

## **Fleet Safety: Benchmarking Good Practice from Collective Insights**

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### **Abstract**

*As fleet safety or work related road safety is a relatively new field, a series of benchmarking workshops have been conducted in Australia, plus one in Thailand, to explore the research evidence and the practical experience of those involved in fleet safety activities. These workshops addressed a number of specific topics in fleet safety, enabling participants to hear about the latest research in these areas, some case studies from fleet safety practitioners in organizations, and to discuss among peers the challenges and techniques used in advancing fleet safety.*

*These workshops have produced a wealth of knowledge about effective and ineffective practices as well as encouraged networking between organizations facing similar challenges. They have also generated some lines of further inquiry and opportunity for public policy development.*

*This paper contains a description of what this program was about and some of the lessons learnt through the process.*

### **Introduction**

Road safety is not just the responsibility of governments. Increasingly, employers, both private and public sector, are taking a more active role in influencing safe vehicle use in the work environment and in work related driving tasks.

In order to collectively learn more about good practice in managing fleet safety or work related road safety, it is beneficial to share knowledge and experience. One way of doing this is through benchmarking workshops. A company called Benchmarking Partnerships in association with ARRB, has been conducting such workshops in Australia, since the first one was hosted by BP Australia in March, 2004. The first international fleet safety benchmarking workshop was held in March, 2007 in Bangkok. In all, 8 workshops have been held, involving participation from well over 100 organisations.



Figure 1 Steven Humphrey, BHP Billiton, reports back with notes of the group

These workshops involved specialist presentations based on researched topics; case study presentations by organisations that have put in place innovative systems or programs; and structured small group discussions on applicability and feasibility of the practices in different organisational settings.

Both heavy and light vehicle safety issues were covered in the workshops. The specific topics were: fleet safety policy frameworks, root cause analysis, key performance indicators, driver

training, behavioural change, OHS and duty of care, driver fatigue, and international fleet safety challenges.

### **Fleet Safety Policy Framework**

In the first of the fleet safety benchmarking workshops, hosted by BP Australia, Melbourne in March, 2004, the focus was broadly on policy frameworks for managing road safety in occupational settings. Presentations on the ARRB ten-elements model, BHP Billiton's Fatal Risk Control Protocols and Latrobe University's fleet safety policy were given. From these presentations small group workshops were held to define some practical ideas for each organisation to take away with them.

The feedback from the group indicated that the format of the workshop was good and provided a great opportunity for practical learning, but that the workshop should be held over a two-day period rather than one. The group identified some specific topics within

fleet safety and suggested that a series of workshops be held to enable deeper exploration of these areas. Tangible outcomes reported some months later included the preparation of a manual based on the ten-elements model and the establishment of a resources industry benchmarking group that still meets periodically to discuss issues of mutual interest.

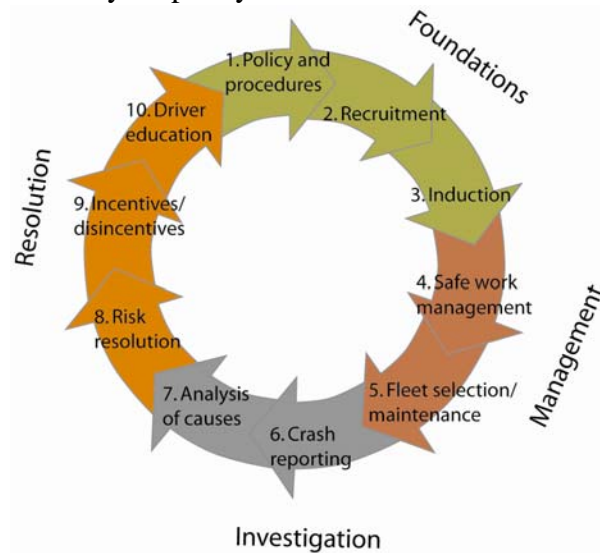


Figure 2 ARRB Ten-Element Fleet Safety Model

### **Key Performance Indicators and Root Cause Analysis**

The workshop on key performance indicators and root cause analysis, hosted by QFleet (Queensland Government's fleet management agency) in Brisbane, in July, 2004, touched on the importance of assigning fleet safety performance KPIs to responsibilities of various people in the organisation. It also illustrated – in theory and practice – how root cause analysis can identify important systemic risk factors to address. ARRB presented the theoretical basis of KPIs and road cause analysis. Reliance Petroleum presented their approach to root cause analysis and assisted the workshop with a real crash example that was investigated so that participants could examine how it worked in practice. Fleet company, LeasePlan presented a collection of cases that showed how performance data can highlight where action needs to be focused. Participants were able to learn from the group exercise, the importance of doing a thorough root cause investigation and analysis of crashes in order to find the systemic problems that could cause a repeat of a similar type of vehicle incident.

The feedback from the group suggested a need to delve more deeply in the establishment of measurement indicators. So, a further workshop on this was planned.

