

Submission to: National Transport Commission

Title: Cooperative ITS Regulatory Policy Issues

Date: 5 February 2013



Contents

1. Introduction	3
2. Australian Trucking Association	3
3. Recommendations.....	3
4. Regulatory Policy issues	4
4.1 Privacy	4
4.2 Liability	6
4.3 Driver distraction and information display	8
4.4 Compliance and enforcement	9
4.5 Incentives for uptake.....	12
5. Conclusion	13

1. Introduction

The NTC has been tasked with examining key regulatory policy issues of Cooperative Intelligent transport systems (C-ITS). The potential benefits of C-ITS systems are well documented in the issues paper. Safety, environmental and productivity benefits; all produced by intelligent devices that can reduce collisions, and provide better route management for drivers, among other applications.

The benefits are clear and there is a desire by manufacturers, drivers and government to make the choice to implement C-ITS devices in vehicles. However, there are considerable barriers to making these benefits materialise.

The heavy vehicle industry is pessimistic about the application of C-ITS devices outside of businesses fleet management, due to poor government policy which has failed to promote the safety benefits over enforcement opportunities. This has limited industry uptake. The no-blame approach used in aviation sets a precedent for a system of monitoring that is internationally recognised, has high uptake and has superior safety outcomes. The NTC should use aviation as a model of how to balance safety over enforcement.

A wider discussion about applications to all vehicles and how to increase voluntary uptake is needed. Aiding drivers to make safer decisions, boost productivity and reduce environmental impact of driving should be facilitated by regulatory policy that respects all stakeholder rights.

2. Australian Trucking Association

The Australian Trucking Association (ATA) is the peak body that represents the trucking industry. Its members include state and sector based trucking associations, some of the nation's largest transport companies, and businesses with leading expertise in truck technology.

3. Recommendations

Recommendation 1

A high level of anonymity should be implemented for users providing C-ITS data.

Recommendation 2

There should be an increase in communication between interest groups and government on privacy issues and providing guidance for drivers under C-ITS

Recommendation 3

Small businesses should have the same protection as individuals and larger entities under the Privacy Act.

Recommendation 4

International standards for technology legislation should be adopted, considering expectations of the Australian technology market are met.

Recommendation 5

Standard liability laws should be adopted for C-ITS system manufacturers.

Recommendation 6

International organisation standards (ISO) for technology liability should be used as guidance in Australia.

Recommendation 7

Electronic work diaries should be promoted in Australian Design Rules (ADR) as safety and compliance enhancing devices.

Recommendation 8

Distraction laws in jurisdictions should be harmonised to remove regulatory confusion for technology providers and drivers over C-ITS legality.

Recommendation 9

ADR's be guided by international standards for driver distraction laws.

Recommendation 10

CB radios should continue to be exempt from driver distraction laws, given the benefits these communication devices bring.

Recommendation 11

Enforcement desires of road agencies should not discourage uptake of C-ITS systems, given the social benefits C-ITS provides.

Recommendation 12

Explicit limits should be put on the use of personal data produced from C-ITS systems.

Recommendation 13

Surveillance laws be harmonised in order to remove ambiguity in C-ITS application.

Recommendation 14

Incentives should be provided to drivers who install C-ITS systems in their vehicles.

Recommendation 15

C-ITS systems should be voluntary and have open standards in order to increase uptake of C-ITS systems.

4. Regulatory Policy issues

Each of the key policy areas highlighted by the NTC has been discussed below including an evaluation of options and NTC questions for consideration.

4.1 Privacy

Fleet management systems are available for heavy vehicle operators to monitor movements of vehicles and other information. While these systems provide data to a private business, data collected by the government has privacy concerns attached to that data, which are likely to be more complex than the private fleet management system.

Benefits of C-ITS systems such as gathering data which could be statistically important need to protect users by a layer of anonymity. This is important for an opt-in system to be successful. Drivers need confidence that identifiable data will not be misused.

An opt-in method of deployment of C-ITS applications would balance drivers concerns with privacy and implementing a system that creates as many benefits as possible. Drivers could use their own discretion to decide whether they wanted to be monitored and provide data. Additionally, using pseudonymity, which is a common method of protecting user data, provides all the protection of anonymity, while allowing great data analysis.

