that?

Dr Williamson—It is a system that could work, I guess. Given that people sometimes need a helping hand to make the decision to stop, it may work from that point of view. It is certainly an option that could be looked at, but we would need to look at it fairly carefully.

CHAIR—We have no further questions. Thank you for your evidence, Dr Williamson. We trust that we can come back to you. On this business of the theory and the practice, that is the dilemma we are going to have in this report. Would you like to come back to the committee with a one-pager on the 10 things you would do, or the eight things you would do—

Dr Williamson—Sure.

CHAIR—Would you give the committee your eight preferred options, in order of priority, to tackle this problem? I do not mean the way out stuff, I mean a practical way of translating your theory into practice.

Dr Williamson—Yes, the things that would make a difference. We can do that, for sure. We would be delighted.

CHAIR—On that note, thanks for your evidence. You will receive a copy of the *Hansard* draft.

Proceedings suspended from 12.31 p.m. to 1.38 p.m.

GRANT, Mr Colin, Principal Consultant, BHP Transport

McCABE, Mr Tom, Manager National Road Development, BHP Transport

CHAIR—I have to caution that, while you are not required to give evidence under oath, the committee hearings are legal proceedings of the parliament and warrant the same respect as those attending to the House itself. Any false or misleading evidence is considered a serious matter and may be regarded as a contempt of the parliament.

Mr McCabe—My role and position in the company is a stewardship role over the road operations across Australia for BHP Transport. Some of the responsibilities are policy standards, safety and management of interstate road contracts. I have only been with them since 1991. Prior to that I was in the external transport industry for over 20 years. My introduction to the transport industry was as a driver for a company and I moved through the ranks of management into the marketing and operational areas.

Mr Grant—I am appearing before the committee in the capacity of project manager for a particular initiative that we are involved with in the area of fatigue management.

CHAIR—Mr McCabe, could you give us a five-minute overview of your submission and then we might break into questions and answers.

Mr McCabe—With your permission, I will give a bit of an overview of the points of the information we provided to you and also maybe touch on some of the issues that have challenged us during the period we have been working on this project. We consider our FMP logistics management model as a very important component of our safety initiatives in BHP. We have a number of safety initiatives—for example, load restraint, driver induction and all those sorts of things that we work through. The FMP model has been very intense for us. We started off in about 1996 and had to work through the levels of trying to get it into position and develop it. I might touch on some of the issues as we go along.

Our model is a bit unique. It is different to the other models that are in vogue at the moment. There are a couple of carriers trialling some FMP models. I think you touched on Nolans earlier, and a number of others under the phase 1 and phase 2 project. Basically that model only addresses from the trucks being loaded to them being unloaded at the customer.

In our model we recognised that the consigner, such as ourselves—and we are also a customer—and the end customer can impact on the level of the fatigue of a driver. They may not know that, and that is part of the issue, but they can impact through the way they operate. So we decided to take this step a bit further and address the potential impacts that a consigner and customer can make, and address the whole issue of the total supply chain.

We have involved all the stakeholders in this process, for example, the regulating authorities, such as Queensland Transport and the New South Wales Roads and Traffic Authority; the Australian Trucking Association, as an industry representative; BHP management and staff—that is loading and dispatch staff; major transport suppliers and their managers, drivers, subcontractors and dispatch people; and, of course, our customers and the

receivers of the end product. We have been working with them for quite a while now and we certainly have a good response from them.

However, there were some issues that we did experience. There is certainly a lack of recognition by many parts of the supply chain of the impact that they can have on driver fatigue. They just did not know. They did not realise the impact they have. That was brought home to us when we had our first workshop. We had the whole supply chain in this workshop and a truck driver started talking about their problems and loading issues. Then a loader started talking about the loading issues they had and a customer spoke about their issues. That communication certainly highlighted the different issues and made people understand that they can make a difference. That is part of the reason we started this project.

One of the other issues were the gaps in communication and that lack of understanding between the customer, consigner and driver. Another one is a lack of awareness of the emerging chain of responsibility legislation. Customers in particular do not realise what their obligations and responsibilities are. They are too tied up in running their business. They have to understand a bit more about what those responsibilities are and maybe the chain of responsibility legislation is not being promoted as well as it could.

There are certainly some gaps in agreement between the different states as far as the uniform road regulation is concerned. That has certainly created some challenges for us, because certain states had different views in these fatigue management models of what their expectation was. Another major one which was highlighted was the distinct lack of quality rest areas for trucks on the highways, the number and distance between the rest areas and rest stops, the access for B-doubles and all sorts of vehicles, and the type and quality of the facilities, such as shade and toilet facilities. Rest areas out in the Nullarbor are just a bit of dirt along the road and the trucks pull up there. There is no shade, no toilets and so on. This certainly leads to issues with fatigue because drivers sometimes are forced to drive further to make the rest area. That has some implications in itself.

The prescriptive standard logbook regulation is still a problem in itself. It does not address fatigue in any way. It sets down prescribed regulations and standards but it does not look at quality rest, rostering periods and all those other issues. It is not taken strongly in the industry either and we all know the issues with logbooks and what can be done with them. It does not address driver fatigue in any way.

The light at the end of the tunnel is certainly this alternative compliance regulation where transport operators—the good ones who can prove they are responsible—can have the opportunity to come up with certain proposals in managing the fatigue of their drivers. It allows them a bit more flexibility in the way they operate their business which is commercially sound, but more importantly it allows them to actually manage their drivers' fatigue and ensure they get quality rest. That is very important. I might just finish on that note.

CHAIR—You have thrown a few grenades in there. It is good to hear people being frank. Your general view is that the logbooks are not effective?

Mr McCabe—No doubt. That is my personal view based on my previous history.

CHAIR—We have heard a lot of that from truck drivers, but not a lot of it from management, which is interesting.

Mr McCabe—Coming from a truck driving background, I can understand that.

CHAIR—Also you feel pull-over areas and rest areas are fairly deficient?

Mr McCabe—They are, particularly in the Sydney to Brisbane corridor. The Melbourne corridor is a bit better. There is quite a distance between Sydney and Brisbane. We deal with operators that have line haul drivers and operators that have stage drivers who are trying to address all those issues. There needs to be some decent rest areas. By 'decent', I mean that they need to be big enough and easily accessible, and they need to be the right distance between each place.

CHAIR—Do they all have to be those highly developed truck stop service stations or can they be of various types?

Mr McCabe—No.

CHAIR—Would you like to describe what would be effective?

Mr McCabe—What would be effective is an area that is shady for the summer time with water and toilet facilities available, and the area to actually park the equipment. That would be sufficient.

CHAIR—Are most of your drivers directly employed or are they owner drivers or subcontractors?

Mr McCabe—We employ some of the major road transport operators and we also employ subcontractors directly in our local operations. They actually work for us. The major operators have subcontractors working for them and company drivers.

CHAIR—But you do not have any trucks as such?

Mr McCabe—We have just moved into the company truck fleet and we own 100 of our own trailers and we use tow operators to tow them. We have about a dozen of our own company trucks that actually work in local operations.

CHAIR—I take it from your evidence that you favour a properly structured fatigue management program, as distinct from the regulatory approach?

Mr McCabe—Yes.

CHAIR—How do you stop that being abused? We had evidence from drivers along the way at truck stops—or ones that we have called at—that special fatigue management arrangements are put in place with companies in a lot of these Australian workplace agreements and the like to give drivers some sort of reasonable rest, but provisions are in there that can be extended in special circumstances. What we are being told is that that is

being extended as a regular thing rather than as the exception. What is your experience of that?

Mr McCabe—The transport industry particularly in the last five or 10 years has got much more professional about what they are doing, partly because they are driven that way by the community and partly because they are starting to take responsibility for their actions. There will always be a need under these alternative compliance schemes to have a good auditing system so that those companies know that they will be audited if they are not doing the right thing. There is always that minority in the industry where you need some prescription, because there are always some in the industry that will take short cuts. If they do, they need to be penalised for that. That will make it a much more level playing field for the good operators.

CHAIR—I was not thinking so much of penalties, but if we want to recommend to the government that there be less regulatory control for example—and I am not saying that that is what the committee has decided, but let us say that was an option for us—and we recommend the scrapping of logbooks or that all states should have a uniform type of fatigue management program, what is implicit in that is that it is not just an excuse to abuse hours in another way and make special arrangements the order of the day. What safeguards could be put in place? Auditing would not achieve that. Would it be perhaps that companies like yourselves who had a fatigue management program would have that linked to your quality assurance and, if you did not measure up, you would lose your whole quality assurance rating?

Mr McCabe—I totally agree. In fact, ourselves, our suppliers who are participating in this trial and our customers are linking that FMP program into their quality assurance.

CHAIR—They are linking it already?

Mr McCabe—Yes. It will all be part of our quality assurance. Again, that needs to be done. The base is that there have to be some ground rules.

CHAIR—Some would not agree to that.

Mr McCabe—Probably not. I am sure that somewhere there has to be some ground rules, providing they are flexible and realistic. Then you have a good auditing system and even an onroad auditing system to ensure the operators are doing the right thing. They are rewarded for doing that by being allowed to stay in the industry. That is one of them. That is what needs to be done. It needs to be audited. There is no doubt.

Mr MOSSFIELD—What we have been told in the inquiry is that there are many good fatigue management schemes around. Everyone would recognise the value of them. It seems to break down with the driver in two aspects: firstly, he may not recognise that he is under fatigue pressure; and, secondly, the commercial considerations, the requirement of his own employer to meet certain timetables. Have you got any suggestions as to how we could get the drivers to be more responsive, both on a personal basis and on a commercial basis, to problems relating to fatigue?

Mr Grant—I will refer to those parts of the pilot which refer to these aspects. One of the components targets again the responsibility of customers and suppliers to assist in the management of fatigue in the area of their due diligence. One of the areas you will see referred to as a standard is that a supplier or a customer has a due diligence, or a requirement, that if they have a truck driver arrive at their premises—either to pick up or deliver products—and they identify that driver as showing obvious symptoms of fatigue, they have a requirement that they should notify the transport operator whose responsibility it is to manage the driver. That is one way. It does not fully answer your question in total, but that is one way.

Mr McCabe—Just adding to that, we do have a suggested checklist for our loaders or the customer's loaders and receivers to use to evaluate whether a driver is fatigued or not. We have to understand they are not medical people and I am not a medical person but there are some obvious signs that a driver may be fatigued, such as red eyes, dropping things, not having his mind on the job, being angry—a number of those things. We put together a checklist in this program for people to use. We have taken into account the privacy issues and so on. We have suggested to receivers and loaders that if they have got a feeling that there is a problem with fatigue they should contact the appropriate management people that manage the driver and just mention that issue to have something done about it, just to be sure that the driver is not fatigued.

Mr MOSSFIELD—You also mentioned driver induction, which is the first time we heard any suggestion that there was some training for drivers. In that type of program, is there any mention of fatigue?

Mr McCabe—Yes, fatigue management. In fact, part of management in different parts of the model will need to have some fatigue management training. Certainly the loaders, the allocators and schedulers will, as well as the drivers and contractors. So there is appropriate training to be applied.

Mr Grant—In addition, that is audited. It is proposed that that be audited to ensure that that training is conducted.

Mr MOSSFIELD—Thanks. That covers that point.

Mr GIBBONS—You refer to the pilot program. How cooperative have the drivers been? Were they pleased to be involved in it? Was there some resentment? Do they see that further down the track it might impact on their ability to earn money?

Mr McCabe—No. They were a bit bemused, I guess, when we started because it was new and it is something that we as their customer were trying to promote which they found surprising and quite refreshing, I should say, once they understood what we were about. We did some surveys with them when we first started and we got some ideas from them. We involved them in the process; they were very positive about it.

Mr GIBBONS—You also have a huge operation overseas. Has it been implemented in your overseas operations as well? How has that been received?

