

Submission to: NSW Minister for Roads and Ports

Title: The Intelligent Access Program and Prescriptive Modular Combinations

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The Intelligent Access Program and Prescriptive Modular Combinations

Executive Summary

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

The Intelligent Access Program (IAP) was originally designed as a way for governments to remotely manage the potential risk of sensitive infrastructure being exposed to very heavy vehicles, plant, and equipment that could damage the infrastructure due to unusual unit mass and mass distribution. It was also developed for use in Supervisory Intervention Orders (SIO) for systematic or persistent offences in the mass, dimension and load restraint area.

The previous NSW government implemented IAP in an ad hoc, disjointed manner. In NSW, the safer B-triple and AB-triple combinations, which provide alternatives to traditional road trains, are subject to additional access hurdles. Specifically, IAP monitoring and individual permit applications, whereas road trains operate without monitoring and on any road in a prescribed area of NSW. Hence, the better, safer combination is disadvantaged, denying NSW productivity, environmental and more importantly safety gains.

In 1999 it was nationally agreed that where road friendly suspension was fitted additional mass could be carried with no additional pavement impact. With regard to bridges, the National Road Transport Commission's *Increased Mass Limits: Compliance and Enforcement Issues* discussion paper, dated December 1997, the NSW RTA summarised its comments on the effects of gross overloading on bridges as follows:

Concerns about gross overloading are usually related to serviceability issues, such as cracking and local damage, and increased rates of deterioration, rather than catastrophic failure.

Austrroads report AP-R239 *Heavy vehicle compliance with speed and mass limits: Evidence from weigh-in-motion devices 2003* in the section regarding compliance with speed and mass limits notes the following:

Koniditsiotis (1997) concluded that ... On average 0.16 percent of vehicles in class 8 and above were overloaded by 30% or more.

Since this time, compliance and enforcement enhancements have markedly reduced overloading even further. It is safe to assume that gross overloading is a very rare event, and HMLs effect on bridges is negligible.

Further, the RTA position is at odds to latest national policies. The NTC has recently released the *National in-vehicle telematics strategy: the road freight sector July 2011* which was approved by ATC ministers in May 2011. The objective of the strategy is to:

Increase the potential for in-vehicle telematics to deliver new or greater benefits (better safety, productivity and environmental outcomes) to users and the community through a partnership between industry and government.

The new strategy post-dates the previous NSW government's decision to implement IAP, allowing the current NSW government to take steps to apply the new strategy in their policies.

The ATA recommends the new NSW government:

- 1. removes IAP from prescriptive modular combinations;**
- 2. removes IAP from vehicles accessing HML;**
- 3. encourages the use of prescriptive modular combinations for productivity, safety and environmental gains by opening the road train network to these vehicles without the requirement to fit IAP; and**
- 4. reduces the administrative burden on the industry by removing the requirement for IAP on low risk vehicles.**

The recent positive announcement by Minister Gay regarding higher mass limit roads and making the relevant HML maps accessible without condition is a step in the right direction. Following through on that common sense decision with further improvements by sensible access arrangements without IAP will garner solid support from the transport industry, which will provide ongoing benefits for NSW.

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1. Introduction

The Intelligent Access Program (IAP) was implemented by the previous NSW Labor Government as a way to monitor trucks on our roads. The ATA has long argued that the policy behind this decision was poorly formed and not consistent with other road agency decisions, particular when NSW determined IAP was required for vehicles with low risk to infrastructure.

This document identifies the types of combinations commonly seen on NSW roads, the impact created on roads from these combinations, and some of the benefits provided to the community from utilising prescriptive modular combinations. It will also show that IAP has been unfairly applied to operators who want to access better efficiencies for their business, and IAP is not the automatic enforcement tool the RTA hoped it would be. In fact, no infringements are issued from IAP non-conformances, so it is not even a strong or worthwhile enforcement tool.

It is anticipated that, after reviewing the information surrounding IAP, a sound policy will be realised that provides for the productivity, safety and environmental benefits available to operators in other jurisdictions, without the negative impact of IAP.

2. Original objectives of IAP

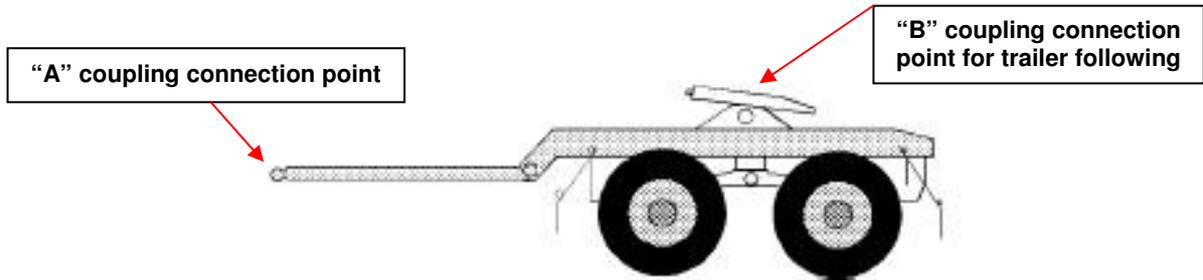
IAP was designed as a way for governments to remotely manage the potential risk of sensitive infrastructure being exposed to very heavy vehicles, plant, and equipment that could damage the infrastructure due to the unusual unit mass and mass distribution. For example, ultra heavy oversize cranes (UHO) that tare at 200 tonne are a major risk to infrastructure compared to standard vehicles such as B-doubles. The UHO is almost 5 times heavier than general mass limits for other similar length vehicles, and mass is strongly concentrated over relatively few axles. The consequence is that some infrastructure could be severely damaged in one pass of this vehicle, for example drain covers, bike paths, and low strength pavements in shared zones.

