DEVELOPING A COMPLIANCE FRAMEWORK FOR HEAVY VEHICLE TELEMATICS – ALC RESPONSE
Background on Australian Logistics Council

The Australian Logistics Council (ALC) is the peak national body representing the major and national companies participating in the Australian freight logistics supply chain industry.

A list of ALC Members is included on the back of this submission. ALC is an advocacy organisation focusing on national logistics regulation, infrastructure and safety policy issues.

ALC works to promote and encourage greater recognition by Government and the community of the importance of the freight logistics industry’s contribution to Australia’s economy. For example, ALC estimates the industry generates an estimated 14.5% of Australia’s GDP and provides more than 1 million jobs across 165,000 companies.

ALC collaborates with government at all levels to ensure it gives appropriate consideration to the needs of freight in its investment and policy decisions in order to maximise its benefits to the national economy. This includes ensuring road, rail, port and intermodal facilities keep up with freight demand (which nationally is predicted to double by 2030 from 2010 levels and almost triple by 2050).

Recommendations

1. Principle 1 should be amended so that its reads ‘Regulators and enforcement agencies that access telematics information for compliance and enforcement purposes must be bound by privacy principles that are consistent…….

2. Principle 2 should be rewritten to read:

2.1 Regulators and enforcement agencies may only collect and use telematics information
(a) in the manner authorised; and
(b) for the purposes intended by an Australian law.

2.2 A court authorised warrant is necessary for any investigatory and law enforcement purposes for any law other than the Heavy Vehicle National Law.

3. Principle 8 be rewritten to read:

8. Commercial telematics is unlikely to be able to be used as evidence supporting prosecutions for offences such as speeding unless certified to produce specific data within a specified tolerance range.

4. Principle 3 to be rewritten to read:

3.1 Information collected by a telematics system owned and maintained by a business is the property of the business.

3.2 Regulators and law enforcement operators may only have access to information in the circumstances, and on the conditions, set out in an Australian law.
5. COTI commission a regulatory impact statement for the mandatory use of a telematics system on heavy vehicles that captures:

(a) the longitude, latitude, speed, date and time of circumstances of speeding events; and

(b) engine on/off data.

6. The final report discusses where the Austroads Freight Taskforce has got to in its work; and when possible, it publishes publicly a document that sets out the interrelationship between the many reviews that NTC is either conducting, or is acting as secretariat.

Introduction

The Australian Logistics Council (ALC) is pleased to comment on the Developing a Compliance Framework for Heavy Vehicles Telematics discussion paper (the discussion paper)

For the purposes of this submission, ALC accepts the definition of telematics contained on page 5 of the discussion paper, as being:

an in-vehicle device that forms part of a system that captures and sends information electronically.

ALC members believe it is important to keep innovation commercial and close to the customer.

ALC would like to see ‘telematics’ used more in respect to managing compliance in particular speed, although the continuing emphasis on the use of telematics as a ‘regulatory’ solution is severely impacting on voluntary take up.

Take up would improve if:

• incentives were available; and

• fear of over-enforcement was not present.

That said, the discussion paper is heading in the right direction in:

• recognising it is inappropriate to specify particular devices; and

• adopting an open standards platform approach so as to enable operators to employ a single platform for both commercial and compliance purposes.

As the discussion paper indicates, both the sophistication of devices and the purposes for which data is collected is growing.

The paper also notes ISO 15638 is being developed.

As illustrated by the list on page 30 of the Discussion Paper, the standard is designed to facilitate the use of telematics for most regulatory applications relevant to heavy vehicles.

Whilst regulators wishing to use telematics will need to identify:

• the data it wishes to capture; and

• the tolerances in data quality it will accept for use in regulatory purposes

it is imperative that any common data set or data dictionary (such as those proposing to be developed by TCA) is consistent with international standards for telematics applications for regulated vehicles (TARV), if for no other reasons than that over time relevant devices will incorporate these standards.
Framwork Principles

The publication of the framework principles in the discussion paper is clearly designed to be the end point of this NTC project.

For convenience, they are set out in Attachment 1.

As a general proposition they are satisfactory, subject to the following observations:

Privacy

Principle 1 reads:

1. Regulators and enforcement agencies that access telematics information for compliance and enforcement purposes should be bound by privacy principles that are consistent with the Australian Privacy Principles – these principles should allow the aggregation of de-identified telematics data for research and planning purposes.

Principle 2 reads:

2. Regulators and enforcement agencies should only access identifiable personal information for purposes intended in the HVNL – a court-issued warrant should be obtained for any other investigatory or law enforcement purposes.

These provisions do not go far enough.

On 28 October 2013, ALC wrote a letter to NTC following on from a workshop held for this project conducted on 2 October 2013.

It is contained in Attachment 2 to this submission.

