

ROAD SAFETY COMMITTEE

Inquiry into vehicle safety

Melbourne — 8 October 2007

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Witnesses

Mr R. Scouler, government affairs manager, and

Mr B. Priddle, vehicle assurance and homologation manager, Ford Australia.

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

Mr SCOULAR — I am Russell Scouler. I am the government affairs manager at the Ford Motor Company. With me is Bruce Priddle, who is the company's manager of vehicle assurance and homologation, and I must say one of the Australian automotive industry's most highly regarded safety engineers..

Firstly, I would like to make some opening comments. Thank you for the invitation to meet with you today. We welcome the opportunity and hope we can add some value to your deliberations. We trust that the recent meetings and discussions you had with our people in the US were also of value to your work. Certainly some of the feedback that I had from our people in the US was that they enjoyed the discussions they had with you very much and valued the opportunity to have had them. Thank you very much for that. Secondly, perhaps with your indulgence, Chair, we would appreciate it if the committee would accept a bit of double act with Bruce and I this morning. I will make some opening comments and Bruce will complement those with some slightly more technical matters if you like. We could go from there and take questions from you.

Ford Australia is a significant vehicle designer engineer and manufacturer. We currently manufacture some 100 000 vehicles annually and employ approximately 5000 people at Geelong and Broadmeadows, including 1000 vehicle designers and engineers in our product development organisation. We are also one of Australia's largest private sector R and D investors with annual expenditure of more than \$170 million. A significant part of this expenditure is oriented towards future environmental and safety initiatives in our motor vehicles. Over recent years we have also established a leadership role in our approach to vehicle design and safety, and this can be illustrated in a number of ways. We were, for example, the first manufacturer to develop and introduce dynamic stability control into a locally manufactured vehicle with the Ford Territory, and we are now spreading that right across our model range. As we have outlined in our submission to the committee, this development was an expensive, complex and time-consuming engineering task. This followed earlier leadership initiatives that we had in the area of standard fitments, for example, of airbags and seatbelt reminders.

To illustrate again the complexity of the task of fitting dynamic stability control to a new vehicle like the Ford Territory, which we did in partnership with our major supplier of that device, Bosch, it involved some 200 000 man-hours or people hours of activity, some 20 million kilometres of virtual testing before it was undertaken, and practical testing when it was undertaken in some eight countries around the world. It included the visit to Sweden and the ice park as well that was referred to in earlier evidence. I would say in part that is also reflective of the complexity of the task and the component in question and, if you like, the complexity and the challenges that are faced in an environment like Australia, where we have a large element of not only asphalted roads but also gravel roads in our regional and rural areas. It is a matter that gives the Australian marketplace some complexities that do not quite exist in a number of other developed markets around the world.

We believe the professional skills of our vehicle designers and engineers are world class and they are recognised by our parent company, which treats our product development operations as a regional centre of excellence. This recognition saw Ford Australia awarded in 2006 the lead design in the engineering role for a new global pick-up truck. This vehicle will be sold in more than 80 countries around the world, and the project itself involves one of the largest automotive R and D projects ever undertaken in Australia.

As we have previously advised the committee in many discussions that we have had with a number of you over the years, Ford Australia believes that road safety reflects the interaction of a number of elements including vehicle safety, the road environment and network, and obviously the driver. Bruce will talk in a minute about the systems approach we take here and the complex interactions involved. Before he does, I would like to emphasise that the biggest influence on vehicle safety today is the demand of the marketplace. In Australia we have the most competitive and contemporary automotive market in the world chasing approximately 1 million sales every year of more than 50 different brands and 350 different models from 26 source countries. If it is made anywhere in the world you can buy it in Australia. In fact if you look at the diversity of our model range, and the brands and models that participate in Australia, not only are we the most competitive and open in the world but we have a significantly

greater variety than many of the other developed, more mature markets around the world, including the USA, which is seen, if you like, as having a bit of everything.

