CITATION:

This paper focuses on initiating cultural change associated with driver distraction using Non Government Organisation workplaces. This is compared to contemporaneous Government initiatives, particularly legislation. A two way communication policy developed for a global petrochemical organisation is presented, with discussion of incentives, implementation and compliance. This particular policy is placed in context by reference to a range of other companies policies as surveyed by the Royal Society for the Prevention of Accidents (RoSPA). The presentation is intended to prompt thought and discussion around status quo change that can be driven by non government organisations thereby seeding broader community attitude and behaviour change, and suggests scope for public sector support.

Introduction

Road safety initiatives and culture have traditionally been instigated and driven by public sector bodies in the interests of the common good.

There have, of course, been some notable exceptions where industry has driven the road safety agenda. An Australia example is the Snowy Mountains scheme, which introduced compulsory seat belt wearing for all business activity during the 1960’s, including the installation of the belts themselves. This was well in advance of legislation being introduced, which even then had numerous ‘out’ clauses including the absence of retrofitting to vehicles.

In recent times, initiatives to ‘go beyond’ the minimum have been increasingly implemented or supported by the public sector. Examples include market driven programs such as various new car assessment programs targeting improved vehicles (www.euroncap.com, www.iihs.org, www.aaa.asn.au/ancap.htm) and emerging road assessment programs (http://www.eurorap.org/) targeting improved roads.

This presentation focuses on the third piece of the jigsaw – initiatives targeting improved road users. The paper will follow in particular an example of one customer of TRL who have established minimum global road safety standards, one of which deals with a number of in-car distractions.

The authors seek to encourage the public sector to work in ways that support and encourage such initiatives with the intent of effecting cultural change in the broader community.
In addition to TRL’s client experiences, the paper refers to the work of ROSPA (http://www.rospa.org/) in studying and supporting such initiatives.

**Work Related Road Safety**

To ensure a commitment to road safety programs in the workplace, there needs to be a clear business case.

TRL research in the United Kingdom has previously shown that that company car owners generally have a crash and casualty rate that is up to 50% higher than private motorists (Downs et al. 1999; & Broughton et al. 2003) after adjusting for exposure. These findings are particularly relevant to discussions on driver distraction as many of the company drivers report a much greater frequency of potentially distracting activities including:

- Use of hands free mobile phones,
- Searching for signs,
- Thinking generally about non-driving issues, and
- Being tired while driving.

However, while this provides some incentive at an altruistic level, true incentive only comes about when the potential cost savings of implementing road safety measures is weighted against the possible costs of the program itself.

One of TRL’s global petrochemical clients has undertaken this analysis and instigated road safety policies led by the following statement:

“Road accidents are the single biggest cause of work related fatalities and third party fatalities involving “Company X’s” operations. This Group Functional Standard – Driving Safety will protect shareholder value by reducing the frequency and consequences of driving accidents.”

This statement, and the focus on shareholder value, provides significant incentive for action. Flowing from this position, the client implemented a number of measures to ensure a response, including:

- A performance based salary component for senior executives linked to road safety performance,
- The creation of a global senior management role (and a cascading hierarchy of roles below this position) dealing exclusively with road safety, and
- The development of policies, procedures and measures targeting results.

**Company Standards**

To facilitate change, the client decided to develop a set of minimum global standards to steer the management of road safety. This was a significant step, as it not only set the goal post significantly higher than what exists in many of the developing nations it operates, but equally stretches beyond practices in developed countries across Europe, North America and Australasia. The standards cover a broad range of topic areas including:

- Use of communication devices,
- Night driving,
- Driver tiredness & fatigue,
- Driver training & assessment,
- Vehicle standards & specifications,
• Restraint use,
• Driver impairment, and
• Journey management & route assessments.

The remainder of this paper deals with the topic area of communication devices.

A Basis for Action

To respond effectively, the private sector needs a steer in the right direction and a call to action. In the United Kingdom, these have come from a number of sources including insurance companies and private lobby groups.