ALC said in the letter:

Government agencies would only be permitted to access this information for purposes set out in the law. The law would also set out the manner by which agencies can request, or otherwise gain access to information, as is the case now with the Heavy Vehicle National Law.

This is because, as was made clear at the workshop, industry harbours some privacy concerns about government agencies either directly receiving the data or alternatively having a general right to seek information held by operators for undefined government functions, whether it be law enforcement, road network planning or any other purpose.

Recommendation 1

Principle 1 should be amended so that its reads ‘Regulators and enforcement agencies that access telematics information for compliance and enforcement purposes must be bound by privacy principles that are consistent…….

Recommendation 2

Principle 2 should be rewritten to read:

2.1 Regulators and enforcement agencies may only collect and use telematics information

(a) in the manner authorised; and

(b) for the purposes intended by an Australian law.

2.2 A court authorised warrant is necessary for any investigatory and law enforcement purposes for any law other than the Heavy Vehicle National Law.

Evidentiary value

Principle 8 reads:

8. The standard of integrity and performance of systems required by regulators is dependent on the compliance and enforcement approach being used. For example, enforcement would require a telematics system to have a higher evidentiary value than a system used by an operator to
generally increase compliance.

There is a subtle yet significant difference in what industry and business mean by ‘compliance’.

There is a saying in business that:

what you can measure you can manage
and what you can manage you can control.

A successful business is about managing people and processes to ensure the business outcomes are achieved, acknowledging that there will always be some non-conformance with the law. In managing potential for non-conformances, risks are considered and strategies implemented to minimise, if not eliminate, non-compliance.

For regulators, strict compliance with rules (subject perhaps to some level of tolerance) is desired.

Current telematics technology sits in a no man’s land between being accurate enough to be used to support a charge that a law has not have been complied with on the balance of probabilities, but not to the criminal standard of beyond reasonable doubt.

Enforcement agencies do not currently accept speedometer readings or GPS data as a defence to a speeding fine, and yet there is an implication this same remote information can be used to prosecute, either directly (specific time/place information) or indirectly (pattern over time information).

There is also an implication in the discussion paper that telematics can be potentially equivalent to a fully certified speed camera unit that is regularly re-certified/calibrated with the consequence that an output from the telematics is the same as a speeding detection or breathalyser result.

The fundamental point is that telematics data cannot be used to sustain a fine/prosecution as the equipment is below the level required for evidentiary purposes for sustaining a prosecution unless some or all of the instrumentation forming part of the system is ‘certified’ to producing specific data within a specified tolerance range.

ALC members would regard this as a highly interventionist outcome causing cost to industry that is disproportionate to the public benefits that would be generated.

Principle 8 as currently drafted is therefore somewhat misleading.

Recommendation 3

Principle 8 be rewritten to read:

8. Commercial telematics is unlikely to be able to be used as evidence supporting prosecutions for offences such as speeding unless certified to produce specific data within a specified tolerance range.

Ownership of Data

Principle 3 reads:

3. Each application should clearly identify which organisation owns, and has responsibility for, the data that is generated.

As made clear in the discussion above, businesses employ telematics to:

• control risk;
• deliver compliance with the law; and
• facilitate the efficient operation of the business.

Regulators only have an effective licence to look at and use the data, in the circumstances and in the manner permitted by an Australian law.

Whilst it may well be there is a regulatory purpose that could ‘leverage’ off data produced, ALC wishes to make it abundantly clear that any telematic information collected from a system used by an operator is the operator’s information, to be stored and managed as the business sees fit.
A failure to recognise this could jeopardise the willingness of industry to provide data for regulatory or other purposes of government.

Recommendation 4

Principle 3 to be rewritten to read:

3.1 Information collected by a telematics system owned and maintained by a business is the property of the business.

3.2 Regulators and law enforcement operators may only have access to information in the circumstances, and on the conditions, set out in an Australian law.

Compulsory telematics

Page vi of the discussion paper said:

It is suggested that the issue of mandatory or voluntary telematics sits below the framework and that the issue is dependent on the compliance application at hand.

Unfortunately ALC does not agree with this proposition.

When ALC members put up its proposal for mandatory telematics that was attached to its 2010 submission the Draft NTC National In-Vehicle Telematics Strategy: The Road Freight Sector (August 2010), it did so on the basis is that it was an initiative that could be implemented now that could have an immediate impact on safety outcomes.

This is because it is the experience of ALC members that the possibility of detection of speed and fatigue offences by drivers as a function of ever improving telematics systems and information management systems has improved the normative behaviour of drivers.