Other infrastructure may require administrative controls in place to minimise the risk, for example a bridge where the UHO must travel at low speed, and directly over the main beams in the centre span. Exposure to other vehicles could be managed by placing time-of-day restrictions on the UHO, so it is not travelling during heavy commute periods, thus reducing the risk of severe traffic delays due to its lower travel speed. In this example, IAP would work well to monitor compliance and assist government in managing the risk to infrastructure, and free the operator from costly direct supervision. But, IAP is now applied in NSW (and Qld to a lesser extent) to prescriptive modular combinations.

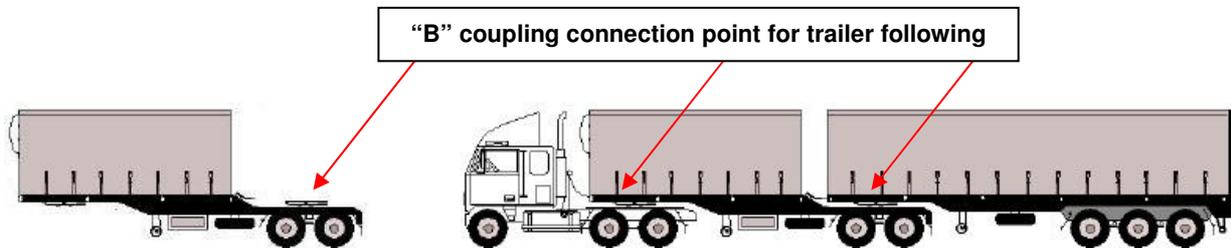
3. What are prescriptive modular combinations?

In prescriptive modular combinations, trailers are connected to a prime mover. Trailers used in a prescriptive modular combination are of a standard length and are easily moved between different combinations or used on their own. The prime mover has a fifth wheel attachment (which is a female attachment point), and the first trailer connects to the prime mover by a kingpin (being a male attachment point). Trailers attached to the first trailer can be connected in two ways, either by an "A" coupling, or a "B" coupling.

An “A” coupling is a joining of the second trailer behind the axles of the first trailer, whereas a “B” coupling places the connection point of the second trailer above the axles of the first trailer, which provides enhanced roll stability through the combination and damping of trailer swing.



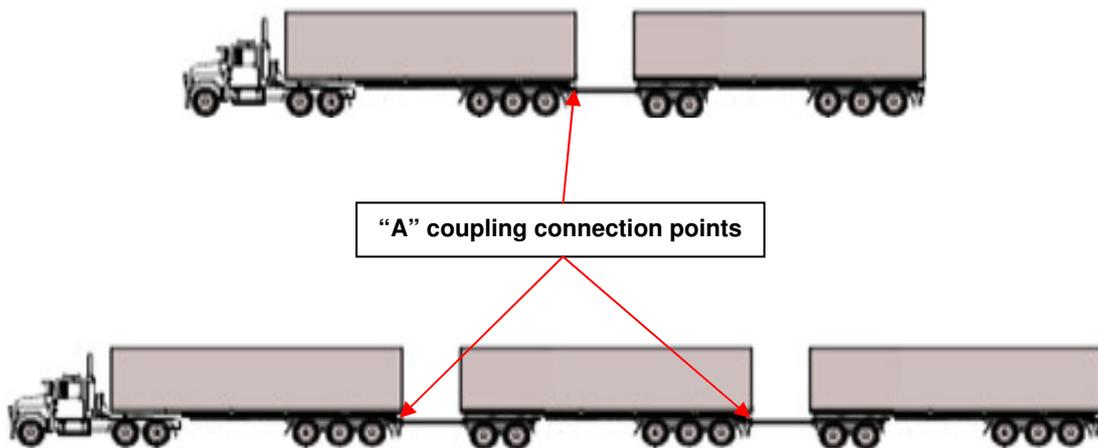
A converter dolly with “A” coupling. **Note** that while the “A” coupling provides a “B” coupling connection point for the trailer following, the name of the coupling is derived from the first point of articulation.



A semi-trailer with “B” coupling. Note that there may be multiple “B” coupling connection points along the combination.

