

Planning for Road Safety, Good Practice in Organisations

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Dr Will Murray

Research Director, Interactive Driving Systems

Visiting Fellow, Loughborough University &
CARRS-Q



Introduction

- Interactive Driving Systems
- Background to occupational road safety
- Case description
- Discussion and lessons
- Summary

Interactive Driving Systems

- Fleet risk management research, policy & practice since early 1990's
- Successful 'strategic' relationships with clients & channel partners in 30+ countries
- Research projects with universities in England, Scotland, Australia & USA – including 2 current PhDs
- Government funded research projects on-going in USA, Canada, New Zealand and UK eg www.fleetsafetybenchmarking.net
- >1,000,000 drivers worldwide on data-led driver risk assessment, monitoring & improvement programs in 15+ languages

VIRTUAL RISK
MANAGER®



INTERACTIVE
DRIVING SYSTEMS®

Support | Privacy Policy
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VIRTUAL RISK
MANAGER®

INTERACTIVE
DRIVING SYSTEMS®
Targeting Driver Risk Reduction
US Patent: 6,714,884

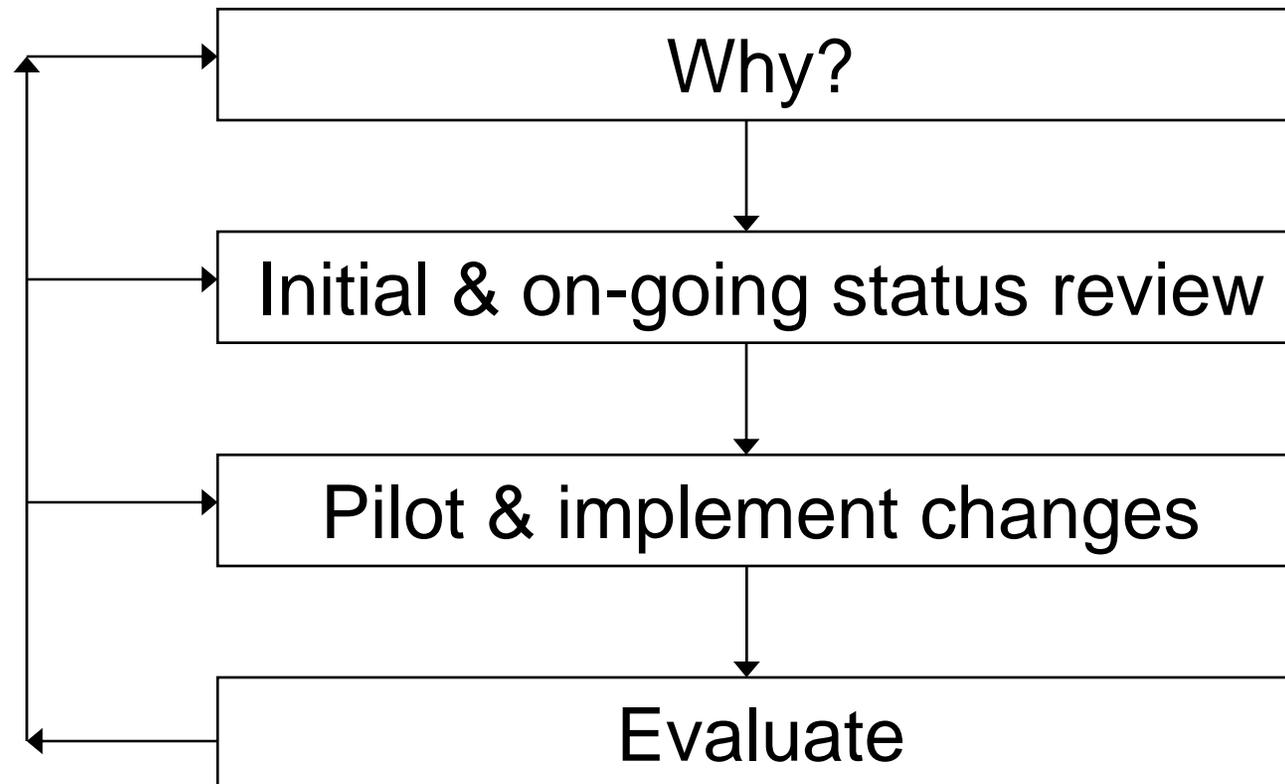
Background

- Occupational road safety is an emerging issue, of significance for both road and occupational safety
 - PESTELED framework to set context *
 - WIPE model for process *
- Increasing research quantum, but still very few peer reviewed case studies
- Roche Australia provides P2R case study, with lessons for research, policy and practice