An example of such a call to action came from Direct Line Insurance who funded TRL to research the effects of driver distraction from both hand held and hands free phone use. These were then benchmarked against both normal (‘control’) driving, and driving with a blood alcohol concentration of 0.08 mg/100mL (Burns P et al. 2002).

While TRL produced a 60 page scientific report on the study (TRL Report TRL547) released late in 2002, Direct Line condensed the key findings of the research into easily digestible material and incorporated the results into a 28 page call to action document. This document, titled The Mobile Phone Report, included discussion on:
• TRL commissioned research findings,
• A review of current research knowledge,
• Popular myths & opinions,
• Current legal position,
• A call to action for employers, the government, and the legal system, and
• An action plan for the future.

The Direct Line report was released in March 2002.

Similarly, ROSPA has produced a number of call to action documents. In July 2002, ROSPA released The Risk of Using a Mobile Phone Whilst Driving. The report can be viewed at:


Key recommendations of the report included measures focussed on:
• Education,
• Data,
• Legislation,
• Employers, and
• Other distractions.

Mirroring the importance placed on workforce initiatives in the above documents, ROSPA have also produced specific guidance for employers such as Driving for work: Mobile Phones which is accessible at


To demonstrate the level of commitment and direction given by ROSPA, a search for “mobile phone” on the website www.rospa.org produced 155 hits at the time of writing this paper, many of which were exclusive documents and/or press releases. These date back to
at least 1998 when ROSPA ran a driving simulator at the British International Motor Show for drivers to see for themselves the effects of using a mobile while driving.

However, such documents alone will not necessarily instigate behaviour change. Contained within these documents, readers will find references to various studies that in summary show:

- around 90% of people believe hand held phone use is dangerous and should be illegal, and
- 45-55% think hands free phone use is dangerous and should be illegal.

Yet the majority (around ¾) admit to using mobile phones while driving, and junction observation surveys indicated at least 2% of all drivers are on the phone at any given moment (mostly hand held).

Therefore, whilst the foundation is laid, affirmative action is required to modify behaviour.

**Legislation versus Corporate Self Regulation**

The ROSPA report *The Risk of Using a Mobile Phone While Driving* detailed worldwide legislation in place at the time and found in the order of 40 nations or jurisdictions within nations hand laws targeting hand held mobile phone use. Far fewer had prohibitions on hands free use, with some deciding to make very specific bans such as school bus drivers. A question mark hung over the effective level of enforcement for many of the above jurisdictions.

Interestingly, the ROSPA report discusses the effectiveness in some nations of targeting employers under health and safety legislation, despite the absence of specific traffic laws prohibiting activities such as hands free call taking and making. Arguably, effective enforcement levels may also be higher under this approach due to likely financial risks.

At the same time that mobile phone use had not been specifically legislated against in the United Kingdom, a survey was conducted of a number of major employers. Of these, a significant number had policies and procedures in place dealing with mobile phone use. One also went on to address a full range of potential distractions in vehicles.

Therefore, whether it be due protection from workplace safety legislation, reducing the costs of doing business, managing brand reputation or just simply employee well-being, it appears that there is momentum in the private sector to lead with road safety reform – ahead of the pace at which legislation can be implemented, being possibly bound by any or all of rigorous process, political will or resource limitations.

**A Corporate Mobile Phone Policy**

TRL has worked with one major global petrochemical organisation to produce a policy on two way communications devices. The policy states that

“whenever a member of the workforce operates a vehicle in the conduct of company business they must:

Not use any mobile phone, or other two-way communication device, whilst a vehicle is in operation.”
Passive listening, and response to operational emergencies only, using two-way radios is allowed, providing a documented risk assessment has been conducted and appropriate controls put in place.”

‘In operation’ includes whilst a vehicle is stopped in traffic, and the policy applies to voice and text communications, and is intended to cover other forms of communication such as work management systems, any emergent in-car entertainment systems, and other devices not used to control the vehicle. The policy applies whether the phone and/or vehicle is issued by the company or not.