Moreover, as page 13 of the discussion paper suggests:

There is no definitive data in relation to the current uptake of heavy vehicle telematics. Telematics service providers report that there is significant fleet saturation among larger operators who are generally investing in their second or third iteration of systems. This aligns with the NTC’s telematics strategy which noted lower adoption rates among smaller operators and owner drivers. It concluded that, for a number of reasons including cost, lack of knowledge and enforcement uncertainty, the heavy vehicle industry ‘has not embraced new and innovative technology as fast or as wholly as many other industries - as a result, the full economic, social and environmental benefits to the Australian community have not been realised.’

and as the Heavy Vehicle Compliance Review Consultation Draft indicated:

Research into deterrence theory was also revealing that size of punishment is relatively meaningless to offenders and would-be offenders. What matters is the probability of detection and punishment of illegal behaviour. In the heavy vehicle context, probability of detection and punishment varies widely according to location and typography.1

As noted in its discussion paper, in its 2 October 2013 letter ALC said:

Put simply, ALC believes technology that ‘date stamps’ the time and location of events, generally through data taken from the Engine Management System (ECM) of the vehicle, which is transmitted through the General Packet Radio Services (GPRS) network for processing by the road operator, should be mandatory. This is because it provides the most convenient mechanism through which operators can maintain the safe operation of the fleet and ensure that chain of responsibility obligations are discharged.

1 NTC Heavy Vehicle Compliance Review Consultation Draft September 3013: 6 and 26. The comment on page 38, which reads ‘As noted earlier, probability of detection is a key factor in securing compliance’ should also be noted.
Information would remain under the ownership and control of the operator. How the individual operator uses the information to manage safety outcomes is up to the operator. Government agencies would only be permitted to access this information for purposes set out in the law. The law would also set out the manner by which agencies can request, or otherwise gain access to information, as is the case now with the Heavy Vehicle National Law.

It is well known that most ALC members use information such as recording engine on/off data as well as ‘speed event’ information (where an ‘event notification’ is generated when a heavy vehicle exceeds the speed limit for a specified time) to assist in managing chain of responsibility obligations relating to speed and fatigue contained in the Heavy Vehicle National Law.

Whilst this information may not be able to be used for a regulatory purpose (such as proving beyond reasonable doubt that a particular heavy vehicle was breaking the speed limit at a particular place at a particular time), it is probably (in conjunction with other information such as rosters and safe driving plans) the best way of illustrating that an operator has taken all reasonable steps to ensure that Chain of Responsibility obligations are being met.

ALC believes that a regulatory impact statement would prove that the benefits of mandatory telematics would outweigh the costs and that now is an appropriate time for COTI to authorise preparation of a RIS to specifically test this proposition.

The original August 2010 suggestion from ALC members is contained in Attachment 3.

Recommendation 5

7. COTI commission a regulatory impact statement for the mandatory use of a telematics system on heavy vehicles that captures:

(a) the longitude, latitude, speed, date and time of circumstances of speeding events; and

(b) engine on/off data.

It should be noted that this recommendation only specifies the outcomes (or things) to be captured and does not specify a specific system.

It should also be noted that recording these outcomes will probably not be ‘evidence’ capable of use in isolation in many regulatory applications such as a specific speeding infraction.

Rather, the recommendation is made on the basis that, leaving aside the considerable business reasons for utilising telematics systems, use of these systems have improved the normative behaviour of drivers and thus driven safety outcomes – the most important reason of all for utilising telematics.

Bringing everything together

As NTC indicated in a letter to ALC dated 20 January 2014:

As you correctly point out, a number of the key projects going to the Council on Transport and Infrastructure (COTI) in May 2014, including the Heavy Vehicle Compliance Review, telematics reforms, Penalties Review and Chain of Responsibility Review, have overlapping areas of content and common issues. The NTC is fully aware of this overlap and is working to ensure that final recommendations from each project are complementary and work together to build an effective, practical and coherent package of reforms. As such, the NTC plans to produce a unified paper to COTI (with relevant reports attached) which will set out clearly how the projects link and relate to each other and how they will provide an overall improvement to Australian road transport regulation.

In its 28 October 2013 letter to NTC, ALC said:

The (telematics) discussion paper should also highlight the work done to date by the Austroads Freight Taskforce, which will, according to a communiqué of a recent Austroads board meeting:

2 In the usual case, management action is not taken through the data per se, but rather through the generation of exception reports.
… be used as an ongoing forum for discussion of issues associated with the voluntary use of in-vehicle telematics for regulatory purposes with an initial focus on a core telematics data set and associated standards.  

This is so the work of different policy ‘silos’ can be brought together to minimise duplication of effort and would be in addition to ensuring there is limited overlap with other NTC projects such as the Chain of Responsibility Taskforce and the penalties and compliance and enforcement review.

ALC notes that unfortunately the discussion paper did not refer to the work of the Austroads Freight Taskforce.