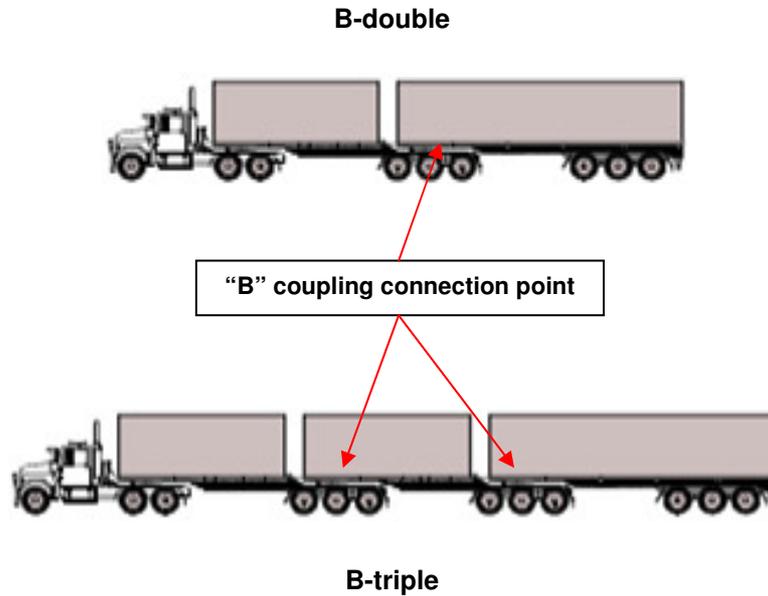
These types of couplings can be mixed and matched between various combinations as explained below. A vehicle combination comprising a prime mover towing two or more semi-trailers can be joined by what is known as a converter dolly, pictured above. The dolly provides an “A” coupling to attach other trailers, as can be seen on the examples below. Combinations utilising only an “A” coupling, can be referred to as an A-double or A-triple. These are more commonly referred to as Type 1 and Type 2 road trains, and are the original prescriptive modular combinations.

Type 1 Road Train



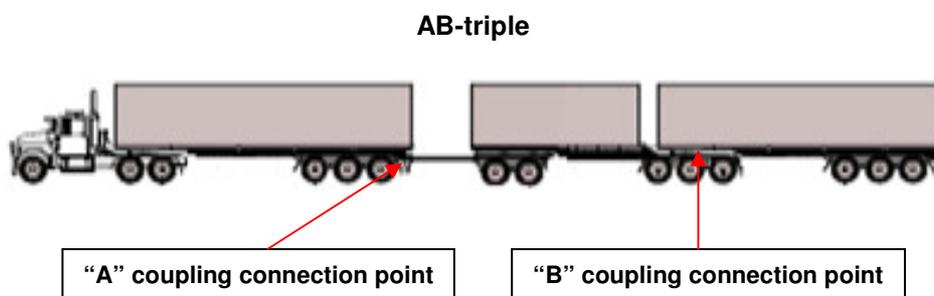
Type 2 Road Train

Prescriptive modular combinations using “B” couplings have been proven to be safer than traditional combinations using “A” couplings, due to the enhanced roll stability and reduced trailer swing of the combination. Vehicles comprising a prime mover towing one or two short semi-trailers (known as A-trailers) followed by a standard sized semi-trailer and joined by a fifth wheel coupling are referred to as a B-double, or a B-triple, depending on the configuration. Examples are shown below.

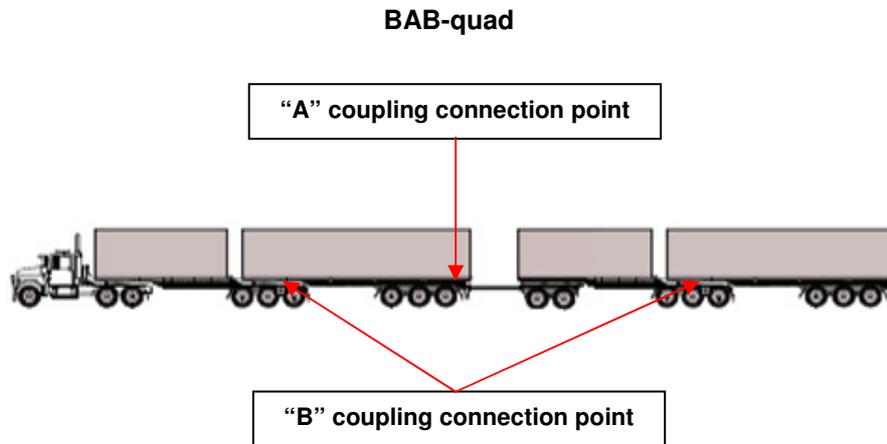


The standard sized semi-trailer is known in this instance as a B-trailer, and it can be disconnected from the A-trailer/s and connected to a prime mover in its own right to form a normal semi-trailer combination.