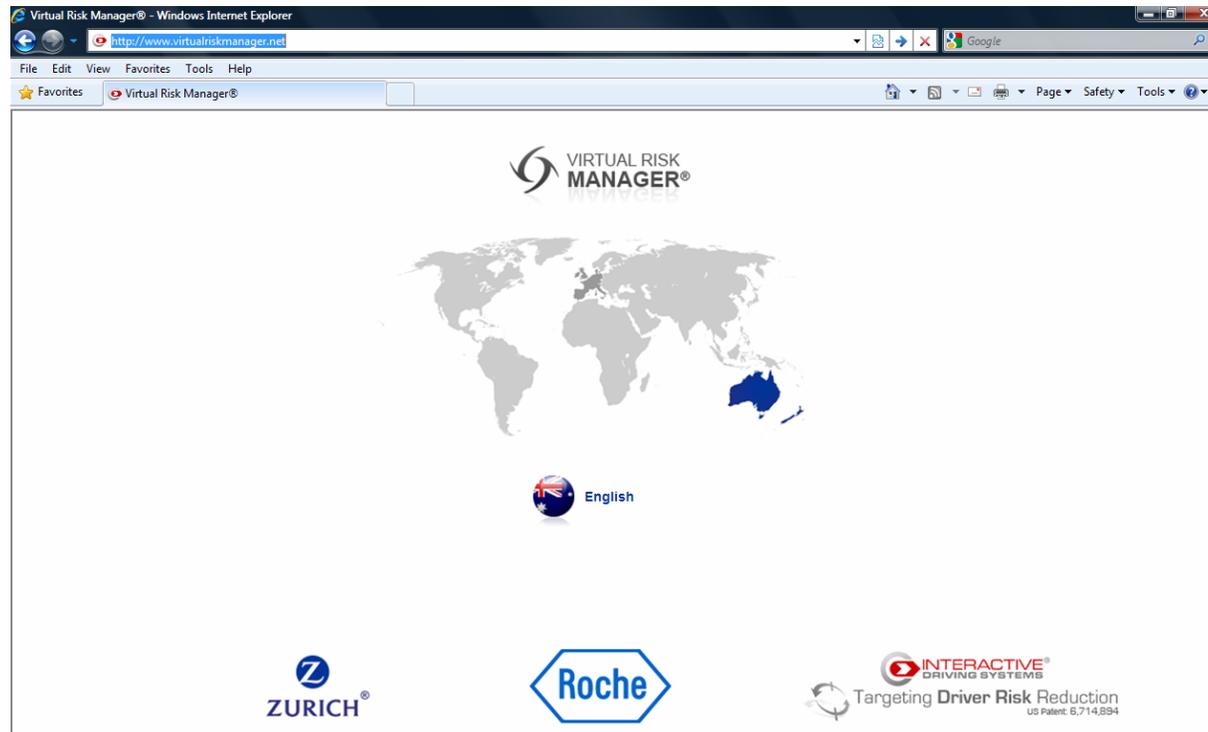
Context

- PESTELED : management tool for analysis of external factors impacting your performance. Examines external macro environment (or big picture):
 - Political
 - Economic
 - Social
 - Technological
 - Environmental
 - Legal
 - Ethical
 - Demographic

WIPE approach



Case study of Roche Australia



450 mostly sales staff in company cars



Program

- Four key initiatives - supported by Insurer:
 1. Implemented online DRA program for all existing staff and new employees
 2. Policy development
 3. Regular targeted communications
 4. Ongoing program development 2009/10

Online Risk Assessment / Improvement

- Launched January 2005
 - For all existing and new staff
- Driver Profile and RoadRISK assessments *
 - Including licence checks and safety policy online
- One More Second attitude and behaviour training *
- RoadSKILLS scenario training *
- MIS to monitor program *
- Achieved almost 100% compliance for existing staff
 - Program ‘touched’ all 450 drivers at least 4 times in 2 years
- New recruits undertake during induction soon after joining

