

#### PARTNERSHIP PROGRAM

# 2016 Utilities Forum 25 August 2016 Telstra – Exhibition Street Melbourne

## Final Report

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Prepared with support from the Utilities Forum partners: Guiding Partners:

- Telstra Host
- APA Group
- Hydro Tasmania
- Origin Energy
- SA Power Networks
- SA Water
- Water Corporation

#### Attending Partners:

- ActewAGL
- AusGrid
- AusNet Services
- BAI Communications
- Comdaine
- Electra Net
- Energex
- Optus
- Queensland Urban Utilities
- Santos
- Sydney Water
- United Energy and Multinet Gas





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#### Summary

The National Road Safety Partnership Program (NRSPP) recognises the value of a national forum specifically for utilities businesses from around the country. This sector is characterised by complex and diverse fleets and the forum provides an opportunity to identify common transport risks and how they may be mitigated. To provide a forum where organisations from the utilities sector can discuss their major transport risks, how they are mitigated, benchmark road safety performance and how the KPIs are influenced.

The forum achieved the following key outcomes:

- Through the Utilities Forum Template<sup>1</sup>, which partners completed ahead of the day, an understanding of participants' capabilities and limitations with respect to fleet management data and key lag-and-lead safety performance indicators.
- A strong industry-specific repository of fleet profile and risk data.
- Understanding of key safety issues common throughout the participant group including the identification of three common priority areas
  - o Fatigue;
  - Distraction and remote travel; and
  - Cargo or payload.
- Facilitated sharing of learnings and information on what worked for other organisations, what did not work and what pro-active approaches have been implemented by other organisations. This was highlighted throughout the day with presentations from Telstra, Downer, IAG and Engistics and the benchmarking reports prepared with data from the Utilities Forum Template.
- The development of a strong peer network that was evident through the formal sessions and continued informally throughout breaks during the day and the evening's networking event.
- The industry-led development of solutions to organisational transport risks, specifically, developing and implementing innovative fleet safety and management solutions through peer network.
- Developing improved driver and fleet safety culture, reducing vehicle incidents and near misses while maintaining peer communications and learnings on fleet safety and management.
- Recognition by participants that the forum fulfilled expectations, and that they will
  continue to engage with the working group and attend future events.

At the conclusion of the forum, participants were asked to provide feedback on the event. A short questionnaire covering aspects of the profile template, workshop format, content and delivery was provided.

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<sup>&</sup>lt;sup>1</sup> NRSPP Utilities Forum Template

Overall feedback was overwhelmingly positive on the two critical questions:

- Did the forum fulfil your reason for attending?
- Would you attend another forum next year?

Participants rated the forum and its continuation a maximum five out of five.

The outcomes, comments and feedback documented during the event provide strong support for the continuation of the program in a manner and frequency to be determined by the working group.

#### Introduction

The National Road Safety Partnership Program (NRSPP) recognises the value of a national forum specifically for utilities businesses from around the country. This sector is characterised by complex and diverse fleets and the forum provides an opportunity to identify common transport risks and how they may be mitigated.

#### **Background**

The Australian utilities sector is often state focused in its operations. The type of transport-related operations involved requires a complex mix of vehicles to maintain the assets they are responsible for. Vehicles range from light to heavy and often include customised vehicles for specific tasks relating to the asset. Depending upon the utility provider, maintaining the company's assets may also include establishing and servicing roads to access them. These road assets may be publicly accessible or solely for the use of the utility provider.

The establishment of the Utilities Forum facilitated knowledge sharing across states, services and organisations. It provided an opportunity for utilities operating in all states to meet in a single location with an aligned and focused purpose, that being road transport safety.

#### Scale of the Road Safety Problem

Australian research indicated that road crashes are one of the leading causes of work-related fatalities, injuries and absences from work. The research indicated that injuries resulting from road crashes are twice as likely to result in death or permanent disability as other workplace incidents as indicated in Figure 1.

Vehicle incident incident Being hit by moving objects Falls from a height Being hit by falling objects Mechanism of Being trapped between stationary & moving objects Contact with electricity Being trapped by moving machinery or equipment Being assaulted by a person or persons Other mechanisms 0% 10% 20% 30% 40% 50% Percentage of worker fatalities

Figure 1: Scale of the problem

Source: SafeWork Australia (2014).