Mr McCabe—No, it has not been at this stage. The one we are doing now is on the Melbourne-Port Kembla and Port Kembla-Brisbane corridors and that will be the template. We are going to trial it for 12 months to be sure that we are going to have the right outcomes. People like the Queensland transport department, New South Wales road transport and what is now called the Australian Trucking Association and New South Wales Road and Traffic Authority are actually on a committee on our FMP group to monitor how the program goes. If it meets the outcomes that we really expect and are confident that it will meet, we as a company want to roll out that sort of thing into our business elsewhere. It will be a step-by-step process. This is only the beginning.

CHAIR—You surprise me a little because the evidence we are getting from drivers in northern New South Wales is that they get very little cooperation from New South Wales police with regard to those drivers who were doing the Queensland fatigue management program. In fact, some of the policemen that we spoke to were not able to differentiate between their regime and the Queensland one and did not want to know about it, so to speak. Yet you say the New South Wales road authorities are actively cooperating with you on your program?

Mr McCabe—Yes, they have been involved all along.

CHAIR—That is very interesting.

Mr McCabe—There are still some issues that they have in the political fields and the difference between states and so on, which they are working through. But they have been very supportive of our program I think because we have involved them basically from day one.

CHAIR—Have they exempted you from logbooks?

Mr McCabe—No, not at the moment. Just to explain the model: the consignor, or ourselves as a consignor of product is one part of the model, the carrier is the other and the end customer is the other. The consignor and end customer do not need ministerial approval to go ahead with these procedures we are doing because it is not affecting the way drivers actually drive on the road. The carrier component has to have ministerial approval under the fatigue management alternative compliance legislation.

The operators who were using that have put their proposal to the FMP group to get that approved. Once that is approved, they will be monitored by the regulatory authorities on that part of it. Then they will be able to drive with diaries rather than logbooks, as in the FMP phase 1 and phase 2 trial, so they do not use logbooks. They use a diary. There is on-road supervision of that under the scope of that legislation and so on. They will operate under that.

Mr GIBBONS—Your area of responsibility is predominantly road and rail and nothing to do with the seafarers or bulk cargo carriers?

Mr McCabe—No, It is not. I am part of a company that is a big user of the sea industry and the biggest part of our industry is sea. No, I am purely road and then I have a colleague who is in rail and another colleague who is in the marine side.

Mr GIBBONS—Do you have any fatigue management program for the marine side of it or do you contract out to shipping companies that move your product?

Mr McCabe—There is a bit of a mix. But I would like to take that on notice if I could and respond to that, because I do not really know. I do know that we do adhere to all the OH&S responsibilities we have but I am not too sure. If I could, I am quite happy to respond to that in writing.

Mr GIBBONS—Yes, certainly.

Mr LINDSAY—Just taking up that point about shipping and rail. There was earlier evidence today that a lot of the issues are just common across the whole thing. Why have you not made them common in your own company? Is there some reason for that?

Mr McCabe—I guess we recognised that there was an urgent issue within the road part of the business. Colin and I, being the instigators of this program, were concentrating on road and we have not moved on to those other parts of the business. Quite frankly, we had not considered it.

Mr Grant—At this stage, we are trying to develop a template to be a model that we believe is practical and really will impact on fatigue management. Once we believe that model can work, the breadth of the application would then be considered and potentially it can be extremely widely applicable, but we just have not considered it. As Mr McCabe said, we focused on where the highest risk and greatest problem are in our business at the moment and that is where we have put our efforts.

Mr McCabe—We have a contract with National Rail as well and they provide our rail facilities. The only rail areas we do have are internal in our mills, so it is not an issue there. Our rail movement is done by National Rail.

Mr LINDSAY—In this program that you are developing, have you also considered the issue of stress as it relates to fatigue?

Mr McCabe—Not directly.

Mr Grant—From work with the team that we have been working with, our understanding is that stress is one of those factors that exacerbate fatigue. In other words, a person can be fatigued without stress but, given stress, their level of fatigue can be increased. It could be argued, for example, that driving a truck along a highway is a less stressful exercise than driving a truck through inner suburban Sydney or Melbourne. Therefore, there may be evidence that suggests the level of fatigue is higher because of the level of stress. I think that is where we put the connection between stress and fatigue.

Mr LINDSAY—An earlier witness today linked the implementation of national competition policy to fatigue in the industry. Has your company had any experience with that?

Mr McCabe—Again, not as I understand it. I do not know whether Colin has any experience of that.

Mr Grant—My only comment is that, if you notice one of the outcomes in the objectives of this particular pilot program, it not only seeks to manage fatigue better but also seeks to give a better business outcome. That is the one comment so far—if you have fewer queues and delays, if you have equipment that loads and unloads when it is supposed to—you can run through a whole list of things—there is less stress and less fatigue. They are just good business practices.

Mr LINDSAY—Just flipping across to that, which I was going to come to, in terms of the goals that you have suggested in a document that you have provided to us, is there any significance in the fact that the last goal is business outcomes? Does that indicate the order of priority of your goals?

Mr McCabe—Yes, I could answer that. Certainly, safety is our priority and it is driven by our senior management. We are measured by it. Our career and remuneration are measured by safety as number one, and then all the other things come after that. They are all an important part of it, but safety is driven as number one priority.

Mr LINDSAY—Just before I ask you the next question, I would just indicate this to you: BHP is not under a cloud here, or under questioning, or whatever, but I just feed back to you that I am aware of another area of BHP—it is a mine, in fact—where safety is such an important priority that the staff complain that it goes to ridiculous ends. In this area here, are you detecting from where you have been already that that might be a concern among your staff, that you might be going just a bit overboard?

Mr McCabe—I would not say it is a concern, but it has been highlighted, and in particular it has been highlighted by our providers of transport services—their drivers, their subcontractors. We are driving safety in a number of areas. I mentioned load restraint and a number of other areas. They believe we do go overboard in that area. They do believe that, but they understand that, if they are going to work for us, that is the parameters that we work within.

Mr LINDSAY—I just want you to understand that I certainly really appreciate the evidence that you are giving and what your company is doing, and in no way is what I am saying to you in any way disparaging of BHP. In this process that you are going through, are you getting union support or union opposition?

Mr McCabe—In the trial itself and the model we are working on, we have involved the union—contacted them and involved them—and they have given their support. They have not had that much input into it, and that is not their fault, but this probably has not been a requirement because there have not been any issues industrially. But they have certainly supported the model.

Mr LINDSAY—How have Queensland been, given that their FMP program only recognises the actual physical transport component element? How have they responded to what you are looking at?

Mr McCabe—Very supportive. They have given us every opportunity to keep them involved. We have been involved in their fatigue management project committees, presenting to them, as we go, on our progress. They have given us every kind of support. One of the Queensland transport personnel is on our committee and attends our meetings. Yes, they are 100 per cent behind it.

Mr LINDSAY—Among the members of your committee or your group, Queensland Transport are there. Why is it that other states are not represented, or are you not dealing in other states?

Mr McCabe—I guess that was generated from the Queensland Transport FMP project team committee, and it was encouraged that those two members join with us, because they are the two members that we are mostly working with on this project. VicRoads have been in attendance and so on. Now, all these groups tend to support it anyway.

Mr Grant—We have had specific meetings with the state coroner in Victoria, the VRTA, the TWU and WorkCover from the different states, and the NOHSC has been in; and their active support, to the extent that they are able to give it in their capacities, is there. They do believe that this is a potential for a significant initiative.

Mr LINDSAY—You have said today that states have a range of views on the regulatory issues associated with this. Is that a minefield for you? Where do they differ, and where do you think that they should be more together?

Mr McCabe—I guess initially it is getting some decisions back in the early days about the uniform road regulations, getting some agreement on it. I know with some of those regulations, and I guess it is not only fatigue but some of the other areas, there tend to be some different views and different regulatory authorities. As far as the fatigue management program is concerned, just getting the agreement from the states on the FMP program initially took quite a while; we lost about 12 months waiting for those decisions to be resolved so we could move forward with our project. We were working behind the scenes on it, but we could not go forward until those groups agreed on the format for the FMP programs.

Mr LINDSAY—You mentioned the issue of rest areas and the quality of the rest areas. We have had a fair bit of evidence to say that it is desirable to have good quality rest areas. My own experience has been that I do not think I have ever seen a truck stop in a rest area. I could be quite wrong. Do trucks really stop or do trucks really want to just keep going? How important really are rest areas?

Mr McCabe—From our survey—and we have put out about 400 in a survey amongst drivers—the rest area issue was fairly important.

Mr LINDSAY—And the quality of the rest area.

Mr McCabe—And the quality of the rest area, because some of them acknowledge there are rest areas available but they are just strips of road: there is no shade in the summer, no water or toilet facilities.

CHAIR—Is there any chance of getting that survey or some sections of it?

Mr McCabe—I think we should have a record.

CHAIR—If parts of it are confidential, could we have some sections of it?

Mr McCabe—I do not think there is.

CHAIR—It would be interesting. Professor Dinges said that he believed that America was 24,000 truck stops short, and if you extrapolate that to Australia, with about a tenth of the population, we could be 2,500 short if it transfers in that way.

Mr LINDSAY—I have come to the end of my questions.

CHAIR—Just a couple of questions. One of the things we have heard from drivers is that, although some major companies do not technically breach their hours, they do that in a de facto way by putting them into situations where they are queuing for long periods, having to wait for loads and having to wait to unload, and so on. What have you done in your company to ameliorate that problem? Have you got a quality control in that aspect of your operation?

Mr McCabe—This is part of this FMP program, and we have already achieved some progress in that area. I could mention one of our divisions within Port Kembla, where delays were 120 to 130 minutes in getting loads. Once we have the FMP program going, and we have these people communicating—the dispatchers, the drivers, and the management—we now have that loading period down to 60 minutes. In part of our procedures, the consignor has to arrange for areas where a truck can park, and not lose his spot in his line, in the queue, and be called up when he is ready to be loaded. So he can go and have some quality rest. He can go and park his truck. He has a sleeper box and he can have a sleep. A dispatch person will come over and knock on his door and tell him he is ready to go. So he is not sitting in a line moving up every 10 minutes. That is some of the progress we have already made in that area.

The other one that was a big issue was tarping. Some drivers take longer than others to tarp a product before it comes out of the shed. One of the divisions changed its policy so that, if it is not raining, the truck can move out of the shed and move to a tarping area and tarp up. That resolved a lot of issues. Certainly part of these procedures address all of that—queuing, delays, availability of unloading equipment and availability of product. Sometimes you can send a truck to pick up product and they cannot find the product. We have addressed all those issues.

CHAIR—Do all your drivers do their own loading?

Mr McCabe—No.

CHAIR—Because you said you have a fleet of trailers as well.

Mr McCabe—Yes.

CHAIR—Are they pre-loaded?

Mr McCabe—No, they go up and get loaded.

CHAIR—The trailers themselves.

Mr McCabe—The local operations such as Brisbane and Melbourne are pre-loaded, but the interstate loading operations are not. They just go up for the trailer and wait to get a load. But there are loading people who actually use forklifts and cranes, load the product onto the truck, and then the driver just tarps and away he goes. They do not actually load manually themselves in any way.

CHAIR—You have done work with Professor Drew Dawson?

Mr McCabe—I have not. Colin, have you?

Mr Grant—No. We have worked with Dr Anne-Marie Feyer and Dr Ann Williamson.

CHAIR—I see. So are you aware of the work that has been done at the Adelaide Centre for Sleep Research?

Mr McCabe—No.

Mr Grant—No.

CHAIR—You have not used their computer programming in your rostering?

Mr McCabe—No.

CHAIR—Are there any other questions?

Mr MOSSFIELD—Could you answer this. What percentage of road accidents that your company is involved in could be related to fatigue? Do you have records of that?

Mr McCabe—Yes, we would. We travel 80 million load kilometres per annum. We use over 600 trucks on a given day. By 'we', I am talking about our contractors, because we treat them as our fleet, and we do measure the accident rates and so on. I think in the last four years we have had three—I could be corrected on that; I think it was three—accidents that were single-vehicle accidents. I will just do a bit of an explanation of what BHP does. If they are a contractor, even if it is a major company that has a contractor working for them, if they have an accident, they have got to do a full accident investigation based on our criteria. We want to know where it happened, why it happened, and all the facts—even going back into the detail of what the driver did the day before and two days before. They have got to prove to us that the driver was within the hours.