This policy, therefore, exceeds the legislative requirements of most – if not all – jurisdictions that the authors are aware of.

The exemption process is rigorous with only designated senior staff able to provide a written direction for specific devices and operators in specific circumstances. Such exemptions will only be valid and current in the eyes of the company if:

- There is a documented risk assessment,
- Risk minimisation measures are applied,
- The exemption is reviewed annually,
- There is a demonstrated need to achieve specific safety or security requirements, or comply with local legislation, and
- A compliance program is in place.

Examples of the types of operations that might gain exemptions include fire appliances at an oil refinery, or a vehicle travelling in an area subject to hijackings.

Compliance includes forced measures and monitoring such as:

- Reinstalling phones to the passenger side of a vehicle,
- Interlocking phones with handbrakes,
- Random and incident audits of phone records against vehicle management records,
- ‘mystery’ callers, and random compliance observations.

Other measures are also applied to encourage compliance such as:

- Promoting the use of voice mail box ‘posting’ functions rather than calling mobiles (particularly for routine messages or management such as roster information),
- Installation of GPS tracking to minimise need for “where are you” calls, and
- Suggestion to ask “are you driving” whenever calling a mobile (internal or external to the company).

It is also a disciplinary issue to ‘require’ staff to be available while driving.

Equally, as issues arise they are being addressed. An example is the potential conflict between having driving rest breaks, and responding to volumes of voice messages thereby possibly countering the notion of a rest break.

Marketing the Policy

For workforce buy in, the company committed to marketing the policy to staff. A starting point is the context statement within the policy which reads:

“Road safety research indicates that using a mobile phone whilst driving increases the risk of having an accident by four times irrespective of whether a driver is using hands-free or hand-held mobile.”
The impairment is equivalent to or worse than the risk of drinking and driving.

Test show that drivers miss road signs and instructions while using a mobile phone, or other two way communication device."

From this, the company then implemented a range of promotion measures including:

- Brochures and displays,
- A company intranet safety site,
- Credit card sized safety reminders, and
- Dashboard stickers.

Testimonials were used in the campaign not only speaking of staff experiences with the hazards of driving and using a mobile phone, but also a response that at another company’s depot, walking and talking had contributed to incidents and was considered dangerous, thereby being prohibited.

To counter scepticism over laboratory test results and research findings, the company also arranged 145 of their own drivers to do field tests and see for themselves. This self exposure contributed positively to the overall promotion of the policy.

The authors are aware that other companies (such as the major US logistics company Schlumberger) also have mobile phone policies and are marketing them in similar ways not just internally, but also to their customers and suppliers.

**Compliance**

In addition to having disciplinary procedures in place for breeches by employees (and financial incentives for management), compliance is also driven by contractor monitoring. For new contracts, compliance is written into the contract along with monitoring and appropriate penalties for non-compliance. For existing contracts, it is made clear that future and ongoing contracts will be evaluated against such criteria.

**Public Sector Support**

For optimum results, the public sector can offer support in a number of ways. Examples that the authors think are worthy of note include:

**Information support**

Continuing an ongoing program of research and information dissemination for emerging issues,

**Capitalising on corporate motivators**

Seek out and target both motivated companies (such as our clients!) and what specific motivators are. For example, would a sole successful health and safety legal action do more than any amount of paid advertising?
Procurement policy

Does your organisation’s procurement policy give some weighting to organisations going beyond existing legislative and quality requirements?

How do you expect to make it their core business, if you aren’t truly making it yours? Maybe you could offer or endorse a safety star rating scheme of company practices for their own marketing to other government and non-government bodies?

A number of fleets are now specifying ANCAP policies above certain values. If you do, do you reduce the rating by allowing retrofitting of interior accessories? Are you supporting measures such as primary NCAP and the ergonomics rating that could consider various controls and the propensity to distract?