This diversity in a sense is great news for consumers. It can be a headache for regulators and it can be tough news for vehicle suppliers, but that is probably the way it should be. It drives change in a way and at a pace that we believe no regulatory approach could match. It challenges vehicle suppliers in an intensely competitive way because if you cannot produce a product that meets the aspirations and needs of a consumer at the time that they want it, and at the value they are prepared to pay for it, they will go down the road. You cannot hold them. The challenge we are confronted by every day is to ensure that our vehicles exceed those customer expectations in such areas as safety, quality, performance and value. Great cars with great technologies at an affordable price.

I would now like to hand over to Bruce, who has a few comments to make, and then of course we welcome your questions. Thank you.

Mr PRIDDLE — Thank you, Russell. Mr Chair, committee members: with your permission I would like to briefly elaborate on what we call the systems approach to vehicle safety engineering, and explain why it is a key to making significant reductions in road trauma.

Dr W. Edwards Demming, who was a quality guru of sorts, defined a system as a network of interdependent components or subsystems that work together to accomplish an aim. Of course in the context of a transport system the main subsystems are the driver, the vehicle and the transport environment, and the aim is safe mobility. In designing a system we also need to remember that a system has certain characteristics. Its performance is greater than the sum of its parts. It is only as reliable as the weakest link, and failures usually occur at subsystems interactions. I am sure we can all relate to the interactions between the driver and car and road.

We therefore need to thoroughly understand the components of the system, their contribution to the system performance and how they relate to each other, and any unintended consequences or interactions. Ford uses this approach to design its vehicles to ensure that the total vehicle system performs as the customer expects, not just in safety but in every aspect. When it comes to vehicle safety, the approach has been pivotal to the significant advances in vehicle safety that we have made over the years. For example, when a crash happens the whole vehicle and its occupants are involved in a very complex, potentially damaging series of interactions. Only by understanding these events are we able to design and integrate the safety package. The safety, of course, is in the body structure, seats, seatbelts and airbags. They all have to work together to protect occupants of all shapes and sizes. Access to extremely powerful supercomputers and sophisticated computer modelling tools actually allows us to model the total vehicle performance in a crash, and analyse occupant injury effects for different restraint parameters.

Clearly a systemic approach can also be extended to the transport system to ensure a holistic approach to road trauma reduction. Ford has adopted the Haddon matrix to analyse the contributions to the three key subsystems before, during and after a crash to identify areas of opportunity. I have a simple diagram to illustrate this point, if I may hand it out to the Chair and committee members here. You can see depicted in the diagram on the page provided those three areas: human behaviour — or the driver; vehicle safety; and the road environment. Along the rows there are pre-crash — in other words, accident avoidance, crash and post-crash. Down the bottom we have some examples of Ford Australia actions in each of the three key subsystems.

In the last few decades efforts have been largely focused on occupant protection or passive safety, which of course is during the actual crash. This has resulted in significant reductions to road trauma, but since this tackles only part of the total system we have now reached the point where the law of diminishing returns applies. More recently, of course, advances in technology have created new opportunities for the uptake of crash avoidance or active safety technologies such as anti-lock brakes, dynamic stability control or electronic stability program, sonar parking and reversing cameras, just to name a few.

Since prevention is inevitably better than a cure, Ford has embraced these technologies as they have matured and become more affordable. As Russell said, Ford was the first Australian manufacturer to introduce dynamic stability control on the Territory in 2004. Since then we have worked increasingly to bring the feature down the range of Falcon and Territory models. As of July this year, it is now standard equipment on all Territory products and with few exceptions standard on the base model Falcon passenger cars. Stability control has been touted as the greatest advance in vehicle safety since the seatbelt, with various studies reporting significant reductions in serious crashes.

The reason that stability control is such a potent safety feature is that it manages the interactions between the driver and the vehicle and the road environment.

This highlights the potential for other e-safety features as communications and electronic technologies to continue to evolve to enable even more sophisticated ways of managing the interactions between the vehicle and infrastructure, and even between vehicles. Unfortunately these technologies will not have short lead times. These are complex systems which require extensive research and development, and once implementation-ready — as we call it — require comprehensive application engineering into specific products.