Current privacy laws at both federal and state level have integrity; however, users whose data is exposed should be made fully aware of privacy laws. Implementing a platform for co-operation between interest groups and the government on this issue would make sure there is common understanding on privacy concerns of drivers.

The Privacy Act does not apply to 'small businesses with an annual turnover of \$3,000,000 or less' as many trucking companies meet this criteria, there is a question about how protected these organisations are under the Privacy Act. These organisations should have the same privacy protection as individuals and larger organisations. The ATA would support ensuring adequate protection of the privacy of small businesses by the Australian Law Reform Commission's investigation into modifying exceptions listed in the NTC issues paper.

Ongoing work by the heavy vehicle charging and investment plan (HVCI) would have to consider this exception when discussing telematic devices in operator's vehicles.

The new Australian Privacy Principles (APPS) which are likely to replace the Commonwealth Information Privacy Principles (IPPS) and National Privacy Principles (NPPs) indicate that there is a healthy debate on how privacy laws can be made more efficient. Specifically, the ability to allow external dispute resolution services and increased compliance obligations show there is increased scrutiny for those who store and collect data.

The emergence of private partnerships in road provision and other transport areas creates a grey area of which privacy law applies between private sector organisation collection of personal information under contract, or on behalf of, a state-based public sector organisation. This issue is set to be resolved or at least refined by new privacy laws in the Privacy Amendment (Enhancing Privacy Protection). It is important that privacy laws in this situation are clear and concise.

Evaluation of NTC policy options

Option 1: Continue current approach

While laws in place are currently dealing with privacy laws in a concise manner, current exceptions discriminate against smaller businesses and are sporadically applied across Australia. Privacy laws are also not as transparent as they could be in order to improve C-ITS uptake.

Option 2: Privacy code

Implementing privacy codes for specific industries creates a manner of complex privacy 'laws', that grant exceptions but do not enshrine that exception in privacy law. States are also not obliged to comply with the privacy codes this limits the usefulness of such a scheme.

Option 3: Provide guidance on best practice

Providing C-ITS guidance material to government, industry, manufacturers, service providers, enforcement agencies and record keepers would mean that all parties involved in C-ITS have the same information and understanding about privacy laws and surrounding issues. Providing transparent information on privacy guidelines is important to making sure that all parties involved know obligations and rights.

Option 4: Legislate C-ITS governance arrangements and use of information

Separation of the collection and storage of vehicle activity (the C-ITS service provider) from the entity that holds information linking the unique identifier to a vehicle registration number is an idea to pursue. However, the paramount concern for those who use C-ITS applications is that privacy laws are upheld, as long as this is respected the separation issue not as important.

Option 5: Legislate technical standards to protect privacy

Australia is a taker of technology and legislative adoption of technical standards produced by the international organisation standards (ISO) should be approved, if they match the expectations of the Australian market.

A combination of options 3, 4 and 5 would seem to offer the greatest benefits in terms of C-ITS and privacy laws.

NTC questions for consideration and ATA responses

1) Should privacy protection for C-ITS be explicitly regulated?

A: No, it should be treated the same as other sensitive data collection.

2) If so, what limits should be placed on the collection, use and disclosure of personal information generated by C-ITS?

A: Normal privacy laws should apply to personal information created by C-ITS systems

3) Should other, non regulatory controls be pursued?

A: No, current controls offer the strong protection of privacy for information and should apply to C-ITS systems.

Recommendation 1

A high level of anonymity should be implemented for users providing C-ITS data.

Recommendation 2

There should be an increase in communication between interest groups and government on privacy issues and providing guidance for drivers under C-ITS

Recommendation 3

Small businesses should have the same protection as individuals and larger entities under the Privacy Act.

Recommendation 4

International standards for technology legislation should be adopted, considering expectations of the Australian technology market are met.

4.2 Liability

If a C-ITS system produces defects, the liability of manufactures should the same as another liability case of malfunctioning equipment.

The NTC issues paper raises the possibility of liability risk from C-ITS systems risk as reducing the willingness for companies to install such systems. This is a small concern, as many manufacturers and operators are focussed on providing and using safety enhanced trucks with C-ITS applications. Rigorous testing and research in the C-ITS applications are likely to make sure malfunctioning applications are not installed, by original equipment manufacturers (OEMS).