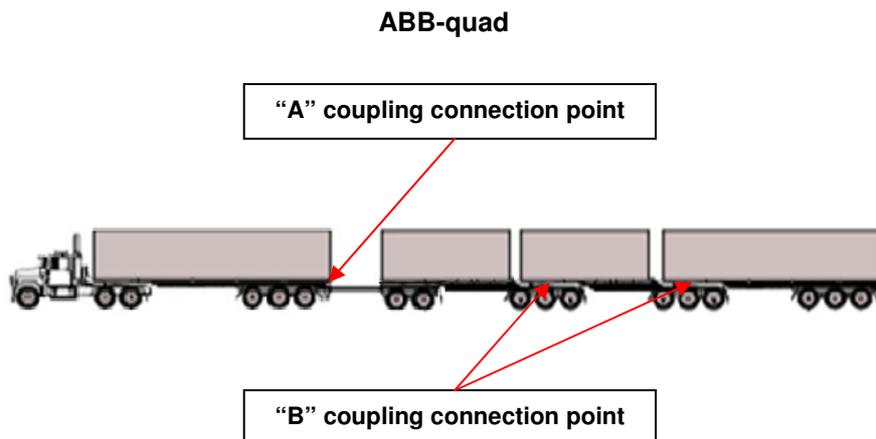
Other examples use a combination of both the “A” coupling and “B” coupling, creating prescriptive modular combinations that are more productive again. An AB-triple combination is a semi-trailer attached by a converter dolly (the “A” coupling) to a B-double set of trailers (“B” coupling), giving the prime mover three trailers; hence the name AB-triple. Combinations incorporating one or more “B” couplings with an “A” coupling have enhanced roll stability and reduced trailer swing because of the “B” coupling between the second and third trailers, or second, third and fourth trailers as can be seen below.



A BAB-quad combination is a B-double combination (“B” coupling) attached by a converter dolly (“A” coupling) to another B-double (“B” coupling) set of trailers, giving the prime mover four trailers; hence the name BAB-quad.



Another combination that utilises both “A” and “B” couplings and provides high productivity gains is the ABB-quad. An ABB-quad combination is a semi-trailer attached by a converter dolly (“A” coupling) to a B-triple (using two “B” coupling points), giving the prime mover four trailers; hence the name ABB-quad.



Prescriptive modular combinations use standard units at standard group loads and meet the bridge formula used by jurisdictions. Vehicles using the “B” coupling connection in their vehicle configurations are inherently safer than those using only “A” couplings.

4. Mass limits and road impact of prescriptive modular combinations

There are three relevant levels of mass limit available to prescriptive modular combinations in Australia:

Name	Abbreviation	Relevant suspension
General Mass Limit	GML	Steel springs or road friendly suspensions
Concessional Mass Limit	CML	Steel springs or road friendly suspension
Higher Mass Limits	HML	Road friendly suspension

To enable access to HML, vehicles must have road friendly suspension (RFS) and must be accredited to the National Heavy Vehicle Accreditation Scheme (NHVAS), which is a set of standards an operator is required to comply with. Vehicles with RFS can automatically access CML, however vehicles with steel sprung suspension must be accredited to the NHVAS to access CML. No accreditation is required for vehicles to access GML.

RFS is a newer technology than steel sprung suspension, and is most commonly an air bag suspension system. When fitted to a vehicle's axle groups, RFS provides less impact to roads than axle groups fitted with steel sprung suspension. Consequently, vehicles fitted with RFS are eligible to access higher mass limits, whereas vehicles fitted with steel sprung suspension are not.

In the table following, you can see that vehicles are identified as GML or HML. The two smaller rigid trucks have been provided as an example and operate at GML. Referring to the ESA column, you will notice that where a combination has a GML and an HML (RFS) reference, the ESA is the same. This is because the table assumes the combinations operating at GML have steel suspension. In fact, if the combinations operating at GML had RFS, the impact would be less.

It must be remembered that damage to roads is caused by axle weights, not by a vehicle's gross mass. Axle weights and impact are measured by equivalent standard axles, or ESAs. These are a comparative measure of road impact and the passage of a standard axle across that road. It is a complex calculation, however it is commonly used by road designers and bridge engineers to determine the damage certain types of vehicles can cause. The vehicles listed in the table following have had the ESAs calculated in the three columns on the right. The percentages in the headings of the columns refer to the amount of load a vehicle has.

Vehicle Type	GCM (tonnes)	Payload (tonnes)	Load Status		
			0%	50%	100%
Calculated ESA's 4 th Power					
Two Axle Rigid GML	15.0	7.00	0.42	1.18	3.00
Three Axle Rigid GML	22.5	13.12	0.51	1.27	3.58
Six Axle Artic GML	42.5	24.13	1.14	2.03	4.96
Six Axle Artic HML ^(RFS)	45.5	27.13	1.14	2.03	4.96
B-double GML	62.5	38.93	1.15	2.24	6.34
B-double HML ^(RFS)	68.0	44.43	1.15	2.24	6.34
B-triple GML	82.5	52.44	1.16	2.51	7.72
B-triple HML ^(RFS)	90.5	60.44	1.16	2.51	7.72
Type 1 R/train GML	79.0	47.77	1.20	2.77	8.41
Type 1 R/train HML ^(RFS)	85.0	53.77	1.20	2.77	8.41
AB-triple GML	99.0	64.20	1.18	2.90	9.78
AB-triple HML ^(RFS)	107.5	72.70	1.18	2.90	9.78
BAB-quad GML	119.0	77.37	1.21	3.20	11.16
BAB-quad HML ^(RFS)	130.0	88.37	1.21	3.20	11.16
Type 2 R/train GML	115.5	71.41	1.26	3.51	11.85
Type 2 R/train HML ^(RFS)	124.5	80.41	1.26	3.51	11.85