**Recommendation 6**

ALC hopes that:

- the final report discusses where the Austroads Freight Taskforce has got to in its work; and
- when possible, it publishes publicly a document that sets out the interrelationship between the many reviews that NTC is either conducting, or is acting as secretariat.

**The Australian Logistics Council**

**February 2014**

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Attachment 1

Draft framework principles

Privacy and protection of information principles

1. Regulators and enforcement agencies that access telematics information for compliance and enforcement purposes should be bound by privacy principles that are consistent with the Australian Privacy Principles – these principles should allow the aggregation of de-identified telematics data for research and planning purposes.

2. Regulators and enforcement agencies should only access identifiable personal information for purposes intended in the HVNL – a court-issued warrant should be obtained for any other investigatory or law enforcement purposes.

3. Each application should clearly identify which organisation owns, and has responsibility for, the data that is generated.

Compliance and enforcement principles

4. Each application and compliance and enforcement approach should set out:
   - the purposes for which information will be collected
   - which data will be accessed for these purposes
   - the conditions under which this information will be sought.

5. The treatment of telematics data should underpin a focus on patterns of behaviour rather than small, one-off breaches.

6. Regulators and enforcement agencies should acknowledge the higher probability of detection provided by telematics technology – telematics users and non-users would not be treated equitably if the higher probability of detection was not taken into account.

7. Opportunities to increase certainty and confidence in compliance and enforcement policies should be pursued. For example, approaches to the treatment of small breaches, including where appropriate tolerances, should be made known to industry, whether that be in the form of legislation, guidelines or public statement on a webpage.

8. The standard of integrity and performance of systems required by regulators is dependent on the compliance and enforcement approach being used. For example, enforcement would require a telematics system to have a higher evidentiary value than a system used by an operator to generally increase compliance.

9. The use of telematics to improve compliance with the HVNL should aim, where possible, to ensure greater efficiency for industry, regulators and enforcement agencies.

10. These principles should be consistently applied by regulators and enforcement agencies across all participating jurisdictions. Regulators and enforcement agencies should demonstrate and communicate to stakeholders why a departure from the framework principles is warranted.

4 As published in Table 7, page 64 of the Discussion Paper
28 October 2013

Mr James Williams
Acting Manager – Compliance and Technology
National Transport Commission
Level 15 / 628 Bourke Street
Melbourne VIC 3000

Compliance and Enforcement Framework for Heavy Vehicle Telematics Workshop

Dear James,

ALC welcomes the opportunity to respond to the July 2013 NTC paper Compliance and Enforcement Framework for Heavy Vehicle Telematics: NTC Response to the ALC Proposal to Mandate Telematics for Heavy Vehicles.

I also appreciate your invitation for ALC to deliver a presentation at your telematics workshop on 2 October. ALC has also had the opportunity to consider the workshop report of the 2 October meeting, which adequately captures the proceedings.

I also wish to make some further observations.

The ALC position remains as indicated to the workshop, as set out in the PowerPoint presentation that is attached.

Put simply, ALC believes technology that ‘date stamps’ the time and location of events, generally through data taken from the Engine Management System (ECM) of the vehicle, which is transmitted through the General Packet Radio Services (GPRS) network for processing by the road operator, should be mandatory. This is because it provides the most convenient mechanism through which operators can maintain the safe operation of the fleet and ensure that chain of responsibility obligations are discharged, as amply illustrated by the presentation by Boral Limited at the workshop.

This is the real safety benefit of the proposal.

Information would remain under the ownership and control of the operator. How the individual operator uses the information to manage safety outcomes is up to the operator.

Government agencies would only be permitted to access this information for purposes set out in the law. The law would also set out the manner by which agencies can request, or otherwise gain access to information, as is the case now with the Heavy Vehicle National Law.

This is because, as was made clear at the workshop, industry harbours some privacy concerns about government agencies either directly receiving the data or alternatively having a general right to seek information held by operators for undefined government functions, whether it be law enforcement, road network planning or any other purpose.

ALC members advise that it costs around $2500 to install a typical unit (which have a life span of 3-5 years), with monthly monitoring costs of around $40 per unit.

However, the real cost is involved in managing the data that has been collected (such as analysing reports that have been generated, setting up systems that permit text messages to be sent to drivers identified as speeding etc). It is for this reason that, for instance, over-speed events in relation to maximum speeds over 100 km/h are the only speeds that can be economically monitored.

This estimate presumes that current products capable of being purchased ‘off the shelf’ are being used.

www.austlogistics.com.au
PO Box 20 Deakin West ACT 2600 Suite 17B, 16 National Circuit Barton ACT 2600
T: +61 2 6273 0755 F: +61 2 6273 3073 E: admin@austlogistics.com.au
ABN 23131860136
To that extent, it became clear during the workshop there is a desire to use information captured for a number of regulatory purposes.