## Fleet Safety Metrics and Measurement Workshop

For this Metrics Workshop, hosted by Toyota Australia, Melbourne, November, 2004, a measurement specialist was brought in to assist with training the group in the essentials of defining appropriate metrics and performance measurement practices. The workshop was jointly guided by an ARRB fleet safety specialist and the metrics and was highly interactive. Group activities focused on setting a vision for a good set of indicators and measurement tools, deciding on important indicators for fleet safety, and how to secure organisational buy-in for fleet safety performance measurement.



Figure 3 Vision of excellent fleet safety measures

While quite a number of fleet safety performance indicators were identified in the workshop, most participants agreed that it was best to keep them down to a manageable number of key indicators.

## Driver Training and Behaviour Change Interventions

Many benchmarking participants had indicated a strong interest in driver training and other ways to influence safe driving. A workshop on this topic was hosted by and Queensland Department of Emergency Services, Brisbane in May, 2005. This workshop involved specialist presentations from ARRB, and CARRS-Q on the research findings about effective and less effective behavioural interventions in road and fleet safety. Case study presentations of real life organisational trials were given by AGL, BOC Gases, the Emergency Services Department and Reliance Petroleum. Each presentation was followed by group discussions about ways the effective programs might be adapted for use in other participants' organisations.

The workshop identified where some kinds of driver training can be helpful, though by and large, skills based training isn't effective. The driver group discussion method of encouraging driver participation in risk identification, analysis and resolution as well as approaches to improve safety culture were showing some very positive results.

## Culture Change

A workshop, hosted by Air Services Australia, in Melbourne, was held in July, 2005. This was not specifically about improving fleet safety, but rather more generally about how to improve organisational culture to make it more conducive to safe work practices. While ARRB presented an illustrative case study about how to change and improve safety culture in an organisation, other cases were presented by Air Services Australia, Alcoa and Telstra. The group workshop sessions identified some important issues and ideas for shifting organisational culture throughout an organisation.

## Gaining Buy-in from Managers and Drivers

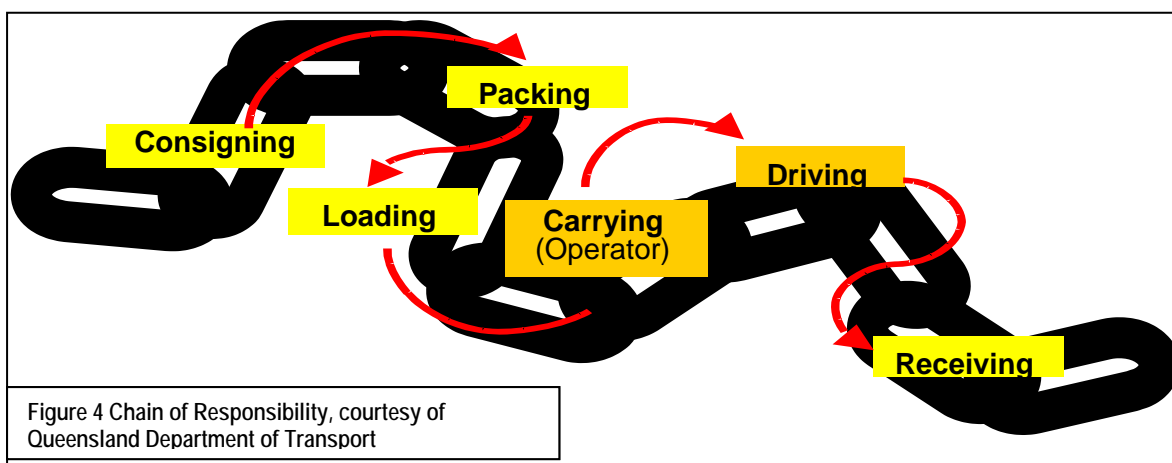
Safety practitioners within organisations often come up against resistance from their superiors and peers making it difficult to implement safety programs. Then if they do

overcome these barriers, they sometimes encounter resistance from the employee drivers to program participation and policy compliance. A workshop hosted by Australia Post and Australian Air Express in Melbourne in October, 2005 heard and discussed presentations from ARRB, Australia Post, Johnson & Johnson, Reliance Petroleum and Toyota about these topics.

Again, the shared experience of the participating organisations helped to strengthen the collective practical knowledge of the benchmarking group as well as to give encouragement for others to try techniques learned in the workshop. A key theme arising was the importance of providing opportunities for active participation, input to policy and/or feedback for managers and for employee drivers.

### **OHS Fleet Safety Duty of Care**

Increasingly employers in Australia and elsewhere have become concerned about whether their policies and practices comply with legislative requirements for employee and public safety with respect to driving. A workshop hosted by the Queensland Department of Emergency Services, Brisbane in June, 2006, reviewed Australian occupational safety and transport legislation including the application of ‘chain of responsibility’ principles with presentations by ARRB and the Queensland Department of Transport. These discussions were followed by case study presentations by Elders, Reliance Petroleum/BP and SurePlan. Again small groups were organised so that clarifications and peer group exchange could occur. In addition, a Fleet Safety Maturity Capability Assessment Tool devised by ARRB and Benchmarking Partnerships was used to assist participants to gauge how well they were complying with good fleet safety practice.