It is clear from the table that vehicles accessing HML (with RFS) have the same impact as vehicles operating at GML, where it is assumed that steel sprung suspension is being used.

5. Prescriptive modular combinations and IAP

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, NSW 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.

It is only the NSW and Qld road agencies that consider prescriptive modular combinations to be so risky as to warrant being subjected to ongoing monitoring. In other states, operators do not require IAP to be fitted to prescriptive modular combinations, and these vehicles operate freely on approved routes. Obviously, there are routes within these states that these vehicles are limited to, just as road trains and indeed all kinds of heavy vehicles are limited (for example in urban areas, or roads with bridges not capable of taking a particular mass). Nevertheless, IAP is not required to be fitted to these combinations in any of these states. These states wish to encourage the adoption of better, safer combinations, and do not impose unnecessary hurdles to their use. In fact, in some cases, B-triples and AB-triples are given enhanced access over traditional road trains.

Modular vehicles not required to have IAP	Modular vehicles required to have IAP
"B" coupled vehicles at GML and CML, and HML in NT, SA, Tas, Vic, WA, ACT	B-doubles accessing HML in NSW and QLD
Tri-axle semi-trailer combinations at GML, CML, and HML in NT, SA, Tas, Vic, WA, ACT	Tri-axle semi-trailer combinations accessing HML in NSW and QLD
Type 1 and Type 2 Road trains, B-triples, AB-triples, ABB and BAB Quads, in Qld, NT, SA, Tas, Vic, WA (where these combinations are applicable)	B-triples and AB-triples in NSW

Vehicles in the first column are at no more risk of travelling off-route as vehicles in the second column, however, the vehicles in the second column are determined by NSW (and Qld to a lesser extent) as being of severe risk of route departure that IAP must be fitted.

There is no legitimate analysis for this judgment. B-triples and AB-triples are simply safer, modern alternatives to traditional road trains. Combinations at HML carry some additional mass for no additional road wear due to RFS, which is a vehicle requirement to enable HML to be accessed. Bridge effects for HML are the same as bridge effects for GML, and otherwise well managed and maintained bridges have no issue.

6. Is there a risk?

It must be made very clear that the ATA supports in-vehicle telematics, which can provide major business benefits. IAP, when fitted to vehicles that are high impact and high risk (such as large, very heavy cranes) provides regulators with some administrative assurance that route compliance is being adhered to in high risk situations that would otherwise require onsite supervision to move.

Protecting bridges and other sensitive infrastructure is important; it is equally important to identify equipment that creates a significant risk. Certain types of cranes (such as the Demag 250 and the Liebherr 200) do not meet the relevant bridge formula, and are therefore a potential significant risk to bridges. As an example, using the Axle Spacing Mass Schedule calculations, the Liebherr 200 with five axles and weighing around 60 tonnes and axle spacing of 8.44m subsequently breaches the Schedule by almost 60%. It should be noted that by comparison, prescriptive modular combinations comply with the Schedule, and are therefore not a risk to bridge infrastructure.

The issues arise when jurisdictions claim prescriptive modular combinations are such a high risk to infrastructure that continual monitoring is required. The Truck Impact Chart clearly demonstrates the ESAs for each vehicle combination, being the measure by which impact of a truck on the road is measured.

In the table following, we have sorted the data based on ESAs per 1,000 tonnes, being the least amount of impact through to the most amount of impact to roads. Logically, if IAP is being used as a risk management tool, those vehicles with the most impact would be required to fit IAP, however this is not the case. It is clear from the chart that the unintended outcome of the policy is to penalise efficient vehicles.