By their very nature, they will not be bolt on and will need to wait for new vehicle models to be developed before reaching the market. When we consider that the average age of the fleet is around 10 years, we are at least looking at that long before these features penetrate the fleet in significant numbers. A sense of urgency clearly exists and market forces will provide the greatest stimulus for innovation. However, we must proceed with a measure of caution to be sure we understand the implications for human behaviour, driver workloads and, of course, from a sales point of view, driver enjoyment. Furthermore, car companies should not venture into this new frontier on their own. There must be cooperation and collaboration with infrastructure designers and regulators to advocate international standardisation and ensure that a truly systemic approach is applied. I will be happy to take any questions you may have.

The CHAIR — In relation to the ESC, and obviously you have heard from previous discussions how important we believe the ESC is, or DSP, or other names that have been given to it, and I will ask the same of you: do you think that there should be a standardisation of the ESC in terms of its name so that it is more understood and accepted in the wider marketplace?

Mr SCOULAR — I am not so sure. I think it is a feature which the acceptance of has grown very quickly in our marketplace. If a standardisation of the name or a description of it would help that process, fundamentally I would not have a problem with that. Whether there could be complex issues there in terms of intellectual property, trademark names and that type of thing that may interfere with that, I do not know. They may be there. I think the important thing is that it has been established that it is a valuable safety feature in a motor car, its uptake in the marketplace has been very fast and very strong, and that that continues.

Mr KOCH — Russell, in a submission put by Ford, it certainly included a statement that global policy is to fit vehicle safety technology where it is seen as practical. If I could ask you on two fronts, first, if you will define what Ford sees as practical, and the other one is, if it is seen as practical internationally or across the water, why wouldn't Ford Australia see that as being practicable within the country?

Mr SCOULAR — I was the author of that letter so I suppose I should have known what I was writing at the time. I think the reference — —

Mr KOCH — I understand you knew exactly what you were writing at the time, Russell.

Mr SCOULAR — Thank you. Ford Motor Company is a global company. We take a global approach to our safety issues, and I think we are fitting safety equipment at a very fast pace as the equipment is developed and its benefits are understood. What was intended by the reference to 'wherever practical' there was more an issue of timing, if you like, so we have had some discussion today, for example, on the issue of electronic stability control. It is a complex system. It is not a system like a plug-in light globe type of thing. You actually have to engineer it into the vehicle and the other features of the vehicle to get the full benefits of that. Obviously that is a practical thing that you do at the point of the introduction of a new model rather than doing what we would call in the trade a running change.

Mr KOCH — Thank you. As you are aware, Russell, 80 per cent of motor vehicle sales in Australia are from imported vehicles. We only produce about 20 per cent of the action here.

Mr SCOULAR — Sadly so.

Mr KOCH — That is why I brought it forward, because we are very concerned with the specification of international vehicles when they land here, and obviously some of these safety features are only offered as options and not as standard equipment, so I wanted to raise that with you. Taking that further, we are aware that Fiesta, for

instance, produced over in Germany has ESP as standard equipment. Why wouldn't that be offered on our shores here? Why has Ford felt it necessary to remove that from a standard requirement of Fiesta sold in Australia?

Mr SCOULAR — I am not sure of the precise answer to that question, if you like, at this precise point of time. What I can state is that if I look forward in the company's forward model programs and our forward planning, we will reach saturation coverage of that feature in our vehicle line-up in only a matter of three to four years time.

Mr KOCH — That does not really explain why — —

Mr SCOULAR — But I indicated at the beginning of my question that I was not sure of the precise answer to that. I can take that question on notice and feed back to you.

Mr KOCH — I would appreciate that. To me it is an anomaly that I think we are seeing with imported cars, and we would certainly like to get to the bottom of that considering we will be making recommendations at a further stage.

Mr SCOULAR — Sure.

Mr LANGDON — Through the Chair, looking at your current list of models that we have in front of us, there are very few — the DSC, and as a subquestion to that, why have you called it DSC? I understand what it stands for — dynamic stability control.

Mr SCOULAR — Yes.

Mr LANGDON — One of the issues we raised with Holden was the number of controls being named, and whether that would confuse the general public. So why have you taken this decision to call it dynamic?