Further research of serious claims by sector showed that the utilities sector constituted 13.2 serious claims per 1 000 employees (6.1 for the electricity, gas and water supply and 7.1 for the communication services) as illustrated in Figure 2.

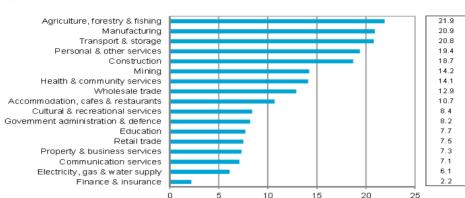


Figure 2: Serious injury claims by industry sector

Source: SafeWork Australia (2014).

The research also showed that work-related road crashes cost the Australian community approximately \$1.5 billion annually. Further, based on Australian workers compensation data, work-related road crash injuries are estimated to cost approximately \$500 million per year.

Serious claims per 1000 employees

Table 1 and Table 2 outline the claims data for the electricity, gas and water sector and the communications sector. The data showed overall reductions in the number of serious claims from 1 425 in 2002 to 1 180 in 2011 for the electricity, gas and water sector and from 430 to 235 over the same period for the communications sector. Conversely, the median compensation paid increased from \$5 000 in 2002 to \$12 300 in 2011 for the electricity, gas and water sector and from \$11 600 to \$14 200 for the communications sector.

Table 1: Claims data in Electricity/Gas/Water

Utilities	2002-03	2007-08	2009-10	2011-12	%change
No. of serious claims	1 425	1 160	1 205	1 180	-17
No. of serious claims involving vehicles	90	70	80	75	-17
Incidence rate (serious claims/1000 employees)	17.9	10.9	9.8	8.3	-54
Freq. rate (serious claims/mil hours worked)	9.3	5.5	4.9	4.2	-55
Median time lost (weeks)	3.4	4	4.6	5.4	60
Median comp. paid	\$5 000	\$7 800	\$9 500	\$12 300	146
Worker fatalities involving vehicles	NA	1	1	1	NA

Source: SafeWork Australia (2014).

**Table 2: Claims data in Communications** 

Communications	2002-03	2007-08	2009-10	2011-12	%change
No. of serious claims	430	300	215	235	55
Incidence rate (serious claims/1000 employees)	5.5	2.6	2	2.2	40
Freq. rate (serious claims/mil hours worked)	2.8	1.4	1.1	1.1	39
Median time lost (weeks)	4	3.7	4.8	5.4	135
Median comp. paid	\$11 600	\$11 900	\$17 800	\$14 200	122
Worker fatalities involving vehicles		5 deaths, 4 involved vehicles on public roads			

Source: SafeWork Australia (2014).

Discussed in the forum were the key safety concerns for the different organisations:

- road safety was the second highest concern for electricity organisations, second to electrocution;
- site management, pedestrian access is the main concern;
- vehicle selection;
- aggression at work sites; and
- work site speed management, particularly in urban fringe areas.

#### Methodology

The Utilities Forum Guiding Partners consisted of Telstra, Origin Energy, SA Power Networks, SA Water, Tasmanian Hyrdo, Water Corporation and CGU who steered the direction and development of the forum.

#### Stage 1. Develop a Profile and Risk Template

A data template was developed with the assistance of the working group that allowed for the capture of information in the following key areas:

- 1. Business profile
- 2. Fleet size
- 3. Ownership and management model
- 4. Operating environment and utilisation
- 5. Road safety management
- 6. Journey management and mobility planning
- 7. Driver recruitment, selection, induction, management and well being
- 8. Vehicle selection, safety, management, maintenance and security
- 9. Corporate, community and supply chain road safety
- 10. Technology profile
- 11. IVMS purpose/priorities (if installed)
- 12. Systems and process development
- 13. Top three transport related risks
- 14. Lead indicators captured
- 15. Lag indicators captured
- 16. Insurance and crash information
- 17. Traffic infringements
- 18. Expectations and outcomes.

The data was then collated and prepared for presentation at the forum. It was also used to produce benchmarking reports for the individual organisations indicating where each organisation was in relation to the rest of the forum participants. The template was also instrumental in developing resources and the agenda for the forum.

#### Stage 2. Conduct Utilities Forum

The second forum was held on 25 August 2016 at the Telstra Conference Centre in Melbourne. A total of 19 organisations were represented including ARRB Group (organiser) and Telstra (hosts). In addition to the guiding Utilities Forum partners, the day was also attended by ActewAGL, Ausgrid, AusNet Services, BAI Communications, Comdain, Electra-Net, Energex, Optus, Queensland Urban Utilities, Santos, Sydney Water and United Energy & Multinet Gas.