Driver Risk Assessment

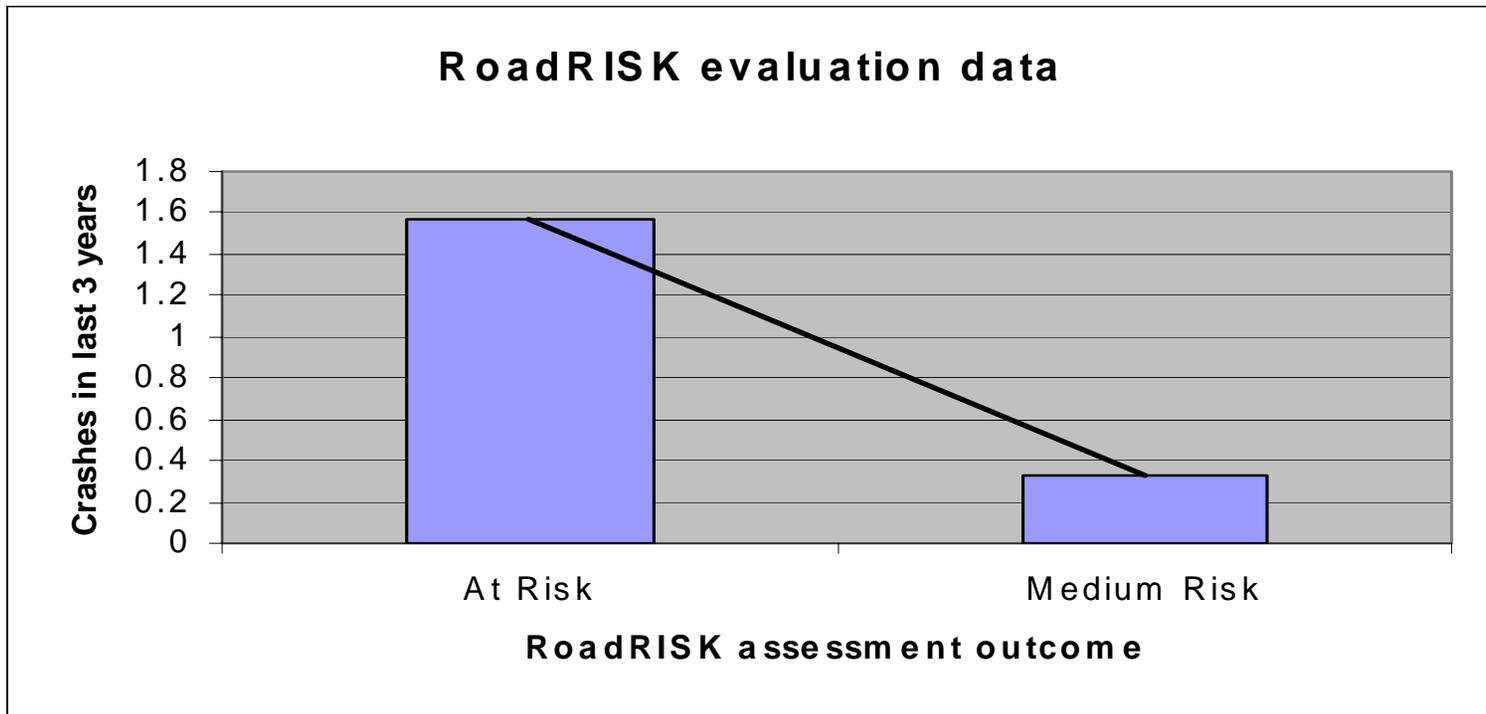
The screenshot displays the Virtual Risk Manager web application. The main interface is titled "VIRTUAL RISK MANAGER" and shows a navigation menu on the left with options like "Assessments", "Driver Profile", and "The Driver". The main content area is divided into sections for "General", "Performance", "Best Practice", "M.I.S.", and "Driver's Tools". A large yellow graphic is visible in the background.

On the right side, there is a section titled "driver knowledge" with a question: "Of all the 'safety space' around your vehicle which space is the most important?". The options are radio buttons for "The 'Safety Space' to the rear of the vehicle.", "The 'Safety Space' to the front of the vehicle.", and "The 'Safety Space' to either side of the vehicle.". A play button icon is visible below this section.

In the foreground, a smaller window titled "Performance Management System - Microsoft Internet Explorer" displays a "RoadRISK Usage Summary" report. The report includes a navigation menu on the left and a table of data with corresponding pie charts:

Section	Number of Drivers on system	Assessment Completions	Assessments Not Completed	Done (%)	Not Done (%)
Profile	400	381	19	95.00%	5.00%
RoadRISK	400	381	3	98.96%	1.04%
One More Second	381	373	8	98.00%	2.00%
Knowledge Checks	381	371	10	97.38%	2.62%

RoadRISK Outcomes



Predictive link between risk assessment and collisions

2 interactive CBT modules

VIRTUAL RISK MANAGER

INTERACTIVE DRIVING SYSTEMS

RoadSKILLS > Country

By planning routes you would be well aware of hazards.