Mr SCOULAR — We were the first Australian manufacturer to introduce this feature on an Australian car, and I think that was a considerable achievement on our part and it resulted from a considerable investment on our part. I think at the time we wanted to highlight that feature and highlight the leadership position that we have taken. Perhaps the question is more directed at those that have followed us, to ask why they have in fact used our name.

Mr LANGDON — Again, back to my main question: looking at the number of models you have here, all the other safety features like curtain airbags and brake assists are not standard items, so that is a concern to me.

Mr SCOULAR — I think the important thing, as I indicated earlier, is that we have plans in place over a very short period of time that will see saturation coverage of this feature across our model range. As regards where we are at the moment, I would make two points. One is I think it is important to understand with this feature that its acceptance in the wider global road safety community of the benefits that can exist and the empirical study data that reflects that is only fairly recent. We are only talking of the last three to four years when a number of major global studies have come out and, I think, highlighted the benefits that can be achieved from this feature. Secondly, as regards where you are in terms of any given point in time in the coverage you have of a particular feature will obviously depend, for example, where you are — an individual manufacturer or importer are — in their model cycles.

Just to elaborate on that point, for example, our last major model change on the Ford Falcon by Ford Australia was in approximately 2002 with the introduction of the BA Falcon. I think it is reasonably common knowledge that our next major model change will be early next year. So in one sense that model was on the market and in the marketplace before a lot of the understanding of this feature was thoroughly understood, and of course the next model will not be until next year. We have not sat back and, if you like, done nothing. In the meantime, with Falcon following our launch of Territory, and given that they do share a number of common platforms and features, we have sought to significantly spread it across the range as far as we can.

Mr MULDER — You indicated that over the next three to four years this particular feature will be available across your product range here in Australia. As we understand it, there are various interpretations of this feature. Does it concern you that other vehicles that may be imported into Australia come in with a downgraded version of dynamic stability control?

Mr SCOULAR — I think my answer to that would be along the lines that there has been reference in earlier discussions to the committee this morning that there is a lot of work going on on a global basis to establish a global standard for what actually is DSE, ESP, ESC, or whatever, but to actually establish, if you like, a global technical recipe for what it is. That work is under way. The major vehicle-producing countries are participating and are active partners in that process, of course including Australia, the Europeans, the North Americans, the Japanese and the Koreans. I think your point of what it illustrates is the importance to establish as quickly as we can an agreed global standard for what it is. Then the issues that you and Terry referred to, as to whether there is an A, B or C variant of the feature, should not arise.

Mr LEANE — Bruce, you mentioned e-safety technology is not bolt-on technology. It needs to be integrated with a new model.

Mr PRIDDLE — Yes.

Mr LEANE — Two questions: I take it 'e' stands for electronic?

Mr PRIDDLE — Yes.

Mr LEANE — Okay, that is good. The second question is: is it not a bolt-on technology because of the capacity of the onboard computer?

Mr PRIDDLE — Yes, that is right. It is an integrated system. Let us take a conceptual system that perhaps communicated with other vehicles and the road infrastructure and then, depending on the environment or what other vehicles are doing, that vehicle might take a particular intervention as a response. It might brake, it might even swerve, for instance — for argument's sake, taking an extreme case. The understanding of that particular vehicle's characteristics are absolutely implicit, just as they are for stability control, because you have to tune the system. The basic operational parameters exist — the computer program exists — but you have to tune the parameters to suit the wheels and tyres, the suspension set-up, the centre of gravity of the vehicle, the steering response, a whole range of different things. All those things have to be programmed into the system to suit a particular application — not just a particular vehicle but a particular combination of them — based on the dynamics of that vehicle. Equally, any total system approach, integrated approach, needs to understand how the other parts of the system are going to react. You cannot tackle it as a component or an entity in its own right.

The CHAIR — We were fortunate enough to see the technology that is available in America, which is the rollover stability control. We saw that in action. Obviously America has a pretty large market in terms of pickup trucks and SUVs. As I understand it, all of those SUVs in America have what is called the RSC. Do we have that here, and when will we have that in the SUVs that are in the marketplace?