Out of those three accidents, all the drivers were within the hours, as per the evidence we have got. Two of the accidents were due to other reasons; one driver particularly, we felt, might have had a heart attack or something. In relation to the one we thought might have been fatigue related, it was never proved. He had left Newcastle and he had had six hours break there; he had a full night's sleep the night before. It was a Monday, and he had had the weekend off. He was 20 minutes from home, and for some reason or other he ran off the road. There was an indication that maybe he was on the telephone, but it was never proven. He had all the rest and all the right criteria there, but there are areas where someone could doze off just the same. We reached our conclusion that it could have been fatigue related—could have been, though we have never proved it.

Mr MOSSFIELD—So your record shows very, very few actually related to fatigue issues?

Mr McCabe—Single-vehicle accidents, yes.

Mr MOSSFIELD—Comparing the effects of the pilot program with what has happened previously, it is not really relevant because your total record, from what you have told us, is fairly good as far as fatigue goes.

Mr McCabe—It is going to be difficult to measure.

Mr GIBBONS—Do you have a policy on two-up drivers?

Mr McCabe—It is not a policy on two-up drivers, but whenever we let a contract our preferred supplier has got to prove to us that they have got a fatigue management program in place and they have got other programs in place to look after the other legal requirements, such as weight and so on. They have got to prove to us that they are meeting those requirements.

I do not think we have got an operation with two-up drivers. We have got operations where we have line haul drivers, for example, to Brisbane. The local driver does all the loading, unloading and delivery. The line haul driver delivers down to Sydney and a Sydney driver does all the local loading and unloading. We have tested that many times to make sure that the right amount of sleep was had in all cases and so on. On our Melbourne run, they actually do stage driving; they run from Port Kembla to Gundagai, and the Victorian driver comes up to Gundagai and they swap and come home. So there is no two-up there. We have not got any policy on it, but we have got a policy overall as part of our conditions of employment. All the fatigue related issues are covered.

CHAIR—When you say you have this policy as part of your quality assurance program and so on, is it purely because you are looking for efficiency and professional format for your company, or have you got an eye to the future? Perhaps where there are accidents, and where trucks have been driven in your name, there may be a chain of responsibility provision. What is the dominant motivation in your policy of wanting fatigue management programs from the companies that you engage?

Mr McCabe—The dominant motivation is safety, there is no doubt. We have got a bit of history. We were doing a lot of this stuff before the chain of responsibility legislation was mooted, going back to 1993 and 1991. Again, we have reviews with our contractors and so on on all these issues. There is no doubt the chain of responsibility has lifted the level, but predominantly it is a safety point of view, and we are not allowed to operate unsafely. That is part of my responsibility as far as roads are concerned—to try and address all those issues. We have still got some work to do, but we are getting well along the way, and this is part of it—the FMP program.

CHAIR—Thanks, Mr McCabe and Mr Grant. That has been very interesting and helpful. You will come back to us with a brief format—we do not want pages of it—of your road, rail and maritime policies in regard to fatigue management just so that we can include them overall in the report. If your colleagues wish to appear personally, if they contact the secretariat, we will try to fit them in down in Canberra one day, possibly together.

Mr McCabe—Okay.

CHAIR—You will receive a copy of the *Hansard* draft of this afternoon's activities.

[2.20 p.m.]

HEILER, Ms Kathryn Joan, Research Fellow, Australian Centre for Industrial Relations Research and Training

CHAIR—Before commencing, I have to caution you that, while you are not required by the committee to give evidence under oath, committee hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. The giving of false or misleading evidence is a serious matter and may be regarded as a contempt of the parliament. I also ask that at the end of your evidence, if you have used any proper names or quotations, you defer to the *Hansard* reporters for the accuracy of the record. Could you tell us the capacity in which you appear before the committee.

Ms Heiler—I am a senior researcher with ACIRRT, based at the University of Sydney. I have been a research fellow there for just over six years and have been examining the issue of changes in working hours and changes in enterprise certified non-union agreements over that time. Over the last three or four years I have focused very heavily on shiftwork assessment, primarily in the mining industry but across a range of other industries as well. ACIRRT holds one of the most comprehensive databases on union and non-union certified agreements and, more recently, Australian workplace agreements. I have worked with both Drew Dawson and Meredith Wallace.

CHAIR—Would you like to give us a five-minute overview of your submission?

Ms Heiler—Sure. I have come along today really in the hope that you will ask me lots of questions rather than me talking to you.

CHAIR—You can be shorter than five minutes if you like.

Ms Heiler—I am here to say that ACIRRT would like to raise a number of concerns about the fragility of our regulatory and industrial relations system in terms of its capacity to regulate hours of work. We are losing the tools. We are seeing provisions in both awards and agreements being eroded and dismantled, and that is likely to have implications, from what we have seen, in terms of trends in working hours and agreements in terms of lengthening of working hours and other impacts on working time conditions. Secondly, common standards around working hours—in road transport and other areas of transport but across other industries more generally—are very important for a range of reasons that I would like to outline in a moment. Thirdly, the focus of fatigue management, whilst it is to be commended, is of concern to us in a range of ways. That is because it primarily focuses on individual behaviour, we think to the exclusion of a range of other issues that need to be addressed with respect to the prevention of fatigue rather than just the management of fatigue. We are concerned that recent trends that are focused on fitness for work and other kinds of fatigue monitoring place unfair emphasis on the behaviour of individuals rather than looking at perhaps the structure of industries and the kinds of competitive pressures that are on both employees and employers.

What I would like to focus on for a moment is that we are seeing many trends in enterprise agreements—union and non-union agreements, and, more recently, individual

agreements—that are dismantling many of the protective award conditions that Australia has built up. As you know, Australia relies primarily on detailed provisions and awards to place some kind of control over excessive hours of work and to provide compensation for antisocial hours of work. If we dismantle or weaken those provisions, then what we are likely to see is what we have been seeing in more recent times, and that is both a lengthening of hours for people who are working full time and a reduction in compensation for employees. As you put pressure on the value of wages, you are, in a de facto sense, placing pressure on an increase in hours of work.

The reason why some kind of enforceable standards rather than standards that are not enforceable is very important is that it tends to act to stop unfair competition between employers—we see a great deal of evidence of that in the road transport industry, particularly around subcontractors and owner drivers—and also competition between employees who may be willing to accept contracts that then lock them into dangerous and excessive working hours. Secondly, it is an attack on the value of wages. As I said, if we see the value of wages decrease, then there is pressure on employees to work longer hours merely to sustain a living wage. Thirdly, it leads to compromised family life, and we do a great deal of research looking at the impact of extended and irregular hours on family life. There is also nascent but strong evidence that there is a relationship between workplace safety behaviours and detrimental impact on family life.

There is a broader concern that we should have as a community about the impact extended and irregular hours of work are having on our community and social structures that we depend upon—in a longer term but also in rural communities, for example. I will just finish there and leave it open to you to ask some questions if you like.

CHAIR—A number of witnesses have said to us that they believe that fatigue management programs are a better substitute for regulation. That is not your experience?

Ms Heiler—They should be seen as a complement rather than as being mutually exclusive. There is a tendency to say that we either have a regulatory system or we have voluntary fatigue management. ACIRRT is of the belief that in fact the two systems can work together very well. That is because large companies with resources, with strong occupational health and safety records, have the capacity to voluntarily put in place fatigue management models and systems that are likely to be effective.

At the lower end of the market, where you have owner-drivers and where you have smaller companies that are really competing for contracts, with very small margins, it is very difficult for them to voluntarily comply, because they are fighting for survival. It is a very competitive financial market. I really think—and people like Gunningham would argue this as well—that you need a variety of different strategies. There is no one strategy that is going to cover all of the different parties. There are really different segments within these industries that will respond in different ways to different kinds of strategies.

I do not see the two strategies as mutually exclusive at all. Some companies will respond and will comply with voluntary fatigue management plans, although I still think that there needs to be a regulatory framework within which that operates, setting some standards and some limits that are enforceable. At the lower end, occupational health and safety records in

small companies are well known. It is difficult for them to comply when they are pushed to the wall financially, and I think there will have to be some other kinds of incentives and disincentives for them to operate safely.

CHAIR—What do you think of the idea of linking fatigue management programs to a company's quality assurance eligibility?

Ms Heiler—So long as there is stringent external auditing of that level of compliance I think that that will work partially. But hours of work are a funny thing, and we found that they are very susceptible to bargaining down. In other words, if you take away some kind of standard that underpins them, they are very similar to wages. Just as you get fragmented bargaining around wages, it will push wages down unless there is a floor. Hours of work operate very similarly to that because there is a cost advantage to increasing hours of work without having to increase compensation—if you can get away with it.

CHAIR—And your experience is that that is occurring?

Ms Heiler—Our experience is very strongly that, when we look at hours of work data over the last 20 years in this country, we see a very strong structural rather than cyclical change in hours of work. In other words, what we know is that if you are working full time in this country you are far more likely to be working in excess of 40 hours a week.

CHAIR—So you are saying the disadvantage test is not working in workplace agreements?

Ms Heiler—I would state that very strongly in terms of the years that we have been looking at trends in both certified union and non-union agreements, and more recently Australian workplace agreements. I also recently had a look at over 80 Western Australian individual workplace contracts. My feeling very strongly is that the protective provisions in these agreements are being eroded and dismantled, and in the absence of any other kind of regulatory framework we are losing the tools with which we can adequately regulate hours of work.

Mr MOSSFIELD—We have heard a number of submissions relating to length of times of shifts—a maximum up to 14 hours seems to be fairly common, but even beyond that. Have you got any views as to what should be the maximum period which people should work prior to having a complete break?

Ms Heiler—There was an article in the *Australian Medical Journal* recently that noted that one of the most dangerous and irresponsible trends around this issue of working hours was to average hours of work over a particular period. In other words, we need to understand both the length of the working day and the number of consecutive shifts that are being worked. The analogy that was used was that saying that an average of 14 hours a day for 168 hours over a particular period was as ridiculous as saying that having a blood alcohol reading of 0.05 averaged over a month was safe, because any prolonged period of fatigue over a 24-hour period without adequate rest is potentially very dangerous.

There is a lot of debate in the shiftwork area, and unfortunately I think there is sometimes a cynical use of the lack of agreement about safe working hours. But there is quite a bit of overseas evidence that shows that the risk of accidents increases exponentially after working nine hours and then increases again after working 12. So, whilst some of the evidence is conflicting, I think most of the experts in the field will say that 12 hours of work is very long. People like Meredith Wallace will say that no more than two 12-hour shifts should be worked consecutively without a break; that there is some work that should not be worked for any longer than eight hours. So it is very important to see the length of shift in the context of the nature of the work, the workload, the staffing levels, the commuting time and the family circumstances. It is not an issue that really should be assessed in isolation from all of these other things. For example, working a 12-hour shift is one thing in a mining situation if you are living on site, but if you are commuting an hour and a half each way it is potentially a very hazardous way of working.

Mr MOSSFIELD—Yes, an area that we have not really covered that much is the additional travelling to and from work. Has your research shown any really bad trends in any particular industry? Which industry would appear to be most at risk?

Ms Heiler—I think that is a very important point. The very industries where shiftwork, for example, is more likely to be worked—in other words, where workers are both working irregular hours because there is a risk associated with shiftwork and tending to be on call; tug boats are a perfect example—have shown to have the greatest increase in overall average weekly working hours over the last 15 years or so. They are also the very industries where we are seeing a lot of pressure to dismantle the protective provisions and agreements in individual contracts. Certainly, industries such as mining, transport and storage, manufacturing and, to a lesser extent finance, are the industries where very long hours of work are being worked by employees on a regular basis.

Mr MOSSFIELD—I would like to ask you one final question relating to this issue. How should hours of work be regulated? Should it be by award description or a national legislation, or have you any other ideas?

Ms Heiler—An issue as complex as working hours is not going to lend itself to one easy solution. I do not believe that self-regulation works in the area of working time. There are too many incentives to lengthen hours of work, both for employees and employers. It is important to see that employees will self-exploit, particularly where they are low waged. Where they are low waged there is a great incentive to increase working hours. But where employers can get a competitive advantage they will lengthen working hours as well. It is not an issue that lends itself well to self-regulation. On the other hand, regulatory attempts in the past have proven to be weak without adequate enforcement.