C-ITS systems mostly provide warnings to drivers and human error in ignoring safety warning systems should be noted in liability laws involving a claim over a C-ITS system.

Manufacturer’s exposure will be no more elevated than other areas of manufacturing. As indicated in the NTC issues paper, incidents that do occur would be likely to be dealt with through existing product law and common law on a case by case basis.

For the chain of responsibility to be strong and responsive to C-ITS system problems it is important that if defects are detected they are rectified and communication is strong between manufacture and technology providers, C-ITS system managers and road managers. This should reduce the risk of unknown liability issues.

Evaluation of NTC policy options

Option 1: Continue current approach

As current liability laws are clear and defined, the current route where many liability cases are dealt with through common law claims appears sound, there seems no real justification for changing this.

Option 2: Enact specific C-ITS liability law to clarify issues

Pre-empting liability to match technology changes is likely to mismatch the pace in technology given the passage and timeline of changing legislation. Recognising ISO standards will allow Australian progress on technology and would be a successful way to make sure that liability laws recognise international standards, without limiting technological advancements.

Option 3: Non-legislative approaches

Providing guidance through open standard to operators will support market development and should be recommended. A code of practice would help to inform manufacturers of C-ITS liability. Australia is a technology taker and using the European code of practice as the basis for an Australian code of practice will suffice. However, non-legislative approaches are limited as the guidelines are not in legislation.

Option 4: Information and education campaigns

C-ITS systems' benefits should be publicised to industry, users and manufactures. It is also important that limits of C-ITS systems are made clear to users. However, it is a manufacturer's responsibility to sell C-ITS systems to users and make sure that limitations are clear. The Government should not bankroll private enterprise marketing.

Option 2 would present the strongest response to liability concerns, by legislating changes with technology and using ISO standards to help guide manufactures liability.

NTC questions for consideration and ATA responses

1) Are current laws around liability sufficient to manage the roll out of C-ITS application?

A: Current laws in place are most likely sufficient to deal with C-ITS applications.

2) Is further guidance required for industry or for road agencies on managing liability risks?

A: Liability cannot and shouldn't be regulated away. Manufacturers and providers will need to exercise due care in an open market when providing goods. Road agencies will need to balance liability exposure with efficiencies C-ITS systems can provide.

Recommendation 5

Standard liability laws should be adopted for C-ITS system manufacturers.

Recommendation 6

International organisation standards (ISO) for technology liability should be used as guidance in Australia.

4.3 Driver distraction and information display

C-ITS systems need to meet safety objectives while not causing unnecessary driver distraction.

Current laws may prevent the benefits of C-ITS devices being fully understood by drivers due to device format restrictions. Toyota stated in the NTC issues paper that jurisdictional differences delayed the introduction of telematics connectivity in their cars in some states. Federal law is mismatching distraction laws of certain jurisdictions with telematics provision. This needs to be rectified to end unnecessary confusion for manufactures and consumers of C-ITS applications.

Electronic work diaries are an opportunity for heavy vehicle drivers to replace hand written work diaries with information simply being entered into a device. It is important the law includes this application of C-ITS as this assists compliance and safety of the driver. The NTC should recommend that the Australian Road Rules (ADR) recognises these devices as providing benefits and make sure that driver distraction laws do not hinder the use of them.

The Heavy Vehicle Charging and Investment plan (HVCI) are suggesting, as an option, telematic devices to measure heavy vehicle mass, distance and location for charging purposes. The privacy and general laws must be respected and, if necessary, a change made for the potential government roll out of telematics to be legal.

ADRs for dashboard information devices would most likely need to be updated with improved C-ITS systems, providing information well beyond speed, RPM etc. As stated in the paper Australia's ADR regulators need to pay attention to international standards changes to ADR's for larger dashboard information displays with a wider use of CITS.

CB radios use in any vehicle must continue to be protected and not classed as a mobile phone device, as they are used to warn other drivers of accidents, obstacles and promote safe operation on roads. The benefits CB radios produce should be maintained in any changing of road rules on communication devices that may be classed as driver distraction. Therefore, the exemption from road rule 300 should be maintained.

Evaluation of NTC policy options

Option 1: Continue current approach

The current approach for driver distraction legislation generally suits the Australian market for C-ITS systems. But, inconsistencies need to be removed.