Mr PRIDDLE — We do not yet. Like a whole range of other technologies that are in development globally, RSC, for example, has been developed in response to a fairly traumatic with particular categories of vehicle in the US. We have not seen those events here. We have stability control in any case. It could be argued whether it is going to be an issue in this market. I hope not.

Volvo is also developing other technology as well — for example, brake assist with collision warnings and interactive systems that tell you when a collision is imminent. The way these things usually work is that they are developed in one part of the enterprise and then they will either take on a life of their own, or it will be discovered that they are only suitable for a particular region of the world. My guess is that those systems which are more interactive with the vehicle, the environment and the driver are more likely to be more globally applicable.

I think it is a question of the volumes of those products built and as they get introduced into more and more vehicles and then they can start to filter way down the range, we will eventually see them in base products. When and if we will have rollover stability control is something that we have not decided yet.

The CHAIR — From the point of view of that being an asset to your company, it would probably be in your interest to advertise it as such and to look at when you can actually have it implemented in the SUVs that we have here. I think it is very good selling point. I am not exactly sure of the figures, but I am sure we have our fair share of rollovers that occur here.

Mr KOCH — Single vehicle accidents.

The CHAIR — Yes, single vehicle accidents; it is actually a complementary thing with the ESC. It is a technology that I believe would add to you selling more vehicles, especially with that feature in it. From the point of view not only of wanting that piece of technology in the vehicles in Australia for the safety reasons obviously, I just think it is in your interest to make sure that you get it here as soon as you can so that you can market it as such.

Mr PRIDDLE — I am not ruling it out. It is an evolution of stability control, and it would require some different sensors to sense roll.

The CHAIR — We saw it in action.

Mr PRIDDLE — You know all about it then. There is a curtain airbag that inflates for a longer period of time. It is not a difficult thing to do. Again it is a question of development effort to engineer that application — application engineering, as we call it.

Mr KOCH — Do either of you see that the product range made available by you and other counterparts in the manufacturing industry has a limit to greater safety opportunities over a lesser range?

Mr SCOULAR — No. I think it is the case, if I understand the question correctly — —

Mr KOCH — I think you indicated, Russell, there were some 150 in the model range or something like that.

Mr SCOULAR — Yes, there are 50 brands, 350 different models, 26 source countries. I think we have to face the reality that in an open market like Australia, and with a very broad trade pattern as the nature of our imports and exports as a community, we have a very wide range of vehicle models and a wide range of brands from source countries. I do not think I would see it as an impediment to the development of the inclusion of different things. If anything I would think that the competitive intensity that comes from a situation like that probably contributes to the faster uptake of particular developments and particular features.

Mr KOCH — I only raise that from the point of view of making resources available for a small number in a product range may come at the detriment of further safety if you could use those resources.

Mr SCOULAR — I understand that.

Mr KOCH — In saying that, when we were in the United States there was a voluntary agreement in relation to curtain airbags across the whole product line. Would you see that as being carried further to Australia? Would the Ford Motor Company in Australia give consideration to curtain airbags across your whole range as standard?

Mr SCOULAR — The Australian automotive industry over the years has participated in the development of a number of industry codes which I think have delivered strong community benefits. Two examples are that we have a CO₂ or a fuel consumption target in the industry that we have had for a number of years on a sales-weighted basis to reduce the carbon footprint of our motor vehicles. That has worked well. It has been updated a number of times and it will continue to work well.

We have also in more recent times as an industry developed an industry code regarding motor vehicle advertising to take a safety-oriented approach there. Whilst that code has only been in place, I think, for three and a half years, by any measure of analysis one would have to accept that it has delivered a demonstrable and clear change in the type of advertising we see in the media for our products, whether it be on television or in the print media or at the cinema.

As regards a particular uptake of a code of this type, I do not know a lot personally about the US situation, but if we believed that it had demonstrable public good benefits in Australia, I see no reason why the industry would not look at something of this nature. I imagine something of this nature is probably more complex than the other two examples I have just given.

Mr KOCH — Russell, I pose the question to a manufacturer, not industry wide. It is something that has been put in place by your parent body in the US. I was just interested to know whether consideration was being given to bring that to Australia as a standard across the Ford product.