Leading by example

Do you have your own corporate policy that ‘goes beyond’ or at least have a thorough guidance document for those who don’t know how to get beyond the basics?

Incorporation

Do you welcome companies into non-traditional areas? For example, TRL has been commissioned to investigate a number of our client’s incidents where we have worked in partnership with local investigating authorities. More safety information comes back to the company, and the reduced adversarial role serves to develop road safety expertise and push advances.

Pushing beyond

Generally, are you leading public debate by means such as the UK government’s Think! campaign as shown during the presentation and visible as www.thinkroadsafety.gov.uk, irrespective of existing organisation or legislation boundaries?

Conclusion

This paper has presented some of the background road safety strives in the private sector, and specifically given an example of what one company has implemented globally to address driver distraction.

Overall, the authors think that such initiatives should be warmly welcomed by the public sector and supported as a method of achieving incremental gains in the community attitude change and the more difficult area of behaviour change.

The authors do not propose that this approach be seen as a replacement to traditional public sector methods. The approach is more likely suited as both an adjunct to and interim measure for the normal range of public sector activity.

However, to realise the benefits of such approaches, the public sector may need to make a number of program and cultural changes themselves as suggested.
References


Forthcoming Publications

The following TRL documents will shortly be released and may be of interest to readers.

TRL634. Mobile phone use by drivers, 2000-03 by J Broughton and J P Hill.

TRL635. A survey of mobile phone use by drivers, April 2004 by J P Hill.

TRL637. How methods and levels of policing affect road casualty rates by M Elliott and J Broughton.

For further information, visit the publications section of www.trl.co.uk
NoGOs with Driver Distraction

Saul Jeavons &
Nigel McDonald (presenter)

Traditionally...

- **Road Safety has been a concern:**
  - for the *common good*
  - of the *public sector*

- **Individual ‘compliance’ has been:**
  - driven by government regulation
  - influenced by public goodwill and risk perception

- **Companies and NGOs have:**
  - paid respectful ‘tribute’
With Some Exceptions…

Recently Encouraged
Presentation Outline

- Road Safety Advances – Just for Government?
- Why NGOs? What’s the Incentive?
- Some NGO Initiatives
- NGOs in Action
  - ROSPA Company Policy Study
  - A Global Company’s Response
- Resulting culture change beyond workforce?
- GO with NoGOs
Motivation Factors

• Industry
  • Road accidents are the single biggest cause of work-related workforce fatalities and third party fatalities

• Public Sector
  • Sustainable responses and new methods to influence community attitudes and behaviour

• Synergy of Goals

Work Related Road Safety

• Accidents per year:
  • 29% more for people whose main car is company-owned
  • 40-50% more for people who drive a company-owned car regularly for work purposes.
  
  (See Downs et al (1999), TRL Report 390 for summary)

• Important:
  • This is after adjusting for mileage, age, gender

• But:
  • Applies to total accidents.
  • What about injury accidents?
Work-related driving as a risk factor

- Compared with drivers who do no work-related mileage:
  - Drivers who do over 80% of their annual mileage for work have 53% higher risk of injury accident
  - Drivers with 1-80% of their annual mileage for work have 13% higher risk

  *This is after adjusting for annual mileage, proportion of motorway mileage, age and gender*

Fatigue, distraction, time-pressure

<table>
<thead>
<tr>
<th>% Driving quite often, frequently or nearly all the time in each situation</th>
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<tbody>
<tr>
<td>Hands-free mobile</td>
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<tr>
<td>-------------------</td>
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<tr>
<td>Company: over 80% wk. miles</td>
</tr>
</tbody>
</table>

[Graph showing data]
Fatigue, distraction

% Driving quite often, frequently or nearly all the time in each situation

- Eating or drinking
- Reading a map
- Thinking about non-driving issues
- Tired

Company: over 80% wk. miles
Company: under 80% wk. miles
Private only

Case Study – Mobile Phones

The Risk of Using a Mobile Phone While Driving

How dangerous is driving with a mobile phone? Benchmarking the impairment to alcohol.
Issues with Mobile Phones