Option 2: Amend current road rules

Amending current rules to acknowledge changing uses for smart mobile phones as 'visual display units' is important as legislation should reflect the multiple uses for smart phones as C-ITS devices. Updating the Australian design rules should happen to allow the market to evolve, they should not constrain innovation, where it produces safety benefits.

Option 3: Create guidelines or principles for manufacturers

Working with manufactures and aftermarket producers of C-ITS equipment would be important for legislators to assist the producers understanding of the law. Replicating guidelines from the US and Europe would be wise given most trucks in Australia are of American or European design.

Option 4: Examine technology options as they develop

Solutions that discourage driver distraction should be encouraged by design rules. Making sure the legislation does not limit positive innovation is important.

Options 2, 3 and 4 are worth pursuing, as they would not constrain manufactures innovation in C-ITS devices and would follow international guidelines which are likely to match ADRs.

NTC questions for consideration and ATA responses

- 1) To what extent should regulatory tools be used to set uniform standards to minimise the driver distraction risks of C-ITS applications?

A: Regulations need to facilitate and not prevent safe devices. Australia is a taker of technology and not a creator, therefore global standards should be encouraged; as is the case with emission standards.

- 2) Are there any other driver distraction and information display issues relevant to C-ITS that have a potential safety risk, but that have not been identified in this paper?

A: Original equipment manufacturers (OEM) will recognise issues when providing those tools. Making sure that aftermarket products mirror OEM standards is important.

Recommendation 7

Electronic work diaries should be promoted in Australian Design Rules (ADR) as safety and compliance enhancing devices.

Recommendation 8

Distraction laws in jurisdictions should be harmonised to remove regulatory confusion for technology providers and drivers over C-ITS legality.

Recommendation 9

ADR's be guided by international standards for driver distraction laws.

Recommendation 10

CB radios should continue to be exempt from driver distraction laws, given the benefits these communication devices bring.

4.4 Compliance and enforcement

C-ITS systems allow data to be produced that could be valuable for greater compliance in road laws to assist drivers in better behaviour on the roads.

The amount of driver information that could be produced by C-ITS systems has implications for enforcement, potentially increasing back office enforcement. However, industry experience with Intelligent Access Program (IAP) enforcement has shown that drivers with monitoring devices are just as likely to get stopped by road enforcement as those without IAP. Therefore, a total removal of physical road enforcement officers is unlikely and it is plausible that more enforcement staff would need to be employed to deal with high volumes of compliance from data provided from devices. This situation may remain true for many years that road side enforcement is the most effective form of making drivers compliant.

IAP is a program which monitors some heavy vehicles conditional access. Transport certification Australia (TCA) is the public company wholly owned by participating road agencies, which oversees certification of IAP devices. TCA claims that IAP is a voluntary program; however, if operators want to operate to a high level efficiency using high productivity vehicles, they must use IAP for compliance. It is predominantly used in NSW and to a lesser extent QLD.

Due to the safe nature of B-doubles, Australia has embraced the use of these high productivity vehicles over the past 20 years with no requirement for IAP to be fitted, regardless of the level of mass limit being accessed. However, New South Wales currently require IAP to be fitted to prescriptive modular combinations, such as B-doubles operating at HML, without any justifiable reasoning behind this decision being provided to industry.

IAP highlights the issue of jurisdictional differences in treatment of what requires monitoring. Other states do not impose IAP because of national policies on higher mass limits for vehicles fitted with road friendly suspension (RFS). Inconsistencies in national applicability of C-ITS units cause unnecessary burdens on drivers.

IAP should be applied to high risk situations that need to be monitored like ultra heavy cranes, applying it to combinations that pose no great risk limits original benefits IAP aimed for.

In NSW, operators seeking to access HML had to pre-enrol, during a transition period, over 3,000 vehicles became pre-enrolled. Recent comments made by New South Wales and Queensland government agency staff indicate only 750 vehicles are using IAP, a significant shortfall in the numbers expected to take up the technology. This illustrates that if C-ITS systems are used as purely enforcement tools and if benefits are limited, uptake will be inadequate.

This lack of motivation to allow monitoring for enforcement is highlighted in the NTC issues paper by the US Privacy Policy Framework comments on the intrusion of enforcement devices and the realisation that if people are not happy having movements monitored they are unlikely to take up offers of monitoring devices. The fact that these devices are supposed to increase safety outcomes is overtaken by fears that these devices will be used for invasive enforcement. Allowing devices to aid compliance is clearly a positive outcome.