I really think that we need a combination of community-wide agreed standards on working hours, taking into account the nature of the work, combined with a non-voluntary involvement in fatigue management at a workplace level. I really think that we need two kinds of strategies at work at the same time; one on its own is not going to be effective.

Mr MOSSFIELD—Thank you.

Mr LINDSAY—That gives me a kind of enigma in a way. You call for community work standards, and a lot of your submission is based on working hours. On the other hand, the fatigue management programs seek to be more flexible in some sense. We have had earlier evidence today indicating that there are ways in which certain sectors in the transport industry can be managed that suits both the employer and the employee. It might mean driving for longer hours but having longer rest breaks, for example. How do you reconcile those two seemingly competing issues?

Ms Heiler—We have to try to use the best medical and research evidence that we have which suggests that, irrespective of preference and the need for flexibility at the workplace, some working hours are just excessive and likely to be hazardous. The other thing to say is that what may be flexible both for employers and employees at a workplace level, may not necessarily be safe. Preference and flexibility are not a proxy for safety.

My view is that we really need to keep a very firm handle on that. There is a temptation—it is very widespread in the mining industry, for example—to say, ‘Compressed working hours with long blocks of time off is a situation that both employees and employers prefer.’ That preference has basically very little to do with whether those working time arrangements are safe.

There clearly has to be a capacity for flexibility on the margins. The trend is that really these long blocks of compressed shifts with long blocks of time off do not work. What we find in the mining industry, for example, is that when you have very long blocks of time off, the temptation is to work a second job or, in the absence of any kind of caps on overtime, to work additional whole shifts. I am of the view that the reason we are seeing these longer hours and the very long hours emerging in particular industries is, ironically, because of that compression of working time. Instead of extending an eight-hour shift, people are working another whole shift. So instead of hours being increased by eight, or even 16 a week, you work a couple of extra shifts and can increase it by two days a week. I do not know that we understand exactly how the compression of shifts, long hours and preference are all working together. I have to admit that, from what I have seen and the workplace studies that we have been doing over a number of years, we need to be very careful that compression of shifts is very tightly controlled in a sense. Obviously, in mining, we are seeing arrangements like two weeks in a row of 12-hour shifts in underground mines. It may be flexible, but it is unlikely to be safe.

Mr LINDSAY—In the work that you have done, have you philosophically thought, not only in relation to the transport industry but also with regard to industry in general and indeed employers, that over the last 20 years, if you were a boss, you would be able to go to golf every Thursday afternoon and now you cannot? Even employers are working longer and longer. Have you philosophically thought about the reasons our society is going that way?

Ms Heiler—I think it is a very good issue and I think it is commendable, in a sense, that the committee, hopefully, is looking more broadly at this issue rather than purely in terms of transport. We feel very strongly that there is a profound change in the way that we work and live. The lengthening of hours and the increase in irregular and extended hours is impacting—there is no doubt. We do work in the social policy area as well, and it is impacting on people’s capacity to participate fully in family life and in community life.

For example, in the evaluation that we are doing at the moment up at the Saraji mine in Queensland, which is a mining town trialling a 12-hour shift arrangement, when they moved to a seven-day roster, for example, that profoundly distorted and damaged that community because family and social life is often based on a Monday to Friday for work and weekends doing a whole range of other activities. As we move to a 24-hour day, seven-day community then we are changing the very fabric of our society.

It is an irony to me that, at the same time we talk about community values and the need for family and societal cohesion, in the workplace we are constructing working arrangements that will make it ever more difficult to participate fully in family and social life. They are big and difficult issues to deal with because we are trying to juggle commercial viability, competitive needs and the need for flexibility with the need for family and social cohesion and, obviously, work, health and safety.

Mr LINDSAY—As part of your written evidence, you suggested that deregulation of standard working hours has allowed for fierce competition and the need for increased productivity in the transport industry.

Ms Heiler—Yes.

Mr LINDSAY—Speaking realistically, hasn't the transport industry always faced fierce competition?

Ms Heiler—Yes, it has. My understanding of other things that have occurred in the transport industry—and it is happening more widely—has been an increase in subcontracting arrangements as well. That it pushes responsibility further down the chain until at the end of the day owner drivers, for instance, find it very difficult if they want to sustain a living in that industry to actually work and drive safely. There has to be responsibility at the top of that chain so that the larger companies that are letting tenders, if you like, are not letting them purely on the basis of cost alone because that is pushing the responsibility down the line to a point where people are really not able to withstand and to work safely if they want to win that contract.

Mr LINDSAY—Are you looking at the links between fatigue and people's stress levels, and the reverse?

Ms Heiler—As I mentioned before, in the work that we did, both at Vickery and at Saraji, we tried to understand the relationship, for example, between coping with stress levels, mood and changes in behaviour at work and the relationship between behaviours at work and home. We found that there was a very strong relationship between those employees who were finding it difficult to deal with work and who tended to be more fatigued and stressed at work, and those who were also finding it difficult to cope at home. The relationship, for example, between balancing work and family, which is associated with stress levels as well, is not just a soft issue. It is likely to be a real issue that impacts on how people cope with fatigue at work as well.

Mr LINDSAY—Do financial issues come into the stress side of things in this industry?

Ms Heiler—My understanding of the kind of pressure, again at the lower end of this industry, is that at least part of the reason for longer driving hours has been a decrease in financial compensation. Just going back to changes and pressures brought under decentralised bargaining, one of the biggest changes that we have seen coming through, particularly with non-union and individual contracts, is a reduction in the compensation for non-standard hours of work.

For example, we are seeing an increase in ordinary days of the week from Monday to Friday extended through to Monday to Sunday; an increase in ordinary hours per day of more than 12 hours; a decrease in payments for overtime; and a decrease in shift loadings. What the combining of those provisions does is reduce the compensation that is normally associated with working long hours and working antisocial hours. Once you remove those disincentives it means you have to work longer hours to deliver the same money, and there is also a greater incentive on the side of the clients to actually operate for those hours.

Mr LINDSAY—One of the claimed benefits of more flexible work hours is that an employer and an employee can get together and say, ‘It would suit me if I could work these particular hours because of my family circumstances.’ Do you see that as a positive in some cases?

Ms Heiler—The theory behind increased flexibility and the capacity of employers and employees to try to balance competing and other needs, works in some cases. But, by and large, in the workplace research that we do—and our focus at ACIRRT is to get out into the workplace and talk to employees and talk to managers and talk to families—we find the promises of flexibility have not been delivered for the benefit of employees. In other words, it has tended to be flexibility of employees rather than flexibility for employees. There are examples where flexibility has been progressive, but by and large it has been associated with attempts to cut costs and to increase numerical flexibility on behalf of the company or the organisation.

Mr GIBBONS—You mentioned that getting towards a solution you need a two-pronged attack, that you would need some sort of regulation on hours worked, together with a mandatory fatigue management plan. Have you looked at a group of FMPs that have been in place in the workplaces around Australia? If so, are there any that you have seen that may be applied to industry in general, any that stand out?

Ms Heiler—I could name you isolated examples, but I could not give you a whole industry approach to this issue because, as we have just been discussing, the trend has been towards greater fragmentation rather than generalised common standards. Ironically, in the same way as we are looking for common standards that will rope in most of the key players, we have got other institutional frameworks in place that are leading to greater fragmentation and greater diversification in arrangements.

We have used Drew Dawson’s fatigue modelling roster at the centre. We are working in conjunction with him. That gives you part of the solution, but it is not an overall solution because it only tells you what parts of that roster are likely to head you into dangerous fatigue levels. Without some kind of stronger requirement to actually act upon that

information it becomes a self-regulatory process. Again, the financial and competitive imperatives will cut in.

Of course, there will always be responsible employers who will seek to do the right thing by their employees, and in a sense we do not have to worry about those. What we have to worry about is that they are being placed in an unfair position by doing so. We have to come up with a system that will actually reward those companies that are attempting to do the right thing.

CHAIR—In your submission you mentioned the European directive on working time.

Ms Heiler—Yes.

CHAIR—What is that directive?

Ms Heiler—It is a directive that sets community wide standards that in a sense companies have to opt out of.

CHAIR—Is it numerical?

Ms Heiler—Some of it is, yes. Some of it sets, for example, maximum working hours, including overtime, of 48 hours per week. That would seem to be incredible here in Australia, that we would ever manage to get companies to be involved in that.

Just a couple of days ago I saw some preliminary feedback from a survey of British companies. Britain was very reluctant to become involved in the European directive but there has been some preliminary feedback on how they are dealing with that directive. For example, it sets some limits on the amount of night work that can be undertaken, overall working hours, and some other kinds of standards. The principle behind it is not that there cannot be flexibility, but that companies that want to deviate from those standards have to demonstrate that they can do so safely.

In a way that is a more positive line to take. Instead of having very broad standards within which you require fatigue management, they have tighter standards and then companies are required to demonstrate that they can deviate from those safely. It is possibly something to think about here. Their system is not that you cannot deviate, but that you have to prove that you can do so safely.

CHAIR—It is not just an agreement, you have to prove that—

Ms Heiler—Yes, you do. Here, what we are trying to do is prove that extended hours are unsafe in order to do something about it. It is a much harder test. In a way it is a test that is very difficult to demonstrate.

CHAIR—It is a test coming from the positive side rather than the negative.

Ms Heiler—Yes, it is.

CHAIR—That has been very interesting. You have been a very frank witness. I thank you for that, and for your submission. If we require any other information, I trust we can write to you.

Ms Heiler—Certainly.

CHAIR—You will receive a copy of the *Hansard* draft of today's proceedings. On that note, thank you very much.

Proceedings suspended from 2.51 p.m. to 3.22 p.m.

CALLAGHAN, Mr David Neill, International Relations Manager, Qantas Airways Ltd

DEAHM, Mr Bruce Roy, General Manager Line Maintenance Operations, Qantas Airways Ltd

LUCAS, Captain Ian Frank, Chief Pilot Designate, Qantas Flight Operations, Qantas Airways Ltd

CHAIR—Welcome. Before I ask you to give your evidence, I have to caution you that, although the committee does not require witnesses to give evidence under oath, committee hearings are legal proceedings of the parliament and warrant the same respect as proceedings of the House itself. Any false or misleading evidence is a serious matter and may be regarded as a contempt of the parliament. Are you going to lead, Mr Callaghan.

Mr Callaghan—No, I defer to Captain Lucas.

CHAIR—Captain Lucas, could you give us a five-minute overview of your submission? Then we will break into a discussion and questions.

Capt. Lucas—Thank you, Mr Chairman. I would like to take this opportunity to say thank you for letting us participate in the inquiry. Mr Deahm and I have both made submissions from our areas. These submissions provide information on where we are currently being pro-active in managing fatigue in these areas, namely with pilots, flight engineers and the licensed aircraft maintenance engineers.

The aviation industry has a demonstrated history of managing the effects of fatigue by developing procedures and processes to ensure that vital safety tasks are completed safely. In the flight operations area, the industry has also been a leader in developing training and the use of human factors by air crew. The aim of Qantas is to provide the safest possible air travel to the public. Part of doing that is working through the issues of fatigue in our industry. Both Mr Deahm and I will be happy to take any questions and assist where we can.

CHAIR—I think one of the greatest areas of concern coming through in this inquiry is that of aircraft maintenance. Have you seen the BASI report that is yet to be released, or excerpts from it?

Capt. Lucas—I have seen some of it.

CHAIR—It says that two-thirds of those surveyed have worked in excess of 14 hours. Do you find that in any way disturbing? It wouldn't be tolerated in the air, would it?

Capt. Lucas—It is. As a pilot, we work over 14 hours. We can go over 20 hours.

CHAIR—As a regular pilot?

Capt. Lucas—Yes, not as a single-pilot crew but in a multi-crew situation. I defer that question to Mr Deahm whose area of expertise is in the line maintenance area.