Mr SCOULAR — I am not aware of any specific discussion that we have had at Ford Australia to bring that to Australia, but my point was not that I know a lot about the detail of the US code. I understand it is an industry one and not company-specific; or am I wrong?

Mr PRIDDLE — I think the key thing we would be looking for — —

Mr KOCH — My understanding was that it was at manufacturing level, not industry.

Mr SCOULAR — But the US manufacturers, if you like, have a far greater share — —

Mr KOCH — That did not come out at the briefing that we had at Ford, which I must admit was a fantastic briefing, and we really appreciated it; but that is okay, I stand to be corrected. My understanding was that it was a Ford initiative.

Mr PRIDDLE — I think what we would be looking for is to increase the availability of head-protecting side airbags. Now that may take the form of a curtain which falls from the roof down, or it might be a thorax-head airbag which comes out of the seat, but the key thing is to have head protection and that is what we are working on, to make that increasingly available, move that down the range and get it in as many products as we can.

It is a question of how quickly we can get that technology to move its way down the range. You can take the example with frontal airbags: they started off just for the driver, then the passenger, in higher series only, and then gradually moved down the range. In fact, with that particular one, we were the first manufacturer to make them standard equipment.

Mr KOCH — Bruce, in reality we should be able to achieve that in Australia quicker than you can in Europe, for instance, or America, from that point of view, due to 60 per cent of our vehicles going into fleet sales where there is a turnover, and hopefully we can bring the age of our registered motor vehicles down under that age group of 10. That is an opportunity and an advantage that other countries do not enjoy, and that is principally why I threw that one in from the point of curtain airbags, because if anyone can lead the world on it, we should be right in the front row.

Mr PRIDDLE — Yes, I think the fleets are in an excellent position to drive our product decisions in terms of how they specify product safety features.

Mr KOCH — As long as it is affordable, because we have heard from fleet owners, and the concern that they have got with even adding the costs. The last statement in relation to that, Bruce, was that fleet managers and certainly those at the buying coalface are very wary of handling 100 000 cars or 50 000 cars for any one fleet owner, and where there is \$100 involved, in relation to price movement between models, it becomes very expensive for that particular company or semi-government body, or authority, or whatever, so there is a limitation from that point of view in the marketplace, which we have been made very aware of by fleet managers.

Mr PRIDDLE — We do, of course, take every effort to make the safety features affordable and available. That is really what we are aiming at. We may not be able to do it as standard, but we would like to get there. Russell has given you some rough time frames, but our key thing is not to package them, as we heard earlier, if possible, unless we package other safety features with them, but to try to at least make them available where we can.

Mr KOCH — It has been put on our table where Ford Motor Company, for instance, was inclined to package, especially ESC. In some cases, fleet managers went past Ford to GM. I think that is something that Ford Motor Company is certainly aware of, and it has done its best to reflect it.

I think the buying marketplace certainly can pick up on any of the packaging options, versus having the opportunity to buy them singly, and will do so accordingly.

Mr SCOULAR — I think perhaps if we are talking Falcon versus Commodore, there are examples where we did some packaging related to, I think, a very strong and good attempt by us to get that feature into the marketplace across our range sooner rather than later, if you look at where we were in the cycle. What we were packaging, if you like, was not stereos, leather trim and a safety feature; what we were packaging, in a sense, was wheel size, brake-wheel type combinations, to be able to get it into the marketplace sooner.

Mr PRIDDLE — We had a calibration that worked with a particular wheel-brake combination, so we said, 'Let us make that available now; meanwhile we will continue to work on making available other wheel-type brake applications to move it down the range', and that is what we have done.

It is a question of timing. We would love to do it straightaway but we have got limited engineering resources that have to develop an awful lot. We have got very complex model line-ups so we have to try, and it is a constant juggling act as to where we deploy those resources and what is the most important priority.

The CHAIR — In relation to Beltminder function: this technology is in, I think, all of the Ford models in the US. That is not the case here, though. Can you tell us some more about that?