The event commenced at 8:30 am and concluded at 5.30 pm with a program that, based on the previous forum and evaluation, provided by attendees at the end of the day was:

- engaging
- relevant
- focused
- timely.

Similar to the inaugural forum, the event followed a structured format that comprised the following:

- welcome and overview of the NRSPP
- setting the scene (the list of participants)
- ascertaining the size and scope of the transport safety risk
- presenting the profile and benchmarking data captured in the template
- a presentation on advanced driver safety analytics by Telstra
- a presentation on organisational safety culture by Downer
- a presentation on vehicle selection by IAG
- workshop discussion of the following:
  - o driver recruitment
  - o organisational leadership and culture
  - o road safety management
- a presentation on heavy vehicle crash investigations and load restraint by Engistics
- dinner hosted by NRSPP.

#### Stage 3. Feedback Forms

Forum participants completed a feedback form at the end of the forum. This will be used inform the template design, content and format of future events.

#### **Utilities Forum**

Nineteen participant organisations met to identify and discuss transport risks and safety issues in the utilities sector. Water Corporation was an apology due to the distance from Perth to attend but provided their data to expand the knowledge base for the day. The forum facilitated discussions on what the different organisations are doing, what has worked, what has not worked and areas for further improvements. From the outset, participants engaged in discussion freely, exchanging perspectives and experiences.

One of the outcomes of the day was the extensive knowledge sharing. This included participation in general discussions, presentations on different issues facing the participants such as grey fleet definition and policy, vehicle selection and technologies and fostering a safety culture within the organisations. Knowledge sharing will enhance the development of tools and peer networks to deliver solutions within individual organisations and the sector as a whole.

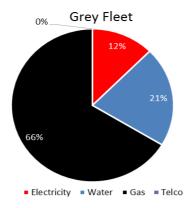
The presentation of data obtained from the templates was relevant, understood and appreciated and informed some of the discussion in the forum. Some of the participants had indicated the need for developing best practice and understanding what this was as an anticipated outcome from the forum. However, the discussion indicated the need to move from a best practice approach towards a moving target as the definition and achievement of best practice implies reaching a goal with no further discussion of the learnings and ways for further improvements.

The issue of fleet composition drew interest from the participants. The data from the utilities template showed that only three of 16 respondents had a grey fleet (mostly gas companies as illustrated in Figure 3). The discussion and feedback forms indicated that most of the organisations have a sizeable grey fleet. However, there was a lack of understanding of what grey fleet is, the full extent of the definition, associated risks for the organisation and the risk profiles for the individual vehicles. There was an evident lack of clarity on:

- the organisation's legal obligations for vehicles and safety
- whether the vehicles comply with the organisation's vehicle standards
- developing and enforcing grey fleet policy

This was identified as an area requiring further discussion and information, particularly, the implementation of policy and procedures.

Figure 3: Grey fleet size by industry



Improving organisational safety culture through incident reporting, including near miss reporting and data management was also raised as a key issue. The discussion focused on the importance of reporting near misses and reducing the fear surrounding incident reporting and the length and complexity of the report forms. Further, the participants indicated that along with incident reporting, there was a need to encourage identifying possible solutions and countermeasures.

Overall, incident reporting with possible solution identification and adequate data management were identified as pivotal to improving an organisation's safety culture. Further actions identified include:

- communication at different levels in the organisation
- including safety in performance management
- community and corporate engagement in safety
- behaviour and culture to complement systems and policies
- increased accountability
- rewarding safe behaviour.

#### **Transport Risks**

The data from the utilities template identifies three top transport risks for the individual organisations. While these were not addressed in detail during the forum, the results are present below. Many of the risks faced by participants were very similar with eight broad categories identified as illustrated in Figure 4. The highest proportion of the risks faced by the participants were driver behaviour (defined as motor vehicle incidents – mainly reversing and speeding), distraction and fatigue.