Mr Deahm—As a bit of history, 12-hour shifts commenced in aviation in 1988. There was a problem with fatigue before then. Domestic aircraft are only maintained at night, therefore, there is a heavy workload at night. The international fleet is basically maintained 24 hours a day. In my area it is a 24-hour operation. Prior to the introduction of extended hour rosters, people worked a week of day shift, a week of night shift and a week of afternoon shift. They were eight-hour shifts. Some of the night shifts were five, six or seven days long. We know now that it is a fatiguing shift.

As a result of problems we were having in those days, we moved to extended hour rosters on the basis of four on and four off, two days and two nights and four off. That has proved very successful. We are learning a lot more now about 12-hour shifts. That is why we engaged the Centre for Sleep Research last year to help look into what we are doing at the moment. I am trying to give you a bit of background of what was going on before.

We are finding now with the basic 12-hour type roster that we have variations of that where it might be 10.9, 9.5 or a combination of 10s and 12s or 12s and eights. We are finding that the recovery time that those sorts of rosters give people helps to reduce fatigue. As for working 14 hours, there is not a lot of overtime worked. It tends to peak. I can only speak for Qantas; the BASI survey was on all of aviation.

Qantas has a basic rule of work extending to only 16 hours from a 12-hour shift. It does not happen very often as, with the four on and four off type approach, we can often draw on people on their days off. So instead of having four days off they might work one day's overtime. Overtime runs irregularly; it is not a regular feature. We do not regularly run people on those sorts of hours. I would not say it was typical of Qantas for 75 per cent of the people to be working 14 hours on a regular basis, but they may do overtime from time to time.

CHAIR—Another area of concern seemed to be that, after working perhaps a series of shifts over those four days, some of them extended beyond the 12 hours or the eight hours, and they are often called back in again on their days off. And it is not so much on an optional basis that they are expected to front.

Mr Deahm—Once again, I can only speak for Qantas. It is purely optional—people are not directed to work on their days off. People are contacted at home. In fact, in some areas they have a book where people lay down when they are available to work overtime, and that is the system we use to select people. They are rung up and if they want to work overtime, they work overtime; if they do not, they do not. Again, I can only speak for Qantas.

CHAIR—Our main area of concern is that witnesses have been reluctant to come forward and have wanted evidence to be confidential for various reasons. Perhaps the most recent reason we have been given is that there is a blame culture.

Mr Deahm—There is not a blame culture at Qantas. We introduced a Human Factors Program at Qantas about four years ago. I am the patron of the Human Factors Group. It is a

group run from the grassroots level, not run by me—that is why I am called a patron, not the director, of the group. It is run from the grassroots level of Qantas and I provide resources and open doors for them. They have travelled widely overseas to attend conferences to build up their knowledge. From the day we ran a Human Factors Program at Qantas the blame culture disappeared. We do not have a blame culture.

We have a MEDA process, which is a maintenance error decision aid, which was pioneered by Boeing. It is a tool to help review incidents and accidents to make sure that we capture all the relevant details. Whereas in the past if we had a problem the report would say, ‘This happened because the guy did the wrong thing,’ now we might have five or six elements of the reason for that incident or accident. That is logged and we consistently review that data to see if there are any trends which would show up things like fatigue.

CHAIR—I understand that that BASI report says that 20 per cent of the respondents admitted to memory lapses caused by pressure and fatigue. Would that be a fair figure?

Mr Deahm—I really could not comment. I worked as an engineer myself, working shift work for 27 years, before moving full time into the ALAEA and now full time into Qantas. Sure, shift work can be a problem, but what I find from my experiences and from the experiences I have noted from my staff—I have 1,700 staff—is that one of the major concerns we have is not what is actually going on at work with shift workers but what is going on at home or when they are not at work.

CHAIR—I will come to that in a minute. Do you have a mechanism if someone believes they are unfit for work, not through sickness but by virtue of fatigue? What is the mechanism that you have in place for dealing with that?

Mr Deahm—He would go to his supervisor and explain the problem and he would be allowed to sit down. The people who work for me work on aircraft. The last thing we want is people making mistakes. We do not make a lot of mistakes at Qantas, but people are human, they do make mistakes. We do everything in our power to try and minimise those mistakes and to provide as much assistance as possible. You talked about the blame culture. We do not penalise people. In fact, we encourage people to come forward when there are problems. That is part of the MEDA process, to make sure that people are happy to come forward and give experiences, where it might have been a mistake they made or they almost made, to make sure that we can take steps to minimise those in the future. If we penalise people, they will not come forward. That is why the blame culture does not work.

Mr GIBBONS—How would your company deal with the fact that aircraft maintenance engineers and cabin crew should have legislated duty times, like a set amount of hours worked? Would that create a major problem for your company?

Mr Deahm—It would depend on how flexible or inflexible those rules were. But, once again, you cannot control somebody’s life. Most of my people work shift work—seven-day, 24-hour shift work—and we have a joint responsibility with the employee and the employer. The employer has to make sure the shifts are shifts that will not stress them out, that will not increase their fatigue levels, that give them recovery time so that they can get enough sleep to come back to work on the next series of shifts. The employee has a responsibility to make

sure he manages his time—and 75 per cent of their time is away from work, not at work, so it is very important for employees to recognise that.

One of the big bonuses when we went to 12-hour shifts was because the traditional night shift used to start at 10 or 11 o'clock at night. What do you think a 22-year-old does while he is waiting to go to work and start at 10 or 11 o'clock at night? He goes out to a party or goes down to the pub and has a few drinks. With a 12-hour shift we start at 6 o'clock at night. The guy has his dinner, comes to work and is fresh. We have found that we have fewer problems by approaching that problem that way.

Mr GIBBONS—In a lot of the evidence that we have taken so far, people seem to think that the risk of fatigue related problems has increased because of the competition which has increased over the past four years. Did that cause you to look at the 12-hour shifts?

Mr Deahm—Once again, in the Qantas environment, no. That may have application in the general aviation area, but all I can speak about is Qantas. My licensed engineers are licensed by the Australian government through CASA, and they have a responsibility to Qantas and a responsibility to CASA to do the right thing. I think we have such a good record in Australia because individual licensed engineers accept that responsibility. Qantas management does not put pressure on people to cut corners, and the individuals themselves do not cut corners. I think that is why we have got such a good record in Australia. Pressure is not put on people at Qantas because of competition. Sure, we like to get the aircraft out on time, but one of our mottoes is 'safety before schedule'. That is one of the mottoes we have had at Qantas for some time.

Mr MOSSFIELD—You were saying that, obviously, people being human, they do make mistakes. Can you identify if any of those mistakes do relate to fatigue problems?

Mr Deahm—I thought that might be a question. I looked up the last 12 months of incidents in my area, and that is Australia and around the world. These are captured through MEDA, through our Quality Assurance and Safety Department. There were about 25 or 26 what we call incidents or accidents in the last 12 months in line maintenance. They may be something like a stand put a bump on a wing when they were docking an aeroplane, or it might be something a bit more serious, like somebody left an O ring off a part and when the engine was running there was an oil leak. So the incidents varied widely. None of them were considered major in that they put the aircraft in danger. Out of the 25 or 26 incidents, there were two that had recognised fatigue factors. In one of them the fatigue factor was the third out of six, and the other one was the fifth out of six.

I am sure there are problems that do occur when people are working in that environment where fatigue is a problem. We do not say, 'These are the ones we have recorded'; we try to look broader than that. But they are the ones that are recorded. So it is not a big issue, but to me it is something very important that we need to look at and constantly monitor.

Mr MOSSFIELD—Have you had any second thoughts about the 12-hour shifts? It is generally agreed that they were introduced in agreement with all the parties, so there is no argument there. But, with the additional pressure that is now on employees, I am wondering whether the fatigue factor has increased since the 12-hour shifts were introduced.

Mr Deahm—Fatigue is the result basically of sleep deprivation or a problem with the quality of sleep. The basic 12-hour roster—four on, four off—has proved to reduce fatigue levels compared to the shifts we were working before. The other thing I should say is that the extended-hour rosters were introduced as an initiative of the union, not management, at the time. Management were very sceptical. The union was maybe a bit more progressive than the management in those days, and it was a union initiative. It was introduced at Australian Airlines, as it was called then, in 1988 in Sydney. It spread to other ports in Australia. It spread to Ansett. It also spread to Qantas and, since I have been back at Qantas in the last five years, it has spread widely throughout Qantas.

It is not just 12-hour shifts. As I said before, there are 10.9s, there are eights and 12s—things like that. It is widely accepted. I might also say that any roster that goes beyond the normal 7.6 hours or eight hours has to be agreed, by a two-thirds majority, by the group of people working it. That is something that has been there from day one. What more can I say?

Mr MOSSFIELD—Some of the evidence that has been put to us suggests that it is not so much the length of the shifts that are a problem but the time of the day that the shifts are being worked, such as the early morning period. Do you see any problems in your maintenance procedures in having people doing maintenance work at that time of the day or morning?

Mr Deahm—We accept that productivity on a night shift is less than productivity on a day shift. People take their time a little bit more and are a bit slower in what they are doing. You must understand, too, that line maintenance is usually not heavy work and not what we call heavy maintenance where the aircraft are actually torn down and put in a hangar for a month or two. We do not do extended 12-hour shifts with that sort of work. The work that we do on line maintenance is varied; it is intermittent. There are often many rest periods in a shift, depending on the frequency of aircraft transiting at a terminal or the sort of overnight workload. There is light work, there is medium sort of work and there is heavy work and people can select to do that sort of work at different times of the night or day in line with what people can cope with. It is generally accepted that in the early hours of the morning you should not be attempting a complicated job but complicated jobs are attempted in those hours and we do not see any evidence that it is failing.

Once again, it varies from person to person. We have four young women at Sydney domestic terminal working these shifts. The work is not overly heavy. There is usually not fatigue generated by the work itself. However, with the constant shiftwork, there is a fatigue factor. We have tried to verify as much as possible using the Drew Dawson model of rostering. The evidence shows that we are in better shape doing these sorts of rosters than those we were doing pre-1988.

Mr MOSSFIELD—Is that the view of the union? Would they agree with you on that point?

Mr Deahm—I actually worked for the union when these things were introduced and it was the view of the union then. I think where there is a problem it is a small group of people that would prefer not to work night shift and prefer not to work shiftwork.

Unfortunately, the only work I can offer licensed engineers is shiftwork. My area is the most sought after area to work in. It is the most interesting. The pay is very good. They get lots of experience. They get to travel to other areas. So it is sought after. But there are small numbers of people that do not like working night shift or shiftwork generally. Whether that is a fatigue problem or it is a social problem because it interferes with a regular social life, I am not too sure. Some of those people are vocal. I guess they would prefer not to work shiftwork. But that is the only work I can offer them because that is the nature of our industry.

Mr LINDSAY—In your evidence that you sent to the committee, you opened up with a note:

Under the . . . (ICAO) . . . an airline operator is required to formulate rules to limit flight time and flight duty periods and provide for adequate rest periods for all its aircraft crew members.

Do all airlines do that? Do they have a plan to do that?

Capt. Lucas—The rules are set up under a prescriptive set done by the state and just about all countries around the world. There are variations state to state. One of the things you may note in my submission there is that we are talking about going beyond the prescriptive stage now and going into an area where we look at managing fatigue by developing rostering rules rather than having a prescriptive set of rules that the state lays down that is expected to cover a total industry.

One of the things we have found over a number of years experience with prescriptive rules is that you cannot write a set of rules to cover the variation between the types in aviation. You may have a crop-duster in western New South Wales flying under the same rules as an international operator doing east-west flights to Los Angeles direct. To me, it is a starting point to have the prescriptive rules but after that you have to go into consultative process, to seek medical advice and to sit down with your unions to work through the problems and how to solve them, and then come up with a set of rostering rules that allow you to cope with the problem. Either that or you stop the business and ask your passengers not to fly at the wrong hours of the day. There is no simple prescriptive rules. I think the question was asked of the cabin crew having limits as well as flight crew. You have to look at the risk involved, the job being done and the task being done and then work backwards from there to say, 'Hang on, do we need a set of rules for this task or is the task not a high-risk area?' If you are serving drinks or meals for 12 hours, do you need some control over when people are working? You may need control over having alertness on the aircraft at the time you want to land the thing or when you want to take off.

