THIS SUBMISSION HAS BEEN PREPARED WITH THE ASSISTANCE OF KM CORKE AND ASSOCIATES, CANBERRA.
ALC is pleased to make a brief submission on the Cooperative Intelligent Systems Regulatory Policy Issues discussion paper (the discussion paper).

ALC notes that the discussion paper deals with all types of cooperative intelligent systems, which the Glossary published on page 61 of the discussion paper defines as being:

A technology platform that enables components of the transport network to share real-time information to improve safety and traffic outcomes.

The discussion paper then goes on to explain that these systems incorporate:

• vehicle-to-vehicle (V2V) communication – where vehicles exchange information with each other, in particular for safety applications;
• vehicle-to-infrastructure (V2I) – where vehicles exchange information with the transport network infrastructure (roadways, intersections, etc.), of which electronic tolling is an example;
• vehicle-to-nomadic device (V2N) – where information is exchanged between vehicles and nomadic devices, such as mobile phones, tablets or navigation devices.

This means the discussion paper canvasses policy issues flowing from all manner of information exchanges with vehicles.

At a high level, ALC notes the work undertaken by SCOTI and published in the 2012 document Policy Framework for Intelligent Transport Systems in Australia, which reads:

1. ITS development and implementation must deliver demonstrable benefits to individuals, the community and business
   ITS provides a suite of enabling technologies that permit the delivery of improved safety, productivity, environmental, urban amenity, and security outcomes. ITS planning and implementation will:
   a) be outcomes focussed – make a tangible contribution towards solving key transport challenges (e.g. reducing congestion and freight delays, lowering emissions, improving energy efficiency, attaining higher levels of safety and security including vulnerable road users)
   b) be consistent with broader transport network objectives
   c) build on existing infrastructure and networks – where it is cost effective to do so – including the National Broadband Network
   d) facilitate competition and consumer-driven outcomes – for establishment and development of innovative ITS applications and services wherever feasible and appropriate.

2. The policy environment in which ITS are developed and implemented must be robust and dynamic
   The policy environment for ITS will provide for both regulatory and non-regulatory processes when market interventions are considered necessary. Non-regulatory approaches will rely on cooperative agreements between jurisdictions and/or business to adopt common standards, policies and guidelines to harmonise state, regional or sector based solutions. Under a regulatory framework the adoption of specifications, the issuing of mandates for national standards and the selection and deployment of ITS applications and services shall be based upon an evaluation of needs involving all relevant stakeholders, and an assessment of benefits and costs in accordance with best practice regulatory principles. These measures shall:
a) deliver interoperability – ensure that systems and the underlying business processes have the capacity to exchange data and to share information and knowledge to enable effective ITS service delivery

b) be transparent – regulatory decisions will be evidence-based and follow established and explicit principles and rules

c) be fit for purpose – including accreditation/certification and or audit requirements

d) discourage inappropriate technologies that could restrict future development

e) be proportionate – provide, where appropriate, for different levels of achievable service quality and deployment, taking into account the local, regional, national and international specificities

f) support continuity of services – ensure seamless services when ITS services are deployed. Continuity of services should be ensured at a level adapted to the characteristics of the individual transport networks, and where appropriate, regions with regions and cities with rural areas

g) encourage innovation – ensure that regulation is only introduced when there is a demonstrated need to do so, is closely targeted, and involves the minimum level of intervention required to deliver a regulatory objective

h) support backward compatibility – ensure, where appropriate, the capability for ITS systems to work with existing systems that share a common purpose, without hindering the development of new technologies

i) avoid favouring particular technologies or applications, to the maximum extent feasible

j) facilitate multiple uses – where appropriate and feasible, enable ITS customer equipment to be used for multiple purposes, to reduce cost and maximise customer value

k) promote equality of access – facilitate and encourage access to ITS applications and services for all users who may benefit from them including vulnerable users

l) facilitate inter-modality – take into account the coordination of various modes of transport, where appropriate, when deploying ITS

m) promote consistency with international standards – enabling Australian suppliers to compete in the world market and providing Australia access to global technology and supplier solutions

n) promote consistency across modes and geography so that information is delivered to end users in a familiar way

o) promote data sharing – to support the delivery of additional ITS solutions that benefit the wider community.

ALC believes that this policy framework is itself sufficient to guide SCOTI in making the necessary decisions to ensure suitable nationally consistent rules are made to facilitate the use of cooperative intelligent transport systems in respect to the range of uses to which technologies in scope may be used.

It follows that ALC believes that as a concomitant of SCOTI adopting a single set of policy guidelines, any rules or practices relating to the operation of intelligent transport systems would be identical throughout Australia.

As can be implied from the reference on page 17 of the discussion paper, these principles would guide the regulation of telematics in heavy vehicles, a subject discussed in the NTC’s 2011 National in-vehicle telematics strategy: the road freight sector discussion paper.

The ALC response to the discussion paper supports the mandatory use of telematics. The response is attached

To that extent, ALC notes the use of telematics may form part of the roll out of alternative charging mechanisms for heavy vehicle use of roads being examined as part of the Heavy Vehicle Charging Initiative (HVCI). The HVCI project is examining, amongst other options,
activity based heavy vehicle road charging based on a Mass Distance Location basis that would be facilitated by telematics.

ALC therefore trusts that this stream of work emanating from the NTC does not delay the work of the HVCI in developing mechanisms designed to improve access to heavy vehicles and better investments in the road network to support supply chains. Similarly, ALC hopes it does not delay the work of Austroads in the development of its Project NT1785, a project that ALC presumes will assist in dealing with the platform interoperability issues between jurisdictions that is said to be 'sorely lacking in the heavy vehicle context' referred to on page 16 of the discussion paper.2

As to other matters dealt with in the discussion paper:

- 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; and
  - evidence that Chain of Responsibility obligations have been discharged is available.
- any other data captured by an intelligent system and held by a third party, such as a toll road operator, would be subject to the Australian Privacy Principles that will commence on March 2014;
- ALC would expect the development of an exhaustive list of the types of enforcement activities in relation to which data that may be characterised as personal information derived from intelligent systems held by an entity obliged to comply with Australian Privacy Principles so that is clear as to the sort of information that may be transferred under Australian Privacy Principle 6.2(b). ALC anticipates that this is one area that could be developed as part of Project NT 17853; and
- liability issues arising from the operation of intelligent transport systems should initially be allowed to evolve through the operation of the common law operating under civil liability legislation, or generic product liability legislation (as relevant). This is because systems may be put to uses and user behaviour may develop in a way that may not be anticipated by legislation developers attempting to second guess what may happen, increasing the chance of regulatory failure as well as suppressing the innovative use of new technology in ways that enhance productivity and thus increase general community welfare. More specific road rules could develop over time, but only on the basis of real evidence after a period of use.

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2 This project has as its purpose ‘to put in place the required regulatory and operational framework to enable the successful deployment and operation of C-ITS solutions in Australia, and thus realise the potential transport and societal benefits of C-ITS http://www.jr.net.au/Austroads/Project/Details.aspx?ProjectID=1299

3 These observations apply the terminology used in the amendments made to the Privacy Act 1988 by the Privacy Amendment (Enhancing Privacy Protection) Act 2012 (Act 197, 2012) and scheduled to commence operation March 2014.
SUBMISSION

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

AUGUST 2010
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.
TABLE OF RECOMMENDATIONS

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CONTEXT

ALC POSITION
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**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).
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 (e.g., 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

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

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