Mr PRIDDLE — In some of the imported models — we have a situation where they had three different technologies available to them for Beltminder. One was none, another one was for the Japan market and there was a European one. Unfortunately the European one did not actually meet the regulation here, to have a light come on when you first get in the car, so we got the Japanese one, which does not have all the same features as Beltminder with the trademark around it. That has been remedied so we will be able to bring the European one here in the not-too-distant future.

Mr KOCH — With the introduction of the Mondeo, when you bring that in from the UK, do you think that will have an impact in relation to other standard safety equipment on your product range, especially in the Falcon sector?

Mr SCOULAR — I think the short answer to your question is, yes. Obviously, the Mondeo that we will be introducing in a few months time is a great motor vehicle. It bears almost no relationship to the car of the same name that was sold here some years ago. We are expecting great things from it and I think to the extent that it is part of the family, we would see its benefits rubbing off on other members of the family as well, in terms of their future developments.

Mr KOCH — In saying that, do we need to import a vehicle of that calibre before we recognise those opportunities and spread it across your fleet as a standard product?

Mr SCOULAR — No, we do not. The reason for us having introduced it is that in a marketplace like Australia we do not have that first model line-up and people have different tastes for what they want in different vehicles. At the moment we have Falcon family-sized vehicles, and then in the Ford line-up you step down to a Ford Focus, which is a 1.8 to 2-litre vehicle. There is, if you like, a gap in between. In that medium sized gap in between there has been quite significant growth in the marketplace in the last two and a half years. We took the decision that we wanted to be part of that growth.

Mr KOCH — So it is product range availability?

Mr SCOULAR — Correct.

The CHAIR — Another company that is very well known for their investment in safety in vehicles is Volvo. Volvo is obviously well renowned and well known, and obviously Ford have bought out the passenger vehicles of Volvo, so therefore there is a sort of an expectation somehow that the investment they have made in the field of safety within vehicles will flow through to the Ford range. I understand they have the active head restraint. What plans do Ford have to introduce this into their Australian models?

Mr SCOULAR — Let me talk at a high level first, Chair. With regard to our relationship with Volvo, obviously corporately the Ford Motor Company owns Volvo passenger cars. It bought them six or seven years ago. It has been a wonderful relationship in terms of what we have learnt from Volvo, and I think in many areas of the business Volvo has learnt from us. I think, if you like, what we have been able to learn from each other has been a strong benefit to both of us in a number of ways, and I want to give you an illustrative example of where those benefits can come to us in Australia.

We have had a number of personnel from Volvo's product development and engineering area that have come to Australia to work with us. One of our most senior engineers, who has been with us for about two and a half, nearly three years is from Volvo. It is not only a question of, if you like, learning from a partner company and what they have done as a company, it is learning on a day-to-day basis how they do their work. As regards individual features

and when we might uptake them, obviously we will look at anything they have, and if we believe it has merit in a particular marketplace for our products will be very keen to adapt it. But I suppose one of the things that the automotive industry is most reluctant to talk about publicly ahead of the launch of any product is any individual feature.

Mr PRIDDLE — And the particular feature you mentioned is only one means to an end. There are other ways of doing it — reducing the risk of whiplash, as you call it, which is not, by the way, a very clearly understood injury mechanism. There are other things that you can do. They are simple things like the position of the head in relation to the head restraint. Those sorts of basic geometric effects can help to control any sorts of reactions in the neck. We need to be careful about seizing on particular technologies as a panacea for any one particular issue that is in the real world. We need to first make sure we understand the injury mechanisms and look at all the ways of achieving the desired outcome.

Mr KOCH — In the Falcon range do you see it right across that range, or are there exceptions? I only raise it from the point of view that it has been indicated to me that there was an exception, and that is in those that are full-time gas. Is that correct or not.

Mr SCOULAR — There is an exception there at the moment which we are seeking to address.

Mr KOCH — Could you indicate to us the reason for that exception in the Falcon range as it relates to gas, and why it is not across the whole range?

Mr SCOULAR — It is a technical issue relating to, if you like, the fuel feed and the mechanisms for measuring that feed within the engine.