Mr LINDSAY—Just so I understand this, your evidence is that these orders are inflexible and inadequate. You have said that a 1990 report concluded that as well. Where are we currently in Australia? Is it still that current orders are inadequate?

Capt. Lucas—We are using two forms of the current CAO 48. One is older than I am and the other one was brought into the domestic operation in 1989, which is a modification of the CAO 48 rules. On top of that we have a document for comment now being circulated

based on, to the best of my knowledge, the Hong Kong flight time limitations which are based on the British flight time limitations.

Earlier this year Qantas was involved in a workshop where we had probably as good expertise as you can get anywhere round the world. We had Dr Curt Graeber who works for Boeing, previously of NASA, Drew Dawson from Australia, Dr Eric Donaldson, who was the director of aviation services in Qantas at the time, and our union. We sat down and looked at these regulations with the experts, asking them what evidence there was for prescriptive flight time limitations, what it was based on and what the medical evidence backing up these proposed rules was. There was none. The indications are that there is research coming out of the Royal Aeronautical Society that may be up to five years away from having real definition, something we can scientifically base flight time limitations on.

Mr LINDSAY—Your evidence at this point in time is that in the world there is basically no agreement?

Capt. Lucas—No. The FAA is formulating new rules. They have now gone on the backburner after about two years through the industry where they cannot get agreement. In the European area the JAA has lost control of the regulatory process. It has gone into the European parliament because they cannot get an agreement within the European aviation industry on what are reasonable rules and what are not.

Mr LINDSAY—The committee has been hearing a lot of evidence about what you have called ‘task fatigue’. That is across all forms of transport. You introduced something you call ‘physiological fatigue’. Can you explain ‘physiological fatigue’?

Capt. Lucas—What we are talking about there are all the medical reasons for fatigue. Task fatigue is just physically running a marathon or something like that. The other areas of fatigue are the high mental workload or inability to sleep in the right sleep patterns or the breaking of sleep patterns. It is the medical side of things.

Mr LINDSAY—You may choose not to answer this question. You say there is a cooperative effort between Qantas flight operations and the Australian International Pilots Association. Is there some reason that Ansett is not involved in that? Normally, the airlines get on well together. Is there some reason for that?

Capt. Lucas—I guess there is a reason. Basically, you have to start somewhere and it is easier for us to start as an airline within our own network. Once you involve another airline in trying to work out flight time limitations, you have to take into account their network. Unless their network mirrors yours, you have two different solutions for two different problems.

Mr LINDSAY—I understand, thank you. You then said that Qantas’s view remains somewhat guarded in regard to the outcome of this process. You go on to say that you query the approach being taken by CASA in attempting to drive this to a conclusion. Are you able to say what the problem is with CASA’s approach?

Capt. Lucas—A change to the prescriptive rules does not provide a solution. In a company like Qantas, where we have a very complex rostering system and we have 1,800 pilots, we are required to do all our rostering by a computer program. If someone comes up with a new set of rules, we are two years down the track before we can even start to evaluate how those rules affect our lifestyle. We are better off staying with the rules we have at the moment and using the Drew Dawson type of risk analysis to filter out patterns or rosters where we have possible fatigue exposure.

Mr LINDSAY—Finally, you have suggested that the federal government might sponsor a research program into issues surrounding fatigue across the transport environment. Would you welcome that?

Capt. Lucas—Yes, we would. We believe that in the cockpit area of aviation we have gone about as far as we can in developing safeguards to cover the effects of fatigue. We are now getting into an area in long range flying where there is no evidence or medical history or backup to what we are doing to say that what we are doing is the right thing or that it is high risk. We really need to get some expert backup in that area.

Mr LINDSAY—Could bodies such as CSIRO help in that area?

Capt. Lucas—I am not aware of any research that has been done in that specialist sort of area—once you start moving someone from their home base. Drew Dawson is probably the closest having regard to what anyone in Australia has done.

Mr LINDSAY—Captain Lucas and Mr Deahm, the committee is on QF459 tonight. Has the line maintenance been done?

Mr Deahm—I certainly hope so.

CHAIR—I have a couple of queries. You explained to us your maintenance regime. We understand that pilots have a very strict regime. Why hasn't that been extended to cabin crew? Is there a reason for that? Is it that cabin crews' activities are not considered to be strategic? What is the reason?

Capt. Lucas—I do not think it is fair to say that the regime has not been extended there. There are limits on rostering that the cabin crew have. They are based on industrial agreements, the same as the LAMEs. They do not have the regulatory requirements that the pilots have.

Mr GIBBONS—What happens if it is a 20-hour flight? You said before that the air crew can quite often do 20 hours because that is how long it takes the aircraft to get to where it is going. Do the cabin crew do the full 20 hours?

Capt. Lucas—The same as the pilots do. What happens is that there are variations in the time off at the end of the flight. Quite often, under the union negotiated limits on their rostering, the cabin crew have a longer break than the pilots get under the regulatory requirements.

Mr GIBBONS—That is still 20 hours on a shift, virtually.

Capt. Lucas—Sure, but on those flights there are bunks and at any one time there is quite an opportunity for half the team to be off in bunks.

Mr GIBBONS—They are resting.

Capt. Lucas—They break up the roster on board the aircraft into a service period and a non-service period.

CHAIR—We heard evidence from Professor Dinges about napping and that some airlines have trialled this. Does Qantas have any plans to trial it?

Capt. Lucas—We have been using it for about five or six years—maybe longer than that. We became aware of the research that NASA did in the late 1980s and early 1990s. We introduced it into the flight deck of our long range aircraft. We use it under certain restrictions: we use it when we operate a minimum crew, so we only have a two-man crew and no relief crew member on board. We have restrictions on the sector length. You must be flying for longer than two hours in the sector; you must organise pre-ordered service of a cup of tea or something like this to come up to the flight deck at the end of the period, for a maximum of 30 minutes. Then we have a requirement for both pilots to brief prior to one guy going into the rest mode. Following the 30-minute break, there is a 10-minute adjustment back into work mode and a full brief on what has changed in the period that someone has been asleep. It is effective. As I say, if the research and the evidence are there that we can use, we are always willing to take it on board. The problem is that there is not the research or evidence.

CHAIR—Have you had any incidents arising out of that?

Capt. Lucas—No.

CHAIR—I would like to come back to Mr Deahm. You said that you do maintenance all the time during the day and it is not just at night. It would be true, would it not, that most of the regional aircraft are serviced at night?

Mr Deahm—Yes. Because there are curfews, all the domestic operating aircraft go to bed at night. That is when the maintenance is done on our domestic fleet and certainly the regionals fall into that category as well.

CHAIR—When would you do most of the maintenance?

Mr Deahm—Between 9 o'clock at night and about five in the morning for the domestic fleet, and we do the domestic fleet all around the country. We mainly do the international fleet in Sydney—the 767 and 747—on a 24-hour basis.

CHAIR—As they come in they are serviced?

Mr Deahm—Yes. There is just as much work done in the day time as in the night time. There is no difference. As the aeroplanes come in, there is continual work being done on those aircraft.

CHAIR—We received evidence today—and I must admit that it disturbed me a little—that in both major airlines there was a flurry of activity when this inquiry was announced. Is that a fair comment?

Mr Deahm—That is not true.

CHAIR—I asked if that was a fair comment.

Mr Deahm—It is not a fair comment. In fact, we engaged Drew Dawson last year before we had even heard of this committee. We organised our human factors about three or four years ago and our MEDA three years ago. We made policy changes to the amount of staff we send away to do engine changes because of fatigue problems. In fact, I think it would be fair to say that the biggest flurry when this committee was announced was by the union. The union has not come to us with any issues on fatigue or problems with shiftwork at all.

CHAIR—Is this the Drew Dawson document that you referred to?

Mr Deahm—That is one of the documents.

CHAIR—This is one of his standard texts, isn't it?

Mr Deahm—There are two documents that we are using. One is a basic guideline as to what shiftwork is and how it affects you. The other one is a working book which is similar to the one used for drivers in Australian railways. That program kicks off at the end of this month. Once again, all this was organised before this inquiry was announced—well before.

CHAIR—Is this one of Drew Dawson's standard texts?

Mr Deahm—Yes. That is like a textbook on shiftwork and how it affects you. The other document, which is quite a thick document, is a working document which is used by shiftworkers to discuss with their families, to fill in questions and answers to add to the research. The way it is formulated is that everyone who works in my department—

CHAIR—Is that the reason why this particular document of Dawson's was not skewed towards the industry, because there was another one coming out? Was that it?

Mr Deahm—It is a generic shiftwork document.

CHAIR—It could apply to any industry.

Mr Deahm—It could apply to everyone. The sort of work my guys are doing is quite high tech. Some of it is low tech, but basically, shiftwork is shiftwork. That is the generic textbook that you could refer to. The other thicker book is the working document that people

actually read through, fill out their own experiences, share that with their wife and with their children.

Mr GIBBONS—Is it Qantas specific?

Mr Deahm—It is Qantas specific but it is still generic in some areas, drawing from that original one with the Australian railways.

CHAIR—Has this existing one been provided to all staff?

Mr Deahm—It is on its way. The program kicks off in Adelaide at the end of this month because that is where they are based. I will be there for the official opening. It will then take between three and four months to spread right throughout my organisation. Every single person who works for me will be getting copies of those two manuals. Every single person who works for me will be going to two working sessions with people from the Sleep Research Centre to discuss issues raised by those documents.

CHAIR—Is this a fairly recent publication?

Mr Deahm—I got some initial ones sent up to Sydney about three weeks ago.

CHAIR—Could we have a copy of the second document as soon as it is printed?

Mr Deahm—It is printed; it is available. I thought of it at the time but I think you said you needed 15 of each document.

CHAIR—It would be helpful if you could provide that number.

Mr Deahm—I could not provide it now but I could in—

CHAIR—There are 10 members of the committee and a number of staff.

Mr Deahm—That can be easily provided. They are being printed at the moment. We got some initial runs and I guess that is where that one came from. That will then spread to other areas of Qantas. Line maintenance, because we do the majority of shiftwork, are using that as the pilot project, but it will spread to other areas of shiftwork at Qantas in engineering maintenance.

Mr MOSSFIELD—One general question that has been presented to us in all sections of industry is that there appears to be a conflict between the commercial needs of industry and the question of safety. How would you respond to that?

Capt. Lucas—I would not say that is correct. I think there is a balance between the two. We have a history of 75 years in aviation and we have been able to maintain that balance. Our safety standard speaks for itself and our commercial standard speaks for itself now. If there is a conflict there, I do not quite know.

Mr Deahm—The analogy I use is that the safest way to operate aircraft would be to not let them fly, just sit them on the ground; that is the safest way, and we all go broke. So then you move from there. You do fly the aeroplanes. You utilise and maintain them and then you have to come up with that balance between being able to run the organisation and still being safe.

Capt. Lucas—Risk mitigation.

CHAIR—I think we all understand that. We are not coming from some extreme point of view. What do you say about the concept that quality assurance and quality assurance qualification should be linked to a genuine interactive fatigue management program? In other words, not something in isolation over on this side of the company, but which is integrated right through your quality assurance. What would your view be?

Mr Deahm—I would say that is exactly what we are doing, just like we did with our human factors.

CHAIR—Do we take it that Qantas would have no objection to that being mandated?

Mr Deahm—We have got to be careful. We have a department in E and M called ‘quality assurance’, so we have to be careful. You are using the generic terminology ‘quantum quality assurance’. But, yes, that is obviously the way to do it because our quality assurance department and our safety department are autonomous. The safety department reports directly to the CEO. They run their own race—they are completely independent—and that is just the way we like it.

CHAIR—What sorts of responsibilities do you take under a chain of responsibility regime with respect to your affiliates and subsidiaries? Do each of those have their own pattern, for example Sunstate-Eastern on the one hand and Airlink on the other?

Mr Deahm—From the E and M side our quality assurance department audits those subsidiaries just as they do the core airline.