All potential hazards signposted in advance give plenty of time to react.

By looking for clues such as stiles, farm buildings, animals in fields all of these are hazardous driving.

How does a defensive driver anticipate potential hazards driving in the country?

Click on ONE answer only

Return Check Answer

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VIRTUAL RISK MANAGER

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One More Second® Page 16 of 21

Taking Control of YOUR 'Attitude Swing'

THE IMPORTANCE OF ATTITUDE AND BEHAVIOUR

Exercise:

Lets look at how TRIGGERS can influence the ATTRIBUTES of a defensive driver. Firstly, in terms of the positive or negative EFFECT the trigger can have, and secondly on whether the resultant SWING would be DANGEROUS or DEFENSIVE.

Example 1: TRIGGER - FAMILIARITY OF ROUTE

ATTRIBUTE	EFFECT	SWING
Alertness	Negative	Dangerous
Attention to Detail	Negative	Dangerous
Concentration	Negative	Dangerous
Confidence	Positive	Dangerous
Hazard Awareness	Negative	Dangerous
Patience	No Change	Defensive
Self - Preservation	No Change	Defensive

Result: 70% INCREASE in likelihood of a DANGEROUS ATTITUDE SWING with a FAMILIAR ROUTE

Return

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Policy and Communications

- Developed, implemented, monitored and improved its policies, procedures, processes, driver manual and on-going communications:
 - Collision reporting and investigation
 - Anti-lock brakes
 - Speed
 - Seatbelt
 - Alcohol
 - Fatigue
 - Holiday driving
 - Back pain
 - Journey management to minimise employee kilometres
 - Vehicle checks
 - Driving whilst pregnant
 - Tyre safety
 - Mobile phone policy



Evaluation

- Improved safety on proactive & reactive indicators
- Loss ratio down from 69% to 48%
 - Failed to Yield (30% down 04-05, up 10% 05-06)
 - Hit Stationery Object (down 13% 04-06)
 - Hit in rear by Third Party (down 30%)
 - Hit Third Party in Rear (down 30%)
 - Reversing (down 30%)
 - Incident and premium costs reduced
- External recognition in Road Safety Awards
- Further insurer support secured for program
 - developments ongoing for 2009/10 *



Ongoing Program 2009/10

- Sustain & maximise program with 100% compliance
 - including company and employee owned vehicles
- Design and implement new online modules & process
 - Privacy Notice *
 - Safe Driving Pledge *
 - Risk Foundation policy assessment *
 - V2 of RoadRISK Profile
 - Risk overview safety climate and other MIS developments *
 - RiskCOACH training modules
 - Driver Index data-warehouse to integrate all data-sets
- Engaging in external programs:
 - reviewing program against Haddon Matrix *
 - detailed claims analysis & benchmarking internally/externally *
 - road safety outreach and community/family member initiatives



Privacy, Pledge and Risk Foundation

Pledge - Windows Internet Explorer
 http://www.virtualriskmanager.net/roche_temp/pledge.html

ZURICH VIRTUAL RISK M
Safe Driving Pledge™

Safety encompasses all areas of the work committed to promoting a heightened awareness to ensure the health and safety of you, your family and the community.

Co-jointly our efforts and your commitment personal injury and property loss claims.

To achieve this we are therefore asking you to adhere to a safe driving culture:

- Adhere to Company motor vehicle policies
- Be aware of and comply with the traffic rules applicable to the state
- Give consideration to prevailing weather conditions and the road surface and adjust speed accordingly.
- Carry out vehicle checks as required by the Company and ensure your motor vehicle is maintained in a safe and roadworthy condition.
- Pre plan all trips with regular rest stops and realistic travel goals.