For example:

- the NTC 2013 consultation draft of the Heavy Vehicle Compliance Review noted that telematics may lead to the discovery of ‘small’ breaches and asks how that should be dealt with from the ‘enforcement perspective’; and

- ‘option C’ of the HVCI initiative anticipates the use of on board technology to determine the access price payable by a heavy vehicle determined on a mass distance location (MDL) basis.

It should be made clear that ECM units currently satisfy the terms of ADR 65/00\(^2\), made under section 7 of the Motor Vehicle Standards Act 1989.

These units do not record information to what ALC has described as being of ‘an evidentiary standard’ as they do not meet the same specification standards as those required by, for instance, the Intelligent Access Program Functional and Technical Specification required of IAP units by TCA.

Therefore, care must be taken when using information collected through telematics as conclusive evidence of any particular matter. It would be quite wrong for any law to treat (or ‘deem’) information collected through use of telematics as being a fact establishing either an offence or some other legal obligation that can only be rebutted through introduction of contrary evidence.

ALC reinforces the observations accurately recorded in the 2 October workshop report that the focus should be an open standards and a systems platform approach consistent with international standards.

To do otherwise would be to require industry to invest in units and systems that will be so expensive the take up of telematics will be discouraged.

I understand that NTC is developing a further discussion paper in this area.

It will be of advantage if the discussion paper could request government agencies to expressly set out:

- the purposes that they want information collected through telematics;

- the data sets they hope to see; and

- the circumstances under which they wish to see the data.

It is only then can issues such as:

- whether ‘off the shelf’ products will be able to satisfy the ‘regulatory telematics’ needs of government – this specifically includes all areas of government that may reasonably be expected to want to use data, which includes network planners and those involved in initiatives such as HVCI as well as those involved in traditional compliance and enforcement operations;

- whether there needs to be the requirement for vehicles to carry specifically certified units, or units that meet a specific standard (which of course would require a rigorous regulatory impact statement) or whether the ALC position of mandatory telematics that are capable of collecting a minimum set of data that can assist the management of (at the very least) speed and fatigue obligations is sufficient; and

- when government officers may use private information.

The discussion paper should also highlight the work done to date by the Austroads Freight Taskforce, which will, according to a communique of a recent Austroads board meeting:

\(^1\) Page 75
\(^2\) Vehicle Standard (Australian Design Rule 65/00 – Maximum Road Speed Limiting for Heavy Vehicles and Heavy Omnibuses) 2006
… be used as an ongoing forum for discussion of issues associated with the voluntary use of in-vehicle telematics for regulatory purposes with an initial focus on a core telematics data set and associated standards\(^3\).

This is so the work of different policy ‘silos’ can be brought together to minimise duplication of effort and would be in addition to ensuring there is limited overlap with other NTC projects such as the Chain of Responsibility Taskforce and the penalties and compliance and enforcement review.

ALC would like to close by making two final observations.

Firstly, ALC believes that this work should not be tied to the development of the electronic work diary as that deals with a specific statutory issue requiring its own treatment, and is working within its own timeframe.

Secondly, the July 2013 NTC paper discussed the issue of ‘geofencing.’

In general terms, geofencing may trigger an event, such as informing a consignee that a delivery is five minutes away or that a vehicle is in a designated low speed zone. It also allows operators to ‘see where vehicles are. Finally it assists in business planning, such as attempting to avoid peak congestion periods.

Therefore, while geofencing is an important business tool, it has limited use for regulatory purposes.

Please do not hesitate to contact me on 0418 627 995 or at Michael.kilgariff@austlogistics.com.au if you wish to discuss this matter further.

Yours sincerely

MICHAEL KILGARIFF
Managing Director

\(^3\) Communique Austroads Board Meeting No 13 15 November 2012
SUBMISSION

to the National Transport Commission on the
Draft NTC National In-Vehicle Telematics Strategy:
The Road Freight Sector
WHO WE ARE

The Australian Logistics Council (ALC) is the peak national body for Australia’s freight Transport & Logistics (T&L) industry. The aim of ALC is to influence government policy decisions to ensure that Australia has a safe, secure, reliable, sustainable and competitive freight T&L industry.

SUBMISSION TO NATIONAL TRANSPORT COMMISSION ON DRAFT NATIONAL IN-VEHICLE TELEMATICS STRATEGY

THIS SUBMISSION HAS BEEN PREPARED WITH THE ASSISTANCE OF KM CORKE AND ASSOCIATES, CANBERRA.

PO Box 20 DEAKIN WEST ACT 2600
P: 61 2 6260 3274  F: 61 2 6260 4978  E: admin@austlogistics.com.au
www.austlogistics.com.au

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Table Of Recommendations

Recommendation 1
The overall objective of the National In-Vehicle Telematics Strategy should be to focus on:
» safety and
» compliance with fatigue and speed regulations.