Cargo (Payload/Heavy)

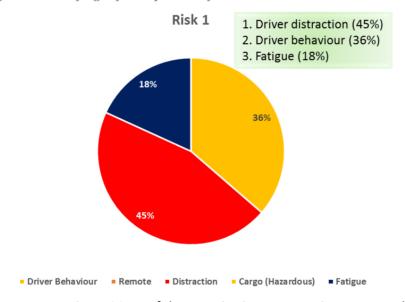
Patigue
13%

Remote
15%

Figure 4: Identified transport risks across organisations

1. Driver distraction: similar to findings from last year's forum, driver distraction rated as the leading transport safety risk among respondents followed by driver behaviour (which included accidents and speeding) and fatigue. The different risk factors identified as the top transport risks are outlined in Figure 5.

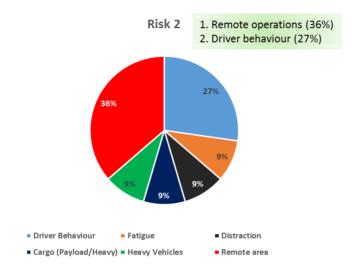
Figure 5. Identifying key transport safety risks - risk 1



- 2. Remote operations: Many of the organisations operate in remote and regional locations. This was identified as the second leading risk with factors including:
  - breakdowns
  - o poor road conditions
  - lone workers
  - o animal strikes
  - o communications
  - o unfamiliar locations
  - o weather conditions.

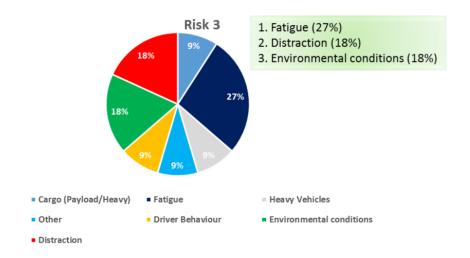
Other risk factors identified are outlined in Figure 6.

Figure 6: Identifying key transport safety risks - risk 2



3. Fatigue: fatigue was rated the third highest transport risk factor among templated respondents. The issues included fatigue whilst travelling to call outs during adverse weather conditions and attending emergency call outs, during major project works and general fatigue management. Other concerns are illustrated in Figure 7.

Figure 7: Identifying transport risk factors - risk 3



#### **Load Restraint**

The day concluded with a presentation on load restraint from Engistics. The presentation highlighted the role of load restraint in roll over crashes. Participants indicated the need to understand the load restraint requirements in their respective organisations, focusing on the different vehicle types.

#### **Technology and Vehicle Safety**

A presentation on vehicle selection and technology by IAG informed the discussion around the changing nature of technology and the likely impact on safety. The data from the utilities template showed that reversing incidents are a common risk factor for the participants. These

can be reduced by investing in reversing technologies such as the reverse cameras or rear autonomous braking highlighted in the presentation. Further discussions focused on the need for balancing a fleet with different technologies and the legislation around standardised vehicle controls and the role of telematics given the emerging vehicle features.

The Utilities Forum template requested data from participants that reviewed their use of technology to support a Safe System approach to transport risk.

 IVMS (telematics): The use of telematics as a road safety tool was widely recognised by participants. However, not all participants had installed telematics in their fleets and where systems had been implemented, penetration was not 100% and the purposes and priorities varied. Figure 8 illustrates the main purposes for which the systems were utilised for those participants that fitted telematics.

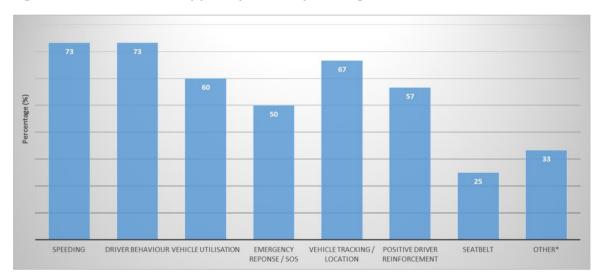


Figure 8. Use of telematics by participants as a percentage

## The average percentage of Utilities Forum partner fleets fitted with IVMS **56%**

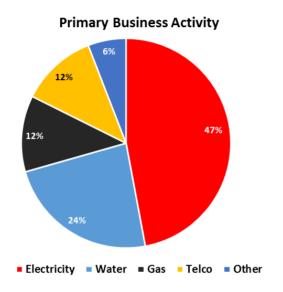
2. Safer vehicles and 5 Star ANCAP (light fleet): The technology profile section of the forum template included a question specifically relating to the percentage of 5 Star ANCAP vehicles (passenger and light commercial vehicles (LCVs)) in participant fleets. The trend was towards, where applicable, having 5 Star ANCAP vehicles. The data showed that on average, 80 percent of passenger and LVCs in participant fleets are 5 Star ANCAP vehicles.