Capt. Lucas—From a flight operations point of view they operate under a separate air operator’s certificate.

CHAIR—I understand that.

Capt. Lucas—And their own chief pilot takes responsibility for their operations.

CHAIR—Are they answerable to you?

Capt. Lucas—No.

CHAIR—What sort of supervisory or liaison role do you have with respect to them?

Capt. Lucas—Informal is the only relationship. They have a totally separate operational function to the main core airline.

CHAIR—Are they audited at the maintenance level?

Mr Deahm—Yes. We do not have an involvement with maintaining their aircraft, but Qantas E and M quality assurance performs regular audits on those subsidiaries on engineering and maintenance—because we have that body of expertise that would not normally be available to a smaller operator. So it is a real benefit for those smaller operators that come under our umbrella.

CHAIR—And do the subsidiaries take as much pride in the standard that you set at the domestic and international level?

Capt. Lucas—I am sure they do.

CHAIR—Is that your experience?

Capt. Lucas—Yes, it is. We set the example and they strive to do the same—or better, in some cases.

Mr GIBBONS—Does your company monitor it, inspect it and ascertain that that is the case?

Capt. Lucas—We have a quality assurance function that extends across into the areas, so we are aware of the safety department type audit that goes on with any codeshare carrier. That is as close as the relationship gets. But I would expect as a pilot in Australia with Australian standards once you have got a good commercial set-up for an airline then normally the operation standard is high anyway.

Mr MOSSFIELD—Is there any information relating to fatigue problems in overseas airlines in other countries? Have you monitored any problems that might be there so that you could use that to make sure that it doesn't creep into your own operations?

Capt. Lucas—We are aware of systems working in other airlines. Air New Zealand has got quite a good system. They have gone part of the way we would like to go in monitoring fatigue. Their system is four or five years old. We are looking at that. The problem with looking at other airlines is that, unless they have got a similar network to the one we operate, they have different roster patterns and different time zone changes and slip patterns—things like that.

Mr MOSSFIELD—You would obviously monitor any airline incidents overseas to see whether there is a fatigue factor involved?

Capt. Lucas—We get a summary from any of the IATA airlines—incident reports on a regular basis—so we are able to look at the breakdown of those to see what categories they come under. There are no indications within the mainstream airlines that there is change either way. If a change occurs it tends to occur in the fringe airlines, the charter airlines, or the operators that are probably the quick buck airlines.

CHAIR—In an incident such as you had last week in Bangkok, although the anecdotal evidence seems to indicate what happened, do you still double-check fatigue and all other matters as well?

Capt. Lucas—It is a normal part of any inquiry. We have got an inquiry going at the moment: there is no evidence to suggest that fatigue was involved.

CHAIR—I understand. I would like to thank you all for your evidence today. I think if we are hard on Qantas it is because we all expect a much higher standard of Qantas as the national carrier than we expect of a lot of other modes of transport, and I thank you for your frank and honest responses. At times the questions may have sounded a bit provocative but we are determined to make this inquiry effective and, as you are a key player in aviation, we wanted to have everything on the table, so to speak. So I thank you very much for the frankness of your responses.

You will receive a copy of the *Hansard* proof. We trust that we can write to you or perhaps even call you to Canberra if we need to speak to you again before the end of the inquiry. Would that be in order?

Mr Callaghan—Yes.

[4.11 p.m.]

DI BARTOLOMEO, Mr Lucio, Managing Director, FreightCorp

HOLT, Mr Michael, Manager, Quality and Systems Safety, FreightCorp

HUTCHINSON, Mr John, Area Operations Manager, Hunter Valley Train Crew, FreightCorp

OSBORNE, Mr Paul, Manager, Train Crew Projects, FreightCorp

CHAIR—Welcome, especially to you, Mr Di Bartolomeo. You have appeared before us before, even though your ability to speak to us might have been somewhat limited on an earlier occasion.

Mr Di Bartolomeo—I recall.

CHAIR—Nevertheless, today your future is in your own hands. Before we go into your evidence I have to caution you that, although witnesses are not required to give evidence under oath, these committee hearings are legal proceedings of the parliament and warrant the same respect as is accorded to the House itself. Any false or misleading evidence is a serious matter and could be regarded as a contempt of the parliament. Mr Di Bartolomeo, would you like to give us a brief overview of your submission, and then we will break into questions?

Mr Di Bartolomeo—Thank you. First of all, I am very pleased to be able to present today and also to have been able to make a submission to this committee on a very important subject. FreightCorp's approach to managing fatigue might briefly be described as attempting to minimise the risk and maximise the balance. In fact, we have taken that as the theme of our fatigue management program. Often, a conflict of interest exists between organisational objectives and employee lifestyles. Lifestyle needs of employees need to be considered in any attempt to manage fatigue. Amongst employees there is a general reluctance to alter social arrangements if they are managing fatigue levels and recognising individual responsibility.

With regard to recognition of both work and non-work related issues, again, a natural conflict exists between shiftwork and employee life. We need to take a whole-of-life approach and rostering needs to recognise obligations outside work. Employees and their partners are seen as an integral part of adapting a holistic approach to managing fatigue. When considering fatigue management we should not lose sight of the fact that it is about human beings. There can be no absolute outcome, and fatigue management programs are often subject to problems because they can be easily manipulated.

There are some practical issues and implications in managing fatigue. There has been continuous and dynamic participation in the rail industry consortium research program and we plan to continue this until 2001. We have been a member of the consortium for the past three to four years. This is the consortium that is working with Drew Dawson in the South Australian Centre for Sleep Research. It was one of a number of participating railways that was involved in research on this subject. It has subsequently come up with a series of

recommendations and an understanding of the subject matter, including the development of a very important tool in being able to calculate fatigue management levels from patterns of rosters, both existing and proposed.

With regard to evaluating the implementation of fatigue management training and education programs conducted by each consortium member, we plan to continue the use of the fatigue management model to better understand the relationship between hours of work and key performance indicators associated with driver performance, in particular, things like fuel consumption and braking behaviour.

In relation to the application of recently developed scheduling algorithms to train crewing, these algorithms have been specifically designed to allow dynamic rostering and have significant potential in operating environments where customer demands fluctuate on a short-term basis.

With respect to forums, all shiftworkers and their families will be discussing fatigue and the effect of non-work activities on fatigue levels. Over 1,500 FreightCorp shiftwork staff are targeted to attend fatigue management training, with approximately 650 already having attended across the corporation. I just note that those documents that you were talking about earlier with Qantas are pre-reading material to all of those employees before they come to our fatigue management programs.

CHAIR—That first document, that generic document.

Mr Di Bartolomeo—That generic document and a similar more specific document to FreightCorp. We are finding that about 50 per cent of partners are attending these sessions. I guess it would be fair to say that the initial response is somewhat cynical on the part of the staff. I am pleased to say that, once they attend, they give us some very good feedback, and comments such as ‘Finally someone has acknowledged that I’m a human being and they are trying to help me cope with shiftwork’—in other words, that people do have lives outside the organisation.

The inclusion of the spouse was significant and has had a positive impact. The wives have said that they appreciate the opportunity to meet the people, to understand the industry and they will work together with managing lifestyle fatigue. In fact, it has got to the point where FreightCorp is proposing the formation of a partners club. It has been suggested through the fatigue management training, and the Hunter Valley depot has accepted the challenge of actually forming such a club.

Important in our whole program of fatigue management is the fact that we are dealing with people and it is their whole lifestyle that impacts on their fatigue levels at work. So if we are interested in the fatigue levels at work, it is only half-hearted if we just look at that dimension and not consider what the employee is doing in those non-work periods.

We continue to develop fatigue sensitive rostering practices. As I say, we have that modelling tool and we use that to test both existing rosters and any new roster that has been proposed. We look at the fatigue index and the fatigue scoring system as part of the fatigue modelling software. It is currently being used as a guide with a risk management and

mitigation approach where we find that levels have exceeded what is currently identified as going into the fatigue range.

The Hunter Valley Train Crew depot is being used as the test environment for the revised train crew roster structures. Hence, that is one of the reasons that we brought John along to this meeting. There are several important train crew rostering practices and a revised master roster has been implemented and they are currently under trial at the Hunter Valley. All reforms to rostering practices and roster structures are developed for a consultative process involving all stakeholders including, of course, the staff themselves.

There has been a further FreightCorp study to encompass fatigue and workload for driver only operations. As you may be aware, driver only operations is not only an important initiative for FreightCorp but also right across the industry and clearly adds an important dimension in attempting to roll out a driver-only operation in terms of the fatigue implications of such a program. So it has a particular focus and attention in that work that we are currently doing.

Further, and I think complementary to the fatigue management issues, is the FreightCorp drug and alcohol policy. Only in September this year, FreightCorp management endorsed the principle of a new drug and alcohol policy that basically adopts a program of a universal blood limit of 0.02 and also drug limits as prescribed under AS.4308. We hope to commence implementation of this new program from January 2000.

Finally, so we can get on to some questioning, in terms of action required, we can put this under four different headings: recognition, legislation, accreditation and funding. With regard to formal recognition of fatigue as a workplace hazard beyond OH&S acts, fatigue requires a consistent and national approach which cannot be achieved on state based OH&S legislation. FreightCorp's state of safety project, which we adopted about six months ago now, is aimed at developing a culture of safety throughout our corporation where fatigue management is, in fact, an important element of that whole program.

With regard to introduced legislation, this requires organisations to implement systems to manage fatigue. I guess the important thing that we are looking for is some uniformity across the various industries. Legislation should require all transport operators to be accredited. What we are looking at is not legislation that is necessarily prescriptive in attempting to set out the details and specifics of roster patterns or shift lengths, et cetera, but, in fact, it should require transport operators to be accredited for fatigue management and their fatigue management program is what is tested for accreditation purposes.

With regard to funding, there should be federal government financial support for a regulatory and a hands-on role for continued research into the effects and social cost of fatigue, continued research into development tools to enable fatigue to be managed in the workplace at acceptable safe levels, and raising industry and community awareness generally.

CHAIR—Taking your last points first, you have said that you accept that fatigue management goes beyond occupational health and safety, but you also say that you do not want it to be too legislatively prescriptive. That only leaves one area for it, albeit supported

by legislation, which is into some form of quality assurance. Your accreditation would be dependent on whether you had an appropriate fatigue management program. Is that correct?

Mr Di Bartolomeo—Yes, a fatigue management program, and to support whether that fatigue management program is actually being implemented and adhered to, some form of auditing process could be put in place.

CHAIR—You use the Dawson model: where do you set the fatigue line?

Mr Di Bartolomeo—Firstly, we have not set a definitive level as being absolute at this stage, given the early nature of it. But we use the 80:90 band—about that band—as a guide to reviewing all of our rosters. When we see a roster pattern that actually produces a fatigue level greater than that, we look at how we can mitigate—

CHAIR—What if there was just one spike in a fortnight's roster that went above the 90 line? Would you modify that or would you leave it?

Mr Di Bartolomeo—No. We look at things such as a particular shift, the start of a shift or the end of a shift. It might only involve changing one of those elements marginally and we would bring that spike down.

Mr Hutchinson—Or the nature of work, perhaps. If the individual is within a terminal and doing very little work compared to being on a main line et cetera, we would take in the nature of work as well as the shift content.

CHAIR—Has this been an ongoing process or has it been triggered by events like the Beresfield accident?

Mr Di Bartolomeo—First of all, I need to repeat that, going back some three or four years, we were party to the study with the South Australia Centre for Sleep Research and with Drew Dawson.

Mr Hutchinson—We started to talk with them in 1994.

Mr Di Bartolomeo—We have been participating in that for a long time. There is no doubt that Beresfield came somewhere at the end of that, but prior to us receiving a lot of the details.

CHAIR—It was before you had the program fully implemented.

Mr Di Bartolomeo—That is right, and before the study actually reached a lot of its conclusions. I think it was very timely when it did come about. Clearly, it gave us an even greater incentive to get on and ensure that the implementation of our program was not tardy in any way, but clearly our commitment to this issue of fatigue management well preceded Beresfield.