Information captured by the IAP devices is also susceptible to inconsistencies; uncertainties arise surrounding the legitimacy and value of the information being captured. Operators who have fitted IAP in the expectations of commercial gain have reported receiving upwards of 1,500 non-conformance reports per vehicle per month, but that no non-conformance existed, so the reports were incorrect. If devices are used for enforcement minimising irregular readings is important to making the system successful.

The NTC issues paper also recognises that it will be a long time before all cars will have C-ITS systems in them. The timeframe for heavy vehicles to have C-ITS systems would be longer as truck age is roughly 13 years¹, it would be likely to take at least a few decades before all trucks have advanced CITS systems and even longer for trailers having EBS or ABS features. The effects of this on compliance should be thought about.

The level of individual identifier information used in a C-ITS system to identify drivers is also key; if signals cannot be made anonymous there is a genuine concern that these vehicles will have greater enforcement focus as they are an easy target.

There has to be a limit on the use of data that is produced from safety systems to not penalise those who want to take up the technology. The use of data to convict drivers in crashes is an issue as the paper recognises. The possibility of past data being used to show a driver has been a recklessly driving in the past, is a fear that has to be explicitly legislated to make sure that all those in a C-ITS system understand the use of their data, capture, storage and the length of time the data is kept.

Classification and monitoring laws in Australia on surveillance devices differ from state to state. If there was a proposal for a national-wide roll out of a C-ITS system, this cannot happen without harmonisation of surveillance laws. The laws that are applied are still not transparent, as consent has to be given to be tracked in some states, how this consent is given or actual consent is obtained is not clearly stated.

The strong prominence on enforcement through CITS devices is a disincentive for the uptake of safety promoting devices. Limits do need to be put on the use of personal information created from CITS devices for enforcement purposes.

Safety advantages need to be the overriding motivation for the use of C-ITS. In aviation legal restrictions² are in place on the use of voice/image information captured from black box devices in an aircraft cockpit for anything other than no-blame safety investigations. If there is an incident data cannot be used for prosecution merely to examine what went wrong. This no-blame approach used in aviation sets a precedent for a system of monitoring that is internationally recognised, has high uptake and has superior safety outcomes. The NTC should use aviation as a model of how to balance safety over enforcement.

¹ TIC: overview: national Truck Plan 2011-2020 ABS Motor Vehicle Census data for 2010 and 2011

² Transport Safety Investigation Act 2003 Part 6

Evaluation of NTC policy options

Option 1: Continue current approach

Jurisdictional differences in compliance and enforcement treatment of C-ITS systems cannot continue to be supported by the NTC. Harmonisation of the treatment of C-ITS information should be pursued. IAP is an example of how jurisdictional differences have resulted in a perverse outcome with a C-ITS system that could have potentially thousands of users having around 500. The National Heavy vehicle regulators and industry's ambitions for national consistency should be supported in the area of C-ITS applications.

Option 2: Specific protection of data from C-ITS applications

In order for increased uptake of C-ITS systems, there should be clear limits placed on how data can be used for enforcement purposes. Only in serious criminal cases should C-ITS information be used, and not without judicial consent.

Option 3: Provide guidance on appropriate use of data

While providing guidance on use of data, this does not offer real protection for those providing C-ITS data. Stronger legislation is needed to protect data from misuse and non endorsed enforcement purposes.

Option 4: Amendment to Surveillance Device legislation

Making sure that those under C-ITS systems are fully aware of surveillance acts applicable to their state is important, amending laws to fit C-ITS systems into this with users consent is a good idea.

While C-ITS applications could provide data useful for enforcement, protecting the data produced by C-ITS users is key to acceptance of C-ITS systems in society. Option 2 should be practiced with clear consent from C-ITS users.

NTC questions for consideration and ATA responses

- 1) Is there a need for clarification over how data from C-ITS systems (both from in-vehicle units and roadside units) will be used and for what purposes?

A: Making sure that those with C-ITS systems can clearly understand what data collected is used for is very important for uptake of C-ITS systems.

- 2) Do limits need to be placed on the use of data from C-ITS systems?