The average percentage of vehicles with a 5 Star ANCAP Fleet Utilities Forum partner's was 80%

### **Participant Representation**

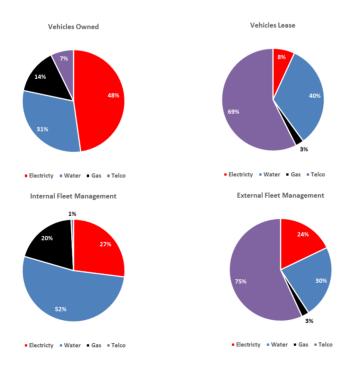
Organisations which participated in the forum ranged from across Australia, the largest number being from the electrical sector. Participants are summarised in detail in Figure 9 with the fleet management and ownership outlined in Figure 10.

Figure 9: Profile of participants



Organisation	Number of vehicles
ActewAGL	395
APA Group	962
Ausgrid	2 873
AusNet Services	1 243
Electra Net	30
Energex	2 475
Hydro Tasmania	425
Optus	502
Origin Energy	1 226
SA Power Networks	1 450
SA Water	1 243
Santos	1 609
Sydney Water	5 320
Telstra	10 533
United Energy & Multinet	
Gas	496
Water Corporation	2 730

Figure 10: Ownership and fleet management models



#### Participant feedback

At the conclusion of the forum, participants were asked to provide feedback on the event. A short questionnaire covering aspects of the profile template, workshop format, content and delivery was provided. Some questions invited a simple scored response (1-5), others a brief commentary.

The feedback received was positive and constructive. Participants strongly endorsed the content and format of the event and interest in attending future forums.

# Did the forum fulfil your reason for attending? **YES** Would you attend another forum next year? **YES**

#### Scored questions

No.	Question	Consolidated Score 1(No), 3(So So) – 5(Yes)
1.	Did the forum fulfil your reason for attending?	4.63
2.	Was the program well organised?	4.63
3.	Was completing the template useful?	4
7.	How useful was the scene setting?	4
8.	How useful was the lead/lag?	4.75
9.	How useful was the discussion on risk management?	N/A
10.	How useful were the external presenters? IAG Downer Engistics	4.14 4.29 4.26
11.	Would you attend another forum next year?	5

#### Feedback commentary

#### Question 4. Was the template missing anything?

• I think we should review the wording to remove the absolute statements e.g. all employees know and understand the policy

#### Question 5. What could be removed from the template?

- Use a rating scale or sliding scale for responses
- Nothing identified the data in relation to grey fleet is difficult to quantify. For example
  we have some idea of the Company leases (for private use) but not sure how we
  quantify how much use for work. This is a bigger issue for private vehicles and novated
  lease.

#### Question 6. What was the most valuable component in the agenda? (1-182)

- The insight into load restraint whilst it was a little long I learnt something from that.
   Also good to hear from and meet others good networking. The IAG session was also valuable.
- 15 Downer Work Sites and Near Miss Reporting
- 16 Load Restraint how to do it safely and new app to assist with loading
- 8 Organisational leadership and culture
- 14 Mobile Phone Policy Guide B2B Video and Policy
- 5 Road Safety Management

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<sup>&</sup>lt;sup>2</sup> Agenda items from the Utilities Forum 25 August

- 16 Load Restraint how to do it safely and new app to assist with loading
- 11 Traditional Measures Lead and Lag Indicators
- 16 Load Restraint how to do it safely and new app to assist with loading.

#### Question 7. How useful was the scene setting? (Item 6-10)

• Very useful.

#### Question 12. How could the forum be improved?

- Perhaps dinner the night before
- Examples with problems and initiatives to resolve them very valuable
- Well run forum
- More presentations from innovations in road safety (e.g. Downer presentation).

#### Question 13. What other topics could the forum include?

- More presentations from innovations in road safety
- Vehicle selection ergonomics
- What can workers do instead of it being just about what the organisation should do
- Perhaps keep topics closer to the time. I think there is a real need to discuss how we can engage the police etc. on incidents involving operational vehicles.

#### **Question 14. Additional comments:**

- Great work well done. These things are not easy and take a lot of time to pull together. Perhaps difficult to link the survey questions to the discussion topics.
- Great forum
- Well run conference
- Great job well done
- A good day.

For further information please refer to www.nrspp.org.au