Mr KOCH — Is that made clear at the point of sale for prospective purchasers?

Mr SCOULAR — I think it is made very clear. People know what features they are getting on a car and know what they are not getting. We certainly do not advertise the car as featuring it. We do not advertise it or promote it as being part of those motor vehicles. Given also that almost entirely those vehicles are sold to specialist fleet buyers I think that fleet buyers tend to be very aware of what they are buying and what they are not buying.

Mr KOCH — In saying that you indicate that you do not actually market the fact that it is not on the car, so how are the users of the motor car, irrespective of the fleet purchaser, to be made aware of that?

Mr SCOULAR — We do not market that it is not on the car in the context that if you are selling any car you do not give a list of 50 items that are not on it.

Mr KOCH — Russell, are people who are driving the motor car under the perception that it is on the car? That is what I am trying to determine.

Mr SCOULAR — I think my point is that I do not know that there is a perception that it is on the motor car.

Mr KOCH — From your earlier comments it was across the whole Falcon range. Obviously it is not across the whole Falcon range. That is what I am trying to — —

Mr PRIDDLE — There are exceptions, and of course in our advertising material we have made clear what those exceptions were.

Mr KOCH — What other exceptions are there?

Mr SCOULAR — I think my comments were that we had spread to other members of the Falcon range. I have never said that it is standard across the entire range, and if I have I stand corrected.

Mr KOCH — I stand corrected. I might have picked it up the wrong way. I thought that was what was indicated, and that is why I drew on it.

The CHAIR — We were given some demonstrations of in-the-vehicle safety in terms of seat belts, four-point inflatable airbag-type seatbelts. What can you tell us about those sorts of investments in terms of that technology that Ford is making overseas? Do you think that is a possibility for the range of vehicles we have here?

Mr PRIDDLE — It may well be. The way it works is that we do big R & D, and when we talk of big R and D, the bigger research is done mostly in the US, and perhaps by some of our other partners like Volvo and Jaguar Land Rover, previously. Once those technologies are developed to be what we call implementation ready, then you can start to look at various product programs and say, 'Will we have that feature and engineer it into our product or not?' That is why this research is done — inflatable restraints, four-point belts — What benefits do they give? Are they significant?

In terms of restraint systems we are really getting very close to the point of spending a lot of money for very little incremental return. My personal opinion would be that we are better off looking at those technologies, if we are going to make the next quantum leap, if you will, into reducing road trauma then we should be looking at these e-safety systems which manage those interactions between the driver of the vehicle and the road environment, because some studies have shown that most — I think it is something like 85 per cent — accidents are the result of mistakes. Human errors should not be fatal. They are inevitable, so if we can come up with a system that avoids an impact at all then it would have far greater-reaching implications in reducing road trauma. But obviously that is going to take some time because first of all the research needs to be complete to make sure we are not designing something that might have an adverse consequence. If one vehicle has it, what are the implications for the vehicles around it? Is it going to cause other problems? If a particular vehicle can respond much faster now because of some technology but a vehicle behind it or around it cannot, is that going to be positive or negative overall?

We need to understand that very carefully because we are dealing with human-machine interface, human behaviour which is not well understood. We can all have our own opinions but it is not really that well understood. Some studies have shown that putting certain features in cars and advertising them increases the driver's sense of invulnerability, which is something that clearly we would not advocate, and people already think it is not going to be them in the accident. We really need to understand this whole issue of human behaviour before we decide about willy-nilly putting things into products. The research is important, and field research is equally important.

Ford was one of the founding members of the Australian National Crash In-depth Study, which MUARC is doing — of course VicRoads is a member, the TAC is a member — to really understand real-world injury mechanisms and causes of accidents. What is coming out of that, perhaps more so than we expected, is that the impacts of roadside furniture are becoming more of an issue. If we can avoid those in the first place, recognising that in some cases it may not always be possible to remove the furniture, we clearly stand to have a lot greater gains. But those technologies, unfortunately, are very complex and require lots of careful development, so there is a long lead time there.

The CHAIR — Thank you very much for your contribution.

Mr SCOULAR — Thank you very much for the opportunity.

Committee adjourned.