- Physical Distraction
  - Operation to answer, terminate, text, dial
  - Hands and eyes from the driving task
  - Handling during call (hand held only)
  - Not much different from other in-car distractions

- Cognitive Distraction
  - Performing mental tasks concurrently
  - Demands of the driving task compete with the demands of the conversation task

Research Backs Concerns

- 1969 – research into effects of divided attention
- 1988 – research into handling a phone while driving
- 2002 – TRL comparison of using a mobile phone to alcohol impairment (Direct Line Insurance)
  - Impairs lane positioning
  - Impairs speed maintenance
  - Impairs following distance
  - Increases reaction times
  - Impairs judgement and gap acceptance
  - Phones worse than alcohol
Distracted driving

Acknowledged by Road Users

Regulation Prohibiting Hand Held

Hong Kong Germany United Kingdom
Brazil Israel Turkey
Italy Norway Jordan
Malaysia Phillippines Singapore
Belgium Romania Australia South Korea
Slovak Republic Japan Austria Taiwan
Slovenia Spain Czech Republic Thailand
Greece Chile Hungary
### Regulation Prohibiting Hands Free

<table>
<thead>
<tr>
<th>Country</th>
<th>Measures</th>
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<tbody>
<tr>
<td>Finland</td>
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<td>Portugal</td>
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<tr>
<td>France</td>
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<tr>
<td>Finland</td>
<td>School Buses in Arizona &amp; Massachusetts</td>
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<tr>
<td>Portugal</td>
<td>13 municipalities in Santa Fe, USA</td>
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<tr>
<td>New Zealand</td>
<td>Delhi, India</td>
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<td></td>
<td>(esp. INSE laws)</td>
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</tbody>
</table>

### Self Regulation in Large Companies

- ROSPA survey of 54 large companies in UK
- 17 responded (31%)
- 14 had policies in place restricting mobile phone use (3 didn’t)
  - Diversion to message service while driving
  - Switched off while driving
  - One policy prohibited a list of activities considered to be distracting
One Particular Corporate Policy

- **Warm and Fuzzy, or Cold and Sharp?**
  - Business case for value lost due to incidents
    - Direct cost
    - Brand cost
  - Link executive remuneration to road safety performance
  - Cascading of performance measures, policies and action plans
  - Poor road safety performance — poor hip pocket performance
  - Senior executive role created to deal with road safety alone
  - Creation of minimum global standards
The Corporate Commandments

- **Policy Principles, Management and Ensuring Compliance**
  - Use of communications devices
  - Night driving
  - Driver tiredness & fatigue
  - Driver training & assessment
  - Vehicle standards & specifications
  - Restraint use
  - Driver impairment
  - Journey Management and route assessments
Communication Devices

- The use of mobile phones and two way communications by drivers is strictly prohibited
- Includes voice, text, work management systems and emergent in-car entertainment systems or other devices not used to control the vehicle
- Applies to all on company business in company, rental and private vehicles
- Includes company and personal phones
- Exceptions only in very rare situations (by written authorisation)

Exemptions

- Only granted by designated persons
- Specific devices and operators in specific circumstances
- Only valid and current with
  - Documented risk assessment
  - Risk minimisation measures implemented
  - Exemption reviewed annually
  - Demonstrated need to achieve specific safety and security requirements, or comply with local legislation
  - Compliance management program in place
**“Just Do It”**

- **Forced compliance by:**
  - Reinstalling existing phones to passenger side of vehicle,
  - Interlocking phone with handbrake,

- **Monitored compliance by:**
  - Comparing phone records with vehicle management records,
  - ‘Mystery’ callers,
  - Random observations of company vehicles

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**Supplying Alternatives**

- Integration with company voicebox ‘posting’ of messages rather than direct call
- GPS tracking installed in fleet to address “where are you” enquiries
- Issue of rest breaks and conflict with checking messages and making calls TBA
- When calling a mobile ask “Are you driving?”
- Breech of company policy to ‘require’ staff to be available while they are driving
Selling to the Workforce

WHY?