Increasing risk to infrastructure

Vehicle Type	GCM (tonnes)	Payload (tonnes)	No Trips per 1000 tonnes	ESA's per 1000 tonnes	IAP required?
BAB-quad HML ^(RFS)	130.0	88.37	12	149	YES
B-triple HML ^(RFS)	90.5	60.44	17	152	YES
AB-triple HML ^(RFS)	107.5	72.70	14	154	YES
BAB-quad GML	119.0	77.37	13	161	NO
Type 2 R/train HML ^(RFS)	124.5	80.41	13	171	YES
B-double HML ^(RFS)	68.0	44.43	23	173	YES
AB-triple GML	99.0	64.20	16	176	YES
B-triple GML	82.5	52.44	20	178	YES
Type 1 R/train HML ^(RFS)	85.0	53.77	19	183	YES
B-double GML	62.5	38.93	26	195	NO
Type 2 R/train GML	115.5	71.41	15	197	NO
Type 1 R/train GML	79.0	47.77	21	202	NO
Six Axle Artic HML ^(RFS)	45.5	27.13	37	226	YES
Six Axle Artic GML	42.5	24.13	42	257	NO
Three Axle Rigid GML	22.5	13.12	77	316	NO
Two Axle Rigid GML	15.0	7.00	143	490	NO

While it is true that road trains are restricted to where they can travel, as can be seen by the numerous road train routes around Australia, it should be remembered there is no “fence” keeping drivers of road trains on these particular routes. Agencies rely purely on their enforcement personnel to manage this compliance. NSW have come to a conclusion that IAP must be fitted to modern prescriptive modular vehicles. Remember, as demonstrated above, these are vehicles do less damage to roads, are safer, and more productive. Where is the risk?

7. Costs and accuracy of IAP

When NSW first advised the industry that it would be moving to implement IAP for HML, operators were required to pre-enrol in the IAP, thus allowing them to access HML until the full implementation of IAP took place. During that period, over 3,000 vehicles became pre-enrolled. Recent comments made by NSW and QLD agency staff indicate only some 500 vehicles are using IAP, a significant shortfall in the numbers expected to take up the technology.

Agency monitoring costs are high. Assuming 3 agency staff within a jurisdiction to monitor these 500 vehicles, with a salary cost to approximately \$70,000 per annum, the cost is \$210,000 per annum to monitor 500 vehicles. Operators are required to spend up to \$1700 per unit to install IAP, with ongoing monthly costs of \$174, and an annual hardware inspection fee of \$250. A properly conducted cost benefit analysis would identify that the costs to both government and operator far outweigh any supposed benefit. At this stage, the ATA is unaware of any cost benefit analysis being conducted by the previous NSW government.

In the NTC’s report *Modular road freight vehicles: A national framework for B-triple operations* Craig Day from Days Transport, Narrandera is quoted as follows:

B-triples would allow me to haul more freight while using less fuel, less labour, less emissions; they’re a more productive vehicle, and they’re a safer vehicle too, meaning less damage to the freight, and it gives me peace of mind for my drivers.

Mr Day would happily utilise B-triples if IAP was not a requirement; however, the cost to administer the system is simply prohibitive for most operators.

The accuracy of the information provided by the IAP must also be questioned when, in Appendix A - Non-RIS Items, Part 7 Intelligent Access Program, item 10, referring to Model Clauses 17(1), 32(1) and 41(1) of the draft Heavy Vehicle National Law (HVNL) it states:

<p><u>Ensure information is accurate, up-to-date and complete</u> The model law provides that a service provider, TCA and IAP auditors must take reasonable steps to ensure IAP information is accurate, up-to-date and complete.</p> <p>One jurisdiction has also required that the information not be misleading.</p>	<p>It should be noted that, as IAP information is generally automatically generated, requiring it not to be misleading imposes an obligation that may not be possible to satisfy.</p>
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As the information captured by the IAP may be misleading, uncertainties arise surrounding the legitimacy and value of the information being captured. Operators who have fitted IAP for 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. Some of these may be explained where a driver took the vehicle into a parking bay or service centre, which is not recognised as an approved route by the IAP (even though such actions are compliant), and therefore the device returns a non-conformance report. This negates any perceived commercial gain due to the sizeable administrative task required to respond to the non-conformance reports.

8. Non-direct costs of IAP

Another area that the previous NSW government appear to have missed is the significant economic losses and loss of safety benefits. Looking at an example of vehicles in the Truck Impact Chart, and considering fuel use and emissions, it is obvious that prescriptive modular combinations have a significant environmental advantage.

Comparing the same combination, it is clear that a B-double at HML uses 2,340 litres less fuel than a B-double at GML, and takes 3 trips less to move the same amount of freight.

It should also be noted that a B-triple at GML uses 12,280 litres less fuel than a semi-trailer combination, and takes 22 less trips to move the same amount of freight. That’s 22 less semi-trailers on the road, which over a 12 month period drastically reduces the risk and likelihood of a road accident.