I Agree I Disagree

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Risk Foundation - Windows Internet Explorer
 http://www.virtualriskmanager.net/roche_temp/

ZURICH VIRTUAL RISK M
Risk Foundation™ > Vehicle Operations



1	As the designated driver of your vehicle you are responsible for...	A	contacting the Police to ensure your registration is valid
2		B	ensuring that you have a current valid registration label affixed to your vehicle at all times
3		C	affixing the label in the top left hand corner of the windscreen
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			

ZURICH® Virtual Risk Manager®
Roche Driving Safety Program

DATA PROTECTION AND PRIVACY NOTICE FOR ROCHE AUTHORISED DRIVERS

Driving a motor vehicle is one of the most hazardous activities anyone may undertake and vehicle collisions are one of the leading causes of death and injury. The safety of Roche Products Pty Limited Australia employees, contractors and their families is of paramount importance to the Company and this is why we have requested you to participate in our Driver Safety Program.

Our commitment to safety is why Roche Australia has for many years partnered with Interactive Driving Systems Inc., a New Jersey corporation and Interactive Driving System UK Limited, a UK limited liability entity and their affiliates (collectively, "IDS") to continue to develop our Driver Safety Program.

Co-jointly our goal is to provide individual tools, training and coaching to authorised drivers that will enable us to track your progress as well as helping you to be a safer driver. At all times both Roche Australia and IDS's treatment of your personal information under the Program will be carried out in compliance with all applicable laws, Company policies and procedures.

This privacy notice describes how your personal information will be used as part of the Driver Safety Program. Please read this notice carefully as we will be asking you to consent to the use of this information. If you have any questions, please contact the Roche Privacy Officer or Fleet Management.

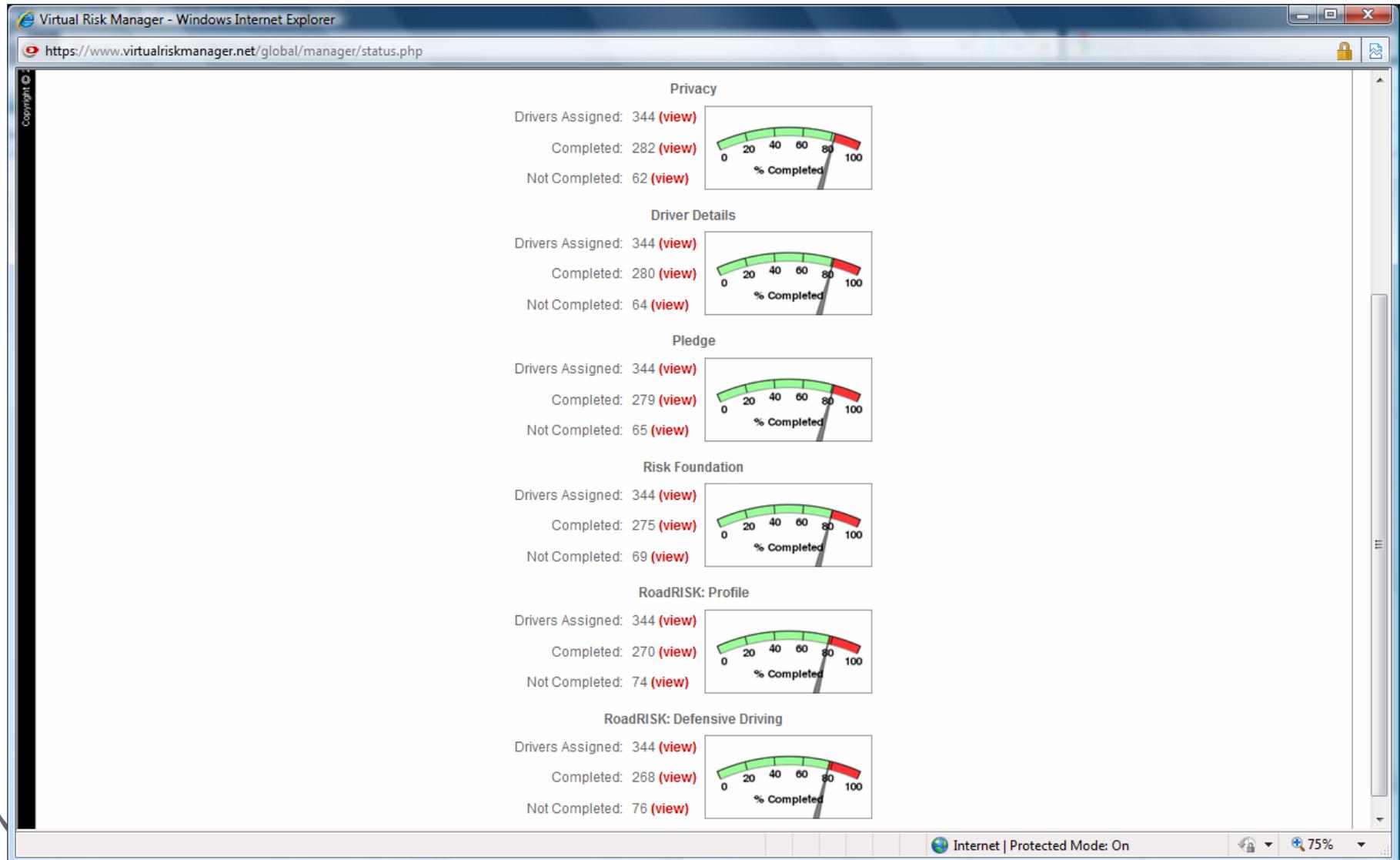
You acknowledge that you are authorised to have a motor vehicle as part of your salary package. As the authorised driver you will be required to participate in our Driver Safety program. In addition any non employee or any person authorised to drive your vehicle may also be requested to participate. Information about your use of the vehicle during working and non-working hours will be made available to the