Recommendation 2
The Strategy may need to consider the development of subsidy schemes to encourage the uptake of telematics.

Recommendation 3
Rather than supporting one of the options contained in the Strategy Document, ALC proposes the adoption of the following option:

ALC Option
The use of ‘monitoring systems embracing telematics’ for compliance purposes should be mandated for heavy line-haul vehicles. Under chain of responsibility rules, systems should be monitored by companies not regulators.

Recommendation 4
Once decisions have been made as to how telematics should be used, so as to reduce duplication and compliance costs all jurisdictions should be obliged to adopt identical and nationally consistent provisions.

Recommendation 5
ALC agrees that mass regulations should be updated to provide a positive duty for managing compliance (consistent with fatigue and speed regulations).
About ALC

The Australian Logistics Council (ALC) is the peak national body for Australia’s freight Transport & Logistics (T&L) industry.

ALC aims to influence government policy decisions to ensure that Australia has a safe, secure, reliable, sustainable and competitive freight T&L industry.

ALC members have interests across the full spectrum of the Australian freight T&L supply chain, including owners, providers and users of infrastructure, as well as suppliers of goods and services. Attached is a list of ALC members.

The Objectives of ALC are to:

1. Be the nationally recognised voice of the major participants in Australia’s domestic and international freight T&L supply chains.

2. Support appropriate nationally consistent regulatory frameworks and transparent markets to ensure Australia enjoys the full benefits of national freight T&L policy development and reform.

3. Promote the freight T&L industry’s image and profile and encourage greater recognition by governments and the community of the importance of the industry’s contribution to Australia’s economy.

4. Drive implementation of strategies to improve Australia’s domestic and international supply chains.
In fact, the most efficient supply chains worldwide leverage real-time information and ensure real collaboration between partners, whether this is within a closed-loop, across the industry, or indeed across the entire economy. Impartial industry wide Information and Communications Technology (ICT) solutions will enhance the industry’s ability to deliver predictable and reliable flows of goods and people. – ALC Press Release 7 January 2010

ALC is pleased to make a submission in response to the Draft National In Vehicle Telematics Strategy: The Road Freight Sector (The Strategy Paper) and its accompanying discussion paper (the Discussion Paper).

ALC supports the development of policies and platforms designed to ensure the efficient movement of information between entities with an interest in the efficient operation of the freight Transport & Logistics (T&L) supply chain.

Publications such as the August 2010 ALC publication Using Information and Communications Technology to Increase Productivity in the Australian Transport and Logistics Industry have encouraged the development of suitable policies to encourage this end.

ALC generally agrees with the industry and government objectives expressed (particularly) in the Discussion Paper.

However, there must be an understanding that:

» the market operates within the current framework. Any major changes to the ‘system’ require government leadership in collaboration with the community and industry;

» investment in telemetry by the freight sector should always be ‘benefits based’ – the use of technology for technology’s sake will not work in the real world of business; and

» telematics is merely a subset of the overall ICT solution to improve the efficiency of the Australian freight chain.

Communication can be via different frequencies and access to which must be managed by the community: DSRC, GSM and GPS.

A key tool for achieving the desired safety outcomes in the Road Freight arena is the expansion of ‘Chain of Responsibility’, to ensure everyone from the driver, to operators and customers as well as device suppliers understand their responsibilities and are held accountable.

It is therefore in the community’s interests to provide the incentives, regulatory environment and research that encourages inter-operability and can assure data validity (eg, for data from a device to be accepted in defence of a regulatory breach, that is demonstrably tamper-proof and reliable), although any rules developed must be sensible in design – they must not be set at a level so high that compliance will be impracticable to achieve in a commercial environment.
ALC Position

The NTC June 2010 Draft National In-vehicle Telematics Strategy: The Road Freight Sector lists three options to increase the uptake on in-vehicle telematics:

**OPTION 1**  Business as Usual  
**OPTION 2**  Government and Industry Partnership  
**OPTION 3**  Strong Government Intervention  

ALC notes that NTC supports Option 2: Government and Industry Partnership as the best method to move forward.

However, a full reading of the Discussion Paper notes an emphasis on the use of telematics for compliance issues, with lesser weight on the use of the technology for other purposes.

In that case, it is appropriate to mandate the use of monitoring systems embracing telematics.

The Bureau of Infrastructure, Transport and Regional Economics (BITRE) states that during the 12 months to the end of December 2009, 246 people died from 211 crashes involving heavy trucks or buses. These included:

- 144 deaths from 125 crashes involving articulated trucks;  
- 81 deaths from 82 crashes involving heavy rigid trucks; and  
- 30 deaths from 27 crashes involving buses.¹

Mandatory use of ‘suitable telematic systems’ to ensure speed and fatigue would assist in reducing this loss of life.