Vehicle	No trips per 1,000 tonnes	Litres of Fuel used per 1,000 tonnes lead*	Emissions
Six Axle Artic GML	42	39,480	92%
Six Axle Artic HML ^(RFS)	37	37,000	86%
B-double GML	26	32,240	75%
B-double HML ^(RFS)	23	29,900	69%
B-triple GML	20	27,200	63%
B-triple HML ^(RFS)	17	24,480	57%
Type 1 R/train - GML	21	28,560	66%
Type 1 R/train - HML ^(RFS)	19	27,360	63%
AB-triple GML	16	24,000	56%
AB-triple - HML ^(RFS)	14	22,120	51%
BAB Quad - GML	13	21,060	49%
BAB Quad - HML ^(RFS)	12	20,400	47%
Type 2 R/train - GML	15	24,000	56%
Type 2 R/train - HML ^(RFS)	13	21,580	50%

* Note: Fuel used per 1,000 tonnes lead assumes a 1,000km trip laden, then returning the 1,000km unladen

9. IAP vs Self Compliance

It should be noted there are significant shortcomings in IAP as a risk management tool. Firstly, it relies on self declaration, being the honesty of the driver. If a driver wishes to declare the vehicle wasn't loaded to HML, or wasn't combined with the trailers making it a B-triple, how would anyone know whether it was or wasn't? If self declaration is deemed a suitable control method, then self compliance should also be deemed a suitable control method. This means, where agencies are happy to trust road train operators in complying with route requirements, the same trust must be given to operators of modern prescriptive modular combinations.

Secondly, using a purely administrative tool to manage risks is unacceptable. In OHS, using an administrative control is not considered acceptable to reduce the level of risk to a manageable level. Agencies should be ensuring that damage to infrastructure is minimised by properly maintaining it or using a device which creates little to no impost on operators.

10. Legal Situation

There is often discussion regarding the evidentiary nature of data. Companies who currently utilise their own in-vehicle telematics are already recording valid route and travel information, and despite the devices not being approved by Transport Certification Australia (TCA), the information is used as evidence. This is the effect of the NTC's Compliance & Enforcement laws adopted by NSW. The ATA's legal advice previously provided to the NTC clearly advises this. IAP data, operator and chain party data are all evidence, and available to enforcement staff as per the allowances in the Model Compliance & Enforcement Bill and relevant NSW law. IAP certification is not required for an enforcement officer to utilise in-vehicle telematics data collected by an operator from a non-IAP system.

The ATA has previously commissioned legal advice from Lovegrove & Lord (now Lords Lawyers), which was received on 9 November 2009. The advice received from Tony Hulett, Special Counsel is clear that there are fundamental issues surrounding IAP that show it is being inappropriately used. A copy of this advice is attached under Appendix B.

The legal advice received from Mr Hulett identifies that IAP was initially found in the *Road Transport (Compliance and Enforcement) Bill (C&E Bill)* as a potential component of a Supervisory Intervention Order (SIO) for systematic or persistent offences in the mass, dimension and load restraint area.

11. National in-vehicle telematics strategy

The approach by NSW to impose IAP on operators who wish to be more productive conflicts with the *National in-vehicle telematics strategy: The road freight sector July 2011* which was approved by ATC ministers in May 2011. The National Policy Principles are included within this strategy to help better align and guide in-vehicle telematics initiatives driven by government and industry, with a national objective. In fact, the NSW (and to a lesser extent QLD) requirement for vehicles to fit IAP in order to access higher productivity is in conflict with these principles, which can be seen in Principle 5:

*Telematics-based compliance monitoring should be **voluntary** wherever practical.*

The NTC notes in its draft regulatory impact statement *Modular road freight vehicles: A national framework for B-triple operations* under footnote 9 that:

The word 'voluntary' should not be understood to mean that participation in the IAP is voluntary; rather, it is voluntary to participate in the particular transport operations that require IAP participation in some jurisdictions. In other words, it is the operator's choice whether to conduct each type of operation, but if the operator chooses to conduct a particular operation that requires IAP participation then IAP participation is mandatory for that operator.

Therefore, because IAP is not voluntary, the jurisdictions that require IAP are in conflict with the ATC ministers' directive.

Further, while consultation may have taken place regarding the implementation of IAP as a requirement, there has been no consideration given to industry and stakeholder concerns, these concerns have simply been ignored. Since the conception of IAP, the ATA has been committed to voicing its objections to IAP being mandatory for prescriptive modular combinations at general mass, concessional mass and higher mass limits. To date, and despite the validity and extent of information and research provided by the ATA to both state and federal departments, these concerns have not been taken into account in any evaluation involving IAP. As the application of IAP is currently left to the states, the implementation of this program would normally require a regulatory impact statement to be undertaken under the requirements of the NSW Better Regulation Office, providing opportunity for the public and industry to comment on the proposal. The RTA does not appear to have undertaken this important step, and again, this is in itself against the principles of the strategy, in particular Principle 7 which states:

*Mandating in-vehicle telematics applications requires transparent and consistent **evaluation** considering the needs of all relevant stakeholders in accordance with best practice regulatory principles. It should ensure any new technological requirements delivers **demonstrable benefits to individuals and the community**.*

The strategy has a case study on IAP on page 7, where it speaks positively about a joint venture between Linfox Logistics and brewer Lion Nathan. This joint venture has used IAP to gain access to a key 11km stretch of a local road in Brisbane. The vehicles being used are high productivity PBS vehicles. In this example, the ATA supports the use of IAP; the vehicles are not modular combinations, the venture is providing a genuine benefit to the local community through less vehicles being on the road and higher productivity gains, the route is short and captured, and it provides the opportunity to prove a new concept PBS vehicle with unique operating systems.