[CLICK HERE TO ACKNOWLEDGE THE DATA PROTECTION AND PRIVACY NOTICE](#)

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Management information



Haddon Matrix framework

www.virtualriskmanager.net

	Management Culture (30%)	Journey (10%)	Road/ Site Environment (10%)	People - Drivers and Managers (20%)	Vehicle (10%)	External/ Societal/ Community/ Brand (20%)
Pre-Crash or Pre-Drive	Leadership Business case Legal compliance Safety review Benchmarking Pilot studies Goals & policies Safety culture Committee Pledge Communications Contractors	Travel policy Mode choice Journey planning Routing Risk assessment Emergency preparation Shifts/ working time	Risk assess* Observation Guidelines Site layouts Work permits C&D rules Road design hot-spot mapping Engage local road agencies	Recruit Contract Induct Check qualified Handbook Risk assess Train Equip Communicate Engage Monitor Correct	Risk assess Select Specification Safety features Service Maintain Check Use policy Mobile comms ITS/telematics Wear & tear Grey fleet	Regulator/policy engagement CSR Benchmarking Communications Family members Community Road safety weeks/ days Awards
At Scene	Emergency support to driver	Engage local investigators	Manage scene	Process to manage scene	Crashworthy 'ITS' data capture	Escalation process
Post-Crash	Report, record & investigate Change process Data linkages, evaluation & KPIs*	Debrief & review journeys	Investigate and improve Review site/road elements of collision data	Reporting and investigation Driver debrief Counselling, trauma support Reassess/train	Strong openable doors Investigate 'ITS' data Inspection & repair	Manage reputation and community learning process



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Detailed claims analysis & benchmarking

Description	2004	2005	2006	2007	2008	2009	Change 2004-09
Vehicles	259	226	219	211	166	149	-42%
Claims	94	65	73	65	42	41	-56%
Claims Ratio	36%	29%	16%	31%	25%	28%	-24%
Cost	169,735	124,813	110,540	122,641	94,652	76,851	-55%
Failed to Yield	11%	11%	15%	11%	12%	7%	-31%
Damaged while Parked	12%	23%	16%	17%	21%	5%	-58%
Hit Stat. Object	16%	17%	18%	15%	14%	22%	38%
Hit in Rear by TP	15%	11%	14%	19%	19%	24%	64%
Hit TP in Rear	11%	12%	10%	8%	5%	7%	-31%
Reversing	21%	17%	19%	11%	9%	7%	-66%
Other	15%	9%	8%	20%	21%	27%	80%

Discussion and Lessons

- Roche:
 - Invested management time in program
 - Engaged with insurer
 - Focused on process and outcomes-based KPIs
 - Took a data-led, systems based approach covering management, drivers, journeys and vehicles
 - Attitude and aptitude of KEY manager (s) is vital
 - Suggests occupational road safety is an opportunity to target a large number of drivers through the workplace
 - P2R is important as well as R2P
 - Chronological case approach

Conclusion

- Occupational road safety has potential to help reduce road toll and improve worker safety
- Frameworks such as PESTELED, WIPE and Haddon are important
- Paper has added to the limited number of existing published cases & provided some lessons for organisations & policy
- Starting point for similar program:
 - Fleet gap analysis: www.fleetsafetybenchmarking.net
- Questions and feedback ??????
- Contact:
 - www.virtualriskmanager.net