Hearts & Minds Campaign

Context Statement

- Road safety research indicates that using a mobile phone whilst driving increases the risk of having an accident by four times irrespective of whether a driver is using a hands-free or hand-held mobile phone
- The impairment is equivalent to or worse than the risk of drinking and driving
- Tests show that drivers miss road signs and instructions while using a mobile phone, or other two-way communication device
While visiting a major trucking organization in Western Australia, I noticed that our host demonstrably stopped walking when receiving a call on his mobile. I questioned him and he explained that due to a serious accident which took place while an employee was walking within the facility - (the investigation found that he was engrossed in his call while talking on his mobile and failed to see a vehicle) - talking on a phone whilst walking is banned within the facility.

WB, New Zealand Nov 1999
Facts and Figures

Use of a mobile phone when driving is unsafe!

Safety Of Hands-Free Phones

- Four times more likely to be involved in an accident
- Nothing can be unacceptable
- Accepting calls should be avoided
- Handfree / receive a call when it is safe to do so

Graphic Examples

Distance travelled before response at 70mph

- Normal: 20m (66ft)
- Alcohol: 31m (102ft)
- Hands-free: 35m (115ft)
- Handheld: 45m (148ft)
- 14m (46ft)
That’s the difference between managing to stop before you hit the vehicle in front of you...

...and hitting it at 31mph.
But is it Real?

Real vs. Simulated 1
Distracted driving

Real vs. Simulated 2

With Some Exceptions…
Distracted driving

For the Doubting Thomas’

Defensive driving - mobile phone test

- January / February 2008 - test in Spain - 245 staff
- Test run in closed circuit with driving experts assessing the results of:
  - First lap: normal driving no distraction
  - Second lap: same circuit but introducing a continuous distraction, and
    with two instruction boards in the circuit
- Distraction consisted of a countdown from 100 to 0, deducting 3, is (68, 67, 64, 61, ...)
- Elements counted were:
  - Time employed
  - Following of instruction boards
  - Math/real life (getting out the road, incorrect use of gears, etc)
  - Overall quality of the driving

Driving Policies

- Usage of mobile phones while driving increases significantly the probability of suffering an accident, due to the loss of concentration of the driver
- Since 1999, CSIE has banned the use of mobile phones for all employees while driving a vehicle for work reasons. This also included the use of “hands-free” devices
- The mobile phone must be disconnected before starting driving the vehicle.
And – The Big Stick

- Disciplinary procedures in place for employees,
- Non-compliance listed in contractor performance monitoring and penalised or noted for future contract assessment.

Schlumberger Cell Phone Standard
- Schlumberger employees shall not initiate calls while driving irrespective of the type of phone.
- If a phone call is received while driving, the employee shall identify the caller and terminate the call immediately. If a return call is required, the driver shall pull over at the first available safe rest stop and then return the call.

Questions
- Does your company have a cell phone policy?
- If not, who will write one?
- Independent of company policy what will you choose to do in your personal life?
- Will you honestly read by example, not just with your employees but more importantly with your loved ones?
Keys to Success

- Based on sound, defensible and valid target issues.
- Little scope for movement and local ‘discretion.’
- Measurable.
- Enacted.
- Actioned.

Public Sector Support?

- Education and information support – issue identification
- Capitalise on corporate motivators
- Foster and encourage corporate advances
- Procurement policy support of leading corporate champions
- Internal policies - leading by example?
- Drive legal responsibility back to corporate management (eg. ‘corporate manslaughter’)
Distracted driving

Integration into ‘Exclusive’ areas
Distracted driving

Lead by Example

Encourage to ‘Go Beyond’