A: Making sure that data is not used for unspecified reasons needs to be legislated for. Any change to the use of data has to be evaluated by users of C-ITS systems.

- 3) If so what limits are appropriate? For what purposes should C-ITS data be available to be used? Should there be limits on how long data can be kept?

A: The paramount use for C-ITS systems is for safety, driver's aid, enforcement and other uses should not be the main priority of C-ITS systems. Any changes in data use should be transparent to C-ITS system users. Limits should be placed on the lifetime of data; however without legal advice no definitive answer can be given.

- 4) Should government, including policies and road agencies, have restrictions placed on the access and use of C-ITS personal information for law enforcements purposes? If so, how, if at all, should these restrictions vary between general law enforcement activities and the investigation of a criminal act?

A: In cases of serious crime, accessing data that would help complement a legal case could be used, only in serious crimes, not general crimes. Also a court order should be required to obtain and use C-ITS data in such cases.

Recommendation 11

Enforcement desires of road agencies should not discourage uptake of C-ITS systems, given the social benefits C-ITS provides.

Recommendation 12

Explicit limits should be put on the use of personal data produced from C-ITS systems.

Recommendation 13

Surveillance laws be harmonised in order to remove ambiguity in C-ITS application.

4.5 Incentives for uptake

For drivers and operators the safety benefits C-ITS systems can provide is balanced against privacy concerns and potential enforcement.

Social benefits are created for drivers having C-ITS systems in their vehicles. Rewards being given for those who want to mitigate risky driving would increase the palatability of these devices, specifically if they would be used for compliance and enforcement. However, the heavy vehicle industry's experience with moving toward C-ITS systems have been a limited response by government, productivity benefits promised by HML have not materialised, due to the application of IAP. The ATA awaits the NTC 'strategy for heavy vehicle compliance' document and hopes that it recognises that incentives for compliance on a number of levels have not emerged.

The potential social benefits, of increased C-ITS systems are recognised, but a market failure exists, due to poor experiences with government intervention on IAP. Voluntary C-ITS systems with open standards need to correct this.

Changing the regulatory approach to facilitate and enable C-ITS systems could provide greater uptake of C-ITS and productivity and safety outcomes these applications provide. Self-regulation of C-ITS systems if endorsed would fit easily into the telematic programs industry currently uses. Different fleet management systems are used by industry, all roughly providing the same core data to operators, but also providing operators specific benefits in some cases. The ATA supports the NTC desire for self-regulation in the introductory phase of technology, however open standards of technology based on performance should be recommended.

The closed standards for telematics compliance in the heavy vehicle industry due to monopoly control over standards applicable for monitoring have limited progress in telematics in the heavy vehicle industry. This has meant that instead of having open standards for devices that meet certain performance criteria, operators who want to use telematics have to apply for TCA approval of electronic monitoring (at high cost).

Allowing these devices to be used in operator safety systems such as TruckSafe and NHVAS should be facilitated by the NTC and the government. However, promoting operators based on a rating system on C-ITS uptake may disadvantage smaller operators who do not need to heavily monitor movements.

Having open standards for telematics is vital if there is to be an uptake of CITS systems in the heavy vehicle industry, and automotive vehicles in general. It is important that guides are created in order to provide practical guidance to industry whilst maintaining flexibility on devices.

The cost of telematics devices should also be considered for incentives for uptake. The NTC paper notes that in the US when drivers were asked the maximum amount they were willing to pay for C-ITS systems, \$US250 was stated³.

Recommendation 14

Incentives should be provided to drivers who install C-ITS systems in their vehicles.

³ Page 13 Cooperative ITS Regulatory Policy Issues NTC

Recommendation 15

C-ITS systems should be voluntary and have open standards in order to increase uptake of C-ITS systems.

5. Conclusion

As noted in this submission, while there are safety benefits to be made from increasing C-ITS systems use in trucks, the focus on enforcement and poor benefits from C-ITS programs overseen by the government have limited benefits for industry, such that take up is minimal.

The industry would prefer to use its own fleet management systems that allow information to be disseminated to road agencies to assist with planning activities. The current C-ITS standards are controlled by TCA which has closed standards. Open standards that facilitate and support the use of C-ITS systems for safety purposes, business benefits and planning purposes are more likely to produce positive results for the community, operators and drivers alike.