ALC also notes that a cost-benefit assessment and prioritisation study of 21 vehicle safety technologies conducted for the European Commission in 2005 based on a wide range of Electronic Data Reporting (EDR) field examples and studies concludes implementing broad accident data recorder implementation led to:

- an average reduction of collision probability of 10% for fatalities as well as for serious and light injuries;  
- benefits estimated to outweigh costs by a factor of 7; and  
- behaviour changes minimising the risk and severity of accidents and repair costs by up to 25%.²

ALC agrees with the combined submission of the Toll Group, Asciano and Linfox Australia. This is attached to this submission.

In addition, ALC makes these further observations.

Mandating the use of telematics in heavy long-haul vehicles for compliance purpose would deal with the enforcement equity concerns outlined in the case study published on page 7 of the Strategy Paper, as well as providing enhanced safety outcomes.

In recognition of this, the Strategy could require the development of subsidy schemes to encourage the uptake of telematics – something that can be used in concert with other regulatory options.³

At the very least, mandatory use of telematics should be phased in over a period of time so fleets can be gradually fitted with compliant technology.

There is a need to identify what a compliant telematic unit should record for compliance purposes.

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¹ Bureau of Infrastructure, Transport and Regional Economics Fatal Heavy Vehicle Crashes Australia October-December 2009  
ALC agrees with the Toll Group/Asciano/Linfox submission as to the functionality that a compliant unit should possess. A unit would:

» be GPS enabled and would time / date / location stamp events eg over speeds, key on key off locations etc;
» send SMS or email messages in real time to the owner of the vehicle when a potential breach occurred;
» warn the driver that he is speeding;
» count driving hours and warn the driver when he was approaching a limit (SDH and BFM);
» provide traceable records;
» have anti tampering systems e.g. It would monitor GPS speed v ECU speed and report variations;
» record distance and time between key on and key off;
» identify the driver – log on key or smart licence;
» be able to Geo fence ad hoc locations;
» provide live location via web (etcetera);
» produce standard reports; and
» log accident data ie capture in detail activity prior to an “incident”.

It is presumed that (ultimately) the National Heavy Vehicle Regulator will decide what functionality is required. However, so as to reduce duplication and compliance costs, all jurisdictions should be obliged to adopt identical and nationally consistent provisions once they are determined.

That said, Option 3 (‘Government’s move to mandated use of in-vehicle telematics based on particular technology or systems without industry input’) is too heavy-handed.

A solution may be as simple as a set of guidelines (as opposed to proprietary specifications, or detailed technical prescriptions such as those achieved as a result of the Working Time Directive of the European Union, discussed in page 19 of the Discussion Paper) that spell out what is required by users combined with standard data definitions, so those developing any enabling software take these into account.

This would avoid some of the limitations identified in the rollout of IAP discussed in page 31 of the Discussion Paper, namely:

» the performance specification that underpins the program requires the use of systems and processes that depart from industry standards;
» in its current application, it represents the imposition of additional operating costs (through technology changeover contracts with accredited service providers) with little or no identifiable benefit to most operators; and
» the difficulty in obtaining the additional road network access required to obtain increased productivity and offset enrolment costs.

The proposed forum, canvassed in page 28 of the Discussion Paper could:

» identify the activities that telematics can assist; and
» develop relevant technical guidelines.

To allow for the development of a dynamic, competitive market in compliant telematic equipment it is imperative that all relevant documentation should be freely available.

This is so equipment can be developed so industry participants (including freight chain participants with statutory Chain of Responsibility obligations) do not incur capital costs and inconvenience if obliged to carry an IAP box, a speed monitoring box and a third box used for GPS tracking, communications, e-mails etc.
However:

» the scope of the forum will need to be tightly targeted;

» care should be taken to ensure there is no duplication of the work being developed by the Australian Strategic Transportation Agenda for Research and Technology or (more particularly, given the small size of the Australian economy) the Institute of Electrical and Electronics Engineers (IEEE)

Moreover, rather than the concept of having ‘certified equipment’ from ‘approved suppliers’, any equipment meeting any relevant standards should be capable of being used as *prima facie* evidence for the purposes of compliance with both sector specific and general industry safety legislation.

Finally, ALC believes that the management of information collected by monitoring services incorporating telematics should be under the control of industry participants, so:

» more efficient commercial practices can be developed and better safety outcomes delivered (including use of electronic work diaries where operators choose to implement them as part of their telematics system); and

» evidence that Chain of Responsibility obligations have been discharged is available.

ALC finally recommends that the overall objective on page 4 of the strategy document should read ‘*Improved productivity, safety, reliability and environmental responsibility*’.