Mr LINDSAY—You have requested increased government funding for research. You have probably heard the Qantas evidence on that where they have called for the same thing. Is that right?

Mr Di Bartolomeo—I am sorry, we missed most of that, but we certainly support it.

Mr LINDSAY—Are they down the same track as to what you are suggesting?

Mr Di Bartolomeo—Yes. We concur with that.

Mr LINDSAY—They were not going as far as you, because you are basically suggesting that this should be across all modes of transport. Is that right?

Mr Di Bartolomeo—Yes. To be specific, from rail's perspective, I think it should apply to sea and air, but I am being very specific here. I want to ensure that it certainly applies to road. Rail is in clear competition with road on much of our business. I would hate to see a situation where the rail industry, as it is, continues down the path—and it should be continuing down the path—of increasing safety, understanding fatigue, and managing and improving safety in the workplace, has that as a rail initiative alone when in actual fact it is not. Similar conditions and similar imperatives apply elsewhere. I would hate to think of the ludicrous situation where another mode of transport may not be as diligent in pursuing the same reforms and, at least in the short term, it may gain a competitive advantage over rail. All we would be seeing is freight move away from rail to road for all the wrong reasons. If it is more efficient and able to move across, then so be it. But they are not the reasons we would like to see it move across.

Mr LINDSAY—Is it accurate to say that, from your evidence, you would like to see one single research project funded by the federal government covering all modes?

Mr Di Bartolomeo—To the extent that we are seeking federal funding, yes, it should be more than just rail; it should be across all modes. It should be a more generic fatigue issue.

Mr LINDSAY—Earlier this morning we heard from the Rail, Tram and Bus Union. They gave some significant evidence about the impact of national competition policy on rail. They claimed that that had produced very significant increases in fatigue. The thrust of their argument was that, with further competition, deregulation or whatever, there were longer shifts being worked and so on. Is that your experience in your part of the rail industry? Has NCP impacted in your area?

Mr Di Bartolomeo—First of all, I will answer that specifically to FreightCorp. There are no shift lengths or roster patterns that have changed since the corporatisation of ourselves and the introduction of the new legislation. We are basically still under the same stable rostering code. We work to that same award condition that applied three years ago. So there has been no change. We are not working any longer shifts than we did before. I think you might find that the RBTU may have been making reference to the proliferation of a number of smaller privately owned rail operators that have negotiated with staff, or for that matter are not in award type conditions and may well be using staff to roster patterns and shift lengths not consistent with our own. I suggest that that is what it is probably referring to.

Mr LINDSAY—All right.

Mr Di Bartolomeo—Again, my comments would be that fatigue management and safety are issues that should cross all boundaries, whether government-owned, privately-owned, road, rail, large operators and small operators. I would hate to think that we would get into a situation where those with the deepest pockets can afford safety, and those that may be seen to have more limited resources are given some lower level of safety responsibility.

Mr LINDSAY—Michael, what is your answer to this? The rail union gave us evidence that they were concerned that at a national level there is little coordination across state based rail safety regimes. Would you agree there is little coordination?

Mr Holt—I would have to disagree fairly strongly with that statement. I have personally been part of a number of federal working parties. They include a working party initiated by the Commonwealth Department of Transport and Regional Services to address their Maunsell inquiry findings. I am a participant in that, as well as other members of FreightCorp, looking at achieving uniform operations right across the nation.

CHAIR—Signalling—

Mr Holt—It is looking at signalling, infrastructure, rolling stock, safety operating systems and the broader safety parameters.

CHAIR—Radios?

Mr Holt—Yes, radios and communications and data exchanging.

CHAIR—Excellent. I am sorry to cut in. Is that complete yet?

Mr Holt—No, that is good. The operating code of practice is scheduled for release early next year. It is going out for public comment this month across the country. Then the working party will re-form to review those comments and produce a final draft. The rolling stock and infrastructure are nearly at the same stage and will go through the same process shortly.

Mr Di Bartolomeo—I think we should differentiate, if I can just elaborate. That is not to say we had a good record of uniformity across Australia. I think that has been recognised by many and, I guess, more importantly, the industry itself. We have really been active in trying to do something about it.

CHAIR—At the time we did *Tracking Australia* there were 22 or 23 operational codes and 14 radio systems. What is that down to?

Mr Holt—I could not tell you at the moment.

CHAIR—It is coming down rapidly.

Mr Holt—It has been suggested that it has been changed but we are setting up a platform where that can change to become consistent.

Mr Di Bartolomeo—I do not think we should mislead. We have had a problem historically, and I suggest it is still there. To change it, for instance, we have to agree which ones are coming out and which ones are staying in.

CHAIR—You have to set a new benchmark.

Mr Di Bartolomeo—That is right. That is the process that has been taking place.

Mr Holt—Notwithstanding that, there are other initiatives to make rail more Commonwealth based or national based, including the AS4292 which calls together parties from across the nation. It is a little more ad hoc, but, also, FreightCorp is moving into the national field and we and other operators are spending more and more time talking to each other less formally.

Mr LINDSAY—Qantas gave evidence that there was not only task based fatigue in their operations but also what they called ‘physiological’ fatigue. Does your industry face that?

Mr Osborne—Yes. The research that has been undertaken by Drew does not look at a point in time; it looks at different effects from a basis of sleep recovery and the point of time of starting and finishing. Physiological fatigue is about the actual work you are undertaking. The evidence from Drew suggests that, if you start digging a hole and you are doing manual labour, then over a period of time your body will adjust to that workload. Therefore, that does not have as great an effect on fatigue. In that sense, there are different levels depending on the task that you are undertaking. It is more the effects of when you are at work and also your sleep recovery time prior to and after you are at work.

Mr MURPHY—Do you monitor overseas rail developments? Is there any evidence of fatigue being a problem internationally? Is there anything that we can learn from here?

Mr Osborne—We monitor what happens overseas. FreightCorp took a group of employees over to New Zealand last year and used their experience, and we have travelled around Australia as well. Over the last four years, we have, in a crewing context, organised two conferences—one in Rockhampton and one in Adelaide—where crewing managers from all over Australia and New Zealand participated. They used all their knowledge. That also included some of those companies which had travelled overseas. Not only that, the rail consortium that we were participating in with Drew Dawson is also all Australian based, using all that experience. We gather all that information from all over the world based on people’s experiences and what they hear.

Mr Holt—We are also aware of a study done in Canada on fatigue and crewing and rostering. We have contacts in England and North America as well, not only in the rail industry; we also have some interesting results from the nuclear safety industry. We have contacts in the American Nuclear Safety Directorate, I think it is called.

Mr MOSSFIELD—Earlier in the day we received submissions that at the moment the industrial relations climate was not providing what you would call a level playing field to allow employees to fully express their views on a range of things—on this occasion, on fatigue matters. Are you quite comfortable that that is not a problem in your industry?

Mr Di Bartolomeo—In terms of our employees being able to have a free voice as to what is happening?

Mr MOSSFIELD—Yes.

Mr Di Bartolomeo—I think we have a fairly active union in our industry—the RBTU. It is able to speak both freely and clearly on behalf of its members across the industry. I am not aware of any restrictions of that sort.

Mr MOSSFIELD—It was mentioned so I needed to clarify that. Just a general point: do you have any views as to the length of time people should work in one shift prior to having a break? We have heard various things ranging from 12, 14 or even longer. Do you have any views on that question?

Mr Di Bartolomeo—Maybe it is worth identifying that right now in train crew—it varies across different workers—at FreightCorp an 11-hour working shift is the longest maximum shift. In other operations, whether it be maintenance or terminal operation, it is 12 hours. We think that, generally speaking, they are appropriate limits, putting aside emergency type situations which might take you over that. I think those limits are sufficient.

Clearly, there are other circumstances—in train crewing for instance—where it is less than 11 hours. We could have some debate about something that is less than that, but I think those upper limits are sufficient.

Mr MOSSFIELD—So, in an emergency situation, is there any upper limit there?

Mr Hutchinson—Not the train crew, necessarily. Eleven hours is the maximum. Perhaps for maintenance and other support functions we can extend that.

Mr Osborne—Even in a situation where a train crew are stuck out on the track and are going to breach that 11 hours, we have a responsibility to relieve them when they have reached that 11 hours. They have the ability, if they have not been relieved, to stop the train. They do not move until we get there to relieve them.

Mr MOSSFIELD—So they have that authority to stop the whole show?

Mr Osborne—Yes.

Mr Di Bartolomeo—They are free to do so. On occasions some will actually say, ‘I’m only half an hour out of the depot; I’ll drive it in.’ That occurs from time to time. The events are such that, when it does occur, those instances are fully reported not only to management but to the unions. It is not an attempt to try to subvert those limits. They are really unavoidable.

Mr Holt—Notwithstanding those self imposed-limits that we have described, our understanding of fatigue is that it is not so much the hours of work but the rostering pattern and the time of day which has more influence on fatigue. We have taken that fairly seriously in our—

Mr MOSSFELD—Yes, we accept that.

Mr Di Bartolomeo—It is the accumulation of hours and particular patterns of rosters.

CHAIR—On that point, we have had evidence in some areas where there are things called ‘exemptions’ that allow a set roster to go beyond a certain number of hours and that this sometimes becomes more the norm than the exception. Can you assure us that that is not the case in FreightCorp?

Mr Di Bartolomeo—I will ask a practitioner.

Mr Hutchinson—I can assure you that that is not the case.

CHAIR—Just a small point: after the Beresfield accident, it was recommended that there be enhanced warning systems. Have they been installed?

Mr Holt—What we did as a result of the Beresfield accident, in specifically looking at the safety systems on board the locomotives, was to engage the Monash University Accident Research Centre to do a study on the psychology of driving a train and maintaining alertness, and they came up with some recommendations which we have adopted. We have fitted out at least two-thirds of our locomotive fleet, and the fitment is progressing.

CHAIR—I suppose yours is a different industry from the trucking industry, but there is a circumstance there where a person is officially rostered to drive a truck from, say, Brisbane to Sydney, and he might, say, spend four hours in a queue at the Brisbane end and three hours trying to get his slot into the warehouse at the Sydney end, which effectively adds seven hours to his shift. Where does your shift begin? Does it begin when the driver enters the cabin or when he begins—

Mr Di Bartolomeo—It actually begins from before he enters the cabin.

Mr Hutchinson—When he fronts up at the front door to sign on.

CHAIR—So that circumstance does not occur in the railways?

Mr Hutchinson—No.

CHAIR—Passive time is counted, in other words.

Mr Hutchinson—It is counted in the entire shift. That is right.

Mr Di Bartolomeo—So, whether the train is loading, unloading or the driver has signed on and has to do a certain amount of preparatory work prior to taking the engine out, all of those are part of his 11 hours, or whatever his roster shift is.

Mr Hutchinson—Travelling to and from.

CHAIR—I suppose the Hunter one is fairly short. Are there any circumstances where you use—

Mr Di Bartolomeo—Barracks?

CHAIR—No, that was to be another question. Are there any circumstances where you use double crews?

Mr Di Bartolomeo—No, we do not. Like they do across the Nullarbor, you are probably thinking?

CHAIR—Yes.

Mr Osborne—No, we do not.

Mr Di Bartolomeo—No, we have none of those operations.

CHAIR—So the idea of enhancing soundproof sleeping bunks on trains would not apply to your operations?

Mr Di Bartolomeo—We do not have any sleeping bunks on trains.

CHAIR—None of the routes you service are in that category?

Mr Di Bartolomeo—No. Albeit, we do operate interstate but we do not operate on that particular corridor. As far as I know, it is the only corridor where it applies, and we are not on that corridor at all.

CHAIR—Are there any other questions? Since there are no further questions, thank you very much. It was very frank and you obviously have a very good handle on your rail profession. This committee has a bit of a soft spot for rail, as you know. We would like to see *Tracking Australia* implemented.

Mr Di Bartolomeo—And good to see, may I say.

CHAIR—To all those who have attended today, some in absentia, members of the press, and those who have facilitated our visit to Sydney I say, thank you, and, in particular, to our final witnesses today, FreightCorp.

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

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

Committee adjourned at 4.44 p.m.