The Chain of Responsibility concept has been in development in Australia since the mid 1990s. But now all States have adopted regulatory provisions to prosecute companies for their part in serious transport breaches.

Participants with both heavy and light vehicle fleets were able to gain some insights into what they could and should do in order to comply with occupational safety and transport laws.

This workshop clarified some of the employer’s responsibilities to improve and maintain safe practices and illustrated how a policy framework template can be useful in identifying gaps in fleet safety management practices.

## Driver Fatigue

Together with speeding, fatigue is the biggest factor in work related crashes. This is an important issue for transport operators but the risk affects light vehicle drivers as well. A workshop was held in Sydney, in September, 2006. This workshop involved presentations from the Roads and Traffic Authority of NSW on regulatory provisions for heavy vehicle operators, as well as from specialist providers of tools and systems for managing fatigue risk. Participants also heard and discussed case studies from Shell and Linfox on behavioural programs and technologies being trialled to curb the risk of driver fatigue. Behavioural and engineering solutions were explored by the group. Participants were able to gain some insights into how various tools and programs work in other organisations.

## Global Fleet Safety Benchmarking

The first international fleet safety benchmarking workshop, hosted by Traffic and Transport Development and Research Center King Mongkut's University of Technology Thonburi (TDRC) and Safe Driver Education Co. Ltd Thailand, was held in Bangkok, March, 2007. It was opened by Khun Chamreon Yutithumsakul, Head of DDPM Inspector Office, Department of Disaster Prevention and Mitigation, who identified some major road safety challenges in Thailand and encouraged an active role for employers in improving road safety.

This workshop had a wider focus than the Australian based workshops with a broad range of presentations – all leading to the question of how to promote good practice in fleet safety globally. There were presentations from Safe Driver Education, ARRB, Johnson & Johnson, the World Health Organisation, Shell and the UN Fleet Forum.

The small group discussions enabled each participant to take away some useful ideas that could assist them to improve fleet safety in their organizations. In addition some insights into the viability of an ongoing network or community of good practice were made. The challenges of benchmarking globally – or locally – is that there are too few organizations taking an active interest in fleet safety for an (ideally industry-segmented) benchmarking group to be easily sustained. However, there is an interest by those that did participate in the Workshop to keep having the opportunity to share practices with one another.

The group concluded that it may be best to aim toward establishing something like an ISO standard for fleet safety to encourage good fleet risk management, but that an informal networking approach, including a series of periodic workshops is the best way to go at this stage.



Figure 5 Example of an underrun protection bar on a transport vehicle.

## Observations and Conclusions

It is clear that employers can make a strong contribution to road safety. Employers can access drivers and vehicles in ways that governments can't; can influence vehicle manufacturers (60% or more vehicles are registered as corporate); and can control journey and driving risk by good policies and practices. There is an interest by some companies to share experience; and peer activities such as benchmarking workshops provide a good and welcomed opportunity to do this.



Figure 6 Edward Arcadipane, QFleet, group session report back

Governments can influence fleet safety actions by companies. They can do this through passing and enforcing occupational safety and transport laws that target those who can influence people who drive for work purposes. In addition, governments can advance the safety of their own fleets and drivers.

Industries and companies vary widely in their practices. The participants of the Benchmarking workshops came with a wide variety of experiences and levels of sophistication in their practices. Dangerous goods companies, such as those in the oil and gas industries have best practices with strong policy commitments to safety. Other companies have good practices too, notably, for example, pharmaceutical companies. Government agencies vary in their fleet safety management practices, from doing nothing to doing some leading edge work in fleet safety. But a number of companies are seeking to improve, whereas some are not taking an interest in fleet safety.

Multi-national companies with good practices set good standards but challenged in local markets

- Use of local contractors poses an increased risk
- Competing with local companies who do not invest in safety
- Operating in high risk environments
- Uneven regulatory and social conditions

So they:

- Want improvements in local markets
- Want legislation for a more even playing field
- Need to assess and mitigate risk in some environments
- May contribute to public road safety programs

Local companies in high risk countries that have poor fleet safety practices:

- Have operational costs that need to be contained
- Lack of knowledge about safety practices
- Find that staff driving habits are difficult to change
- Find that there is poor availability of safer vehicles

So they:

- Need to be advised of low cost effective measures
- Need training and education about fleet safety management
- Are challenged to change culture and behaviour
- Need access to safer vehicles

Suggestions for governments to improve fleet safety include:

- Convene benchmarking workshops (targeting various industry sectors)
- Develop good practice guide(s)
- Introduce fleet safety legislation and standards
- Establishing a website for exchange of practitioner experience
- Commission studies into fleet safety capability/practices
- Put strong fleet safety policies and programs in place in their own agencies
- Encourage benchmarking in the transport industry
- Produce tools and materials for use by employers
- Arrange to hold a conference on fleet safety, targeting employers and government agencies

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