**Australian Logistics Council**

**July 2010**
Response to the National Transport Commission’s National in-vehicle Telematics Strategy

Toll Group, Linfox and Asciano are leaders in the road transport industry in Australia. The companies are at the forefront of road safety management practices, including around speed and fatigue.

There are too many heavy vehicle (HV) accidents on Australian roads. Year end Mar 09 there were 248 fatalities from accidents involving heavy vehicles, and ~30% of HV accidents are single vehicle.1 HV drivers are not always at fault in accidents, but when a HV is involved, accidents tend to be more severe. Numerous studies have shown that major causes of HV accidents, particularly single vehicle ones, are fatigue and speed.2

Toll, Linfox and Asciano believe that the existing chain of responsibility (CoR) legislation provides a sound basis for improving road safety for both heavy vehicle drivers and those who share the roads with them. But increased company monitoring of fatigue management and speed is required to improve compliance.

Studies in Europe and the US show that introducing black boxes to monitor fatigue and speed reduce HV accidents by 20-30%, reduce the severity of the accidents and in Europe have reduced single vehicle HV accidents to ~15% (from ~50%). Cost/benefit analyses overseas have proved compelling with benefits up to 7 times costs.3

We believe it should be mandatory for companies to monitor fatigue and speed using telematics technology. We also believe it is vital to amend the current counting hour rules to make them nationally consistent.

For these reasons, Toll, Linfox and Asciano cannot support any of the three options currently being put forward by the NTC.

We are proposing that a new option (Option 4) that includes mandating that companies use and monitor telematics technology be developed. Option 4 should meet the following requirements.

PROPOSED OPTION 4

Regulators should look to determine the outcome not the process. There should be flexibility to allow the appropriate telematics technology to provide a broad range of both compliance and commercial benefits.

Regulators should focus on compliance and leave commercial aspects to industry.

1. The vital outcome is to improve safety and on-road behaviour by mandating an operator’s management of speed and fatigue in their fleet. It is important to remember the operator and other supply chain participants already have legal responsibility for managing speed and fatigue under chain of responsibility (CoR) legislation

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1 March 2009, Department of infrastructure, Transport, Regional Development and Local Government, Road Safety Statics
2 Media release, Hon Anthony Albanese MP, Minister for Infrastructure, Transport, Regional Development and Local Government Road Safety and Productivity Package, 29 February 2009
2. The Regulator should work to encourage the industry to embrace CoR legislation across the entire supply chain and not solely focus on the truck driver and their company.

3. Self regulation – we believe that all heavy vehicles performing long distance work should have a monitoring device that assists owners and operators better manage speed and fatigue. Heavy vehicles are defined in NTC fatigue model law. Long distance work is defined in the Road Transport (Long Distance Operations) Award 2010.

4. The Regulator should not mandate a specific device.

5. The National Heavy Vehicle Regulator (NHVR) should set a single national standard. State regulators should not deviate from this standard.

6. The Regulator should mandate monitoring for speed & fatigue only. Anything further would delay a start up across the whole industry.

7. The Regulator should amend legislation where required to allow use of electronic work diaries where operators choose to implement them as part of their telematics system.

8. The Regulator will need to phase in mandatory compliance to allow all operators to fund equipment and establish thorough monitoring regimes within their businesses.

9. The Regulator should take a proactive and preventative approach and not a punitive one – CoR legislation will lead to strong outcomes without the need for the regulator to be heavy handed.

10. The compliance process should remain managed by the company although it should be available for external audit or accreditation such as under the National Logistics Safety Code or to the Regulator in the event of a major incident or investigation.

11. Industry codes of practice are a vital part of ensuring safety in the industry and should be at the forefront of industry and regulator thinking on this issue.

Minimum standards of compliance

- It would be GPS enabled and would time / date / location stamp events e.g. over speeds, key on key off locations etc.
- It would send SMS or email messages in real time to the owner of the vehicle when a potential breach occurred.
- It would warn the driver that he is speeding.
- It would count driving hours and warn the driver when he was approaching a limit (SDH and BFM).
- It would provide traceable records.
- It would have anti tampering systems e.g. It would monitor GPS speed v ECU speed and report variations.
- It would record distance and time between key on and key off.
- It would be able to identify the driver – log on key or smart licence.
- It would be able to Geo fence ad hoc locations.
- It would provide live location via web or other.
- It would be able to produce standard reports.
- It would be able to log accident data i.e. capture in detail activity prior to an “incident”.

Signed on behalf of Toll Group

Andrew Ethell
General Manager
Group Corporate Affairs

Signed on behalf of Asciano

Helen Newell
Director
Strategy & External Relations

Signed on behalf of Linfox

Tania Whyte
President Commercial