However, in the same case study, *“Scotts Transport reported that opportunities for Higher Mass Limits and load maximisation have diminished due to ‘changes in state authority standards where benefits were outweighed by compliance costs (Scotts Transport 2009)’*”. It should be noted that the majority of the Scotts Transport fleet are prescriptive modular combinations.

The use of IAP in NSW is inconsistent with the National Strategy and was not supported by proper analysis.

12. Conclusion

The idea that NSW requires prescriptive modular combinations to use IAP when other states have not taken this position defies logic after considering the evidence. IAP is not required on some other prescriptive modular combinations, and is not required on Type 1 and Type 2 road trains operating at GML. There is simply no reasonable way to examine how it has been implemented and why some combinations require IAP and others do not. The policy itself defies logic.

It is difficult to understand how a conclusion can be reached that prescriptive modular combinations are at a high level of risk thus warranting IAP being applied. Prescriptive modular combinations are safer, more productive and more environmentally friendly combinations, with less impact on structures and pavement, compared to a Type 1 or Type 2 road trains.

Fitting IAP to prescriptive modular combinations, such as B-triples or semi-trailer combinations accessing HML, is not appropriate according to the level of risk. Unfortunately, operators are being pushed into a corner where, to ensure they can service their customers and remain competitive with other states, they are being forced to fit IAP to access higher mass limits or more productive vehicles in NSW.

The recent positive announcement by Minister Gay regarding higher mass limit roads and making the relevant HML maps accessible without condition is a step in the right direction. Following through on that common sense decision with further improvements by sensible access arrangements without IAP will garner solid support from the transport industry, which will provide ongoing benefits for NSW.

13. Recommendations

The ATA recommends the new NSW government:

- 1. removes IAP from prescriptive modular combinations;**
- 2. removes IAP from vehicles accessing HML;**
- 3. encourages the use of prescriptive modular combinations for productivity, safety and environmental gains by opening the road train network to these vehicles without the requirement to fit IAP; and**
- 4. reduces the administrative burden on the industry by removing the requirement for IAP on low risk vehicles.**

15. Abbreviations

ATA	Australian Trucking Association
ATC	Australian Transport Council
C&E	Compliance and Enforcement
CML	Concessional Mass Limit
ESA	Equivalent Standard Axle
GML	General Mass Limit
HML	Higher Mass Limit
HVNL	Heavy Vehicle National Law
IAP	Intelligent Access Program

NHVR	National Heavy Vehicle Regulator
NTC	National Transport Commission
OHS	Occupational Health & Safety
PBS	Performance Based Standards
RFS	Road Friendly Suspension
RTA	Roads and Traffic Authority
SIO	Supervisory Intervention Order
TCA	Transport Certification Australia
UHOV	Ultra Heavy Oversized Cranes

16. Prescriptive Modular Vehicles



Semi-trailer



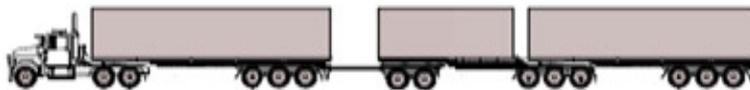
B-double



Type 1 Road Train



B-triple



AB-triple



Type 2 Road Train



BAB-quad



ABB-quad

Appendix A - The ATA and Barkwood Consulting Pty Ltd Truck Impact Chart

The ATA and Barkwood Consulting Pty Ltd have developed a Truck Impact Chart that clearly demonstrates a number of different heavy vehicle combinations and covers GCM, payload, the equivalent standard axles (ESAs) for each vehicle combination, being the measure by which impact of a truck on the road is measured, the amount of trips required to move 1,000 tonnes of freight, the amount of fuel required to move 1,000 tonnes of freight, emissions and driver requirement. The information provided in the tables throughout this document is taken from the Truck Impact Chart.

The Truck Impact Chart has been reviewed RTA’s Senior Pavement Engineer, Ravindra Prathapa. The Truck Impact Chart has also been separately peer reviewed by Bob Pearson, Pearson Transport Resources, and was referred to by TheCIE in the Benefit/Cost Analysis for the National Heavy Vehicle Regulator draft Regulatory Impact Statement, released in February 2011.



Authors: David Coonan - Australian Trucking Association
 Bob Woodward - Barkwood Consulting Pty Ltd.

BARKWOOD CONSULTING Pty Ltd

This document has been prepared to assist operators and road asset managers in assessing the merits of utilising larger vehicle combinations in a transport task.

The assessment process assumes that the vehicle is dedicated to a specific task, operating travel being 50% unladen and 50% laden. The task relativities are 1000 tonnes with a lead of 1000 kilometres.

Equivalent Standard Axles:	ESA’s are calculated by the average of the sum of ESA’s for zero load (empty) plus ESA’s for 100% load and multiplied by the number of trips as required for the transport task.
Vehicle tare weights:	Are predictions based on the averages for a range of equipment within each combination category. These estimates have been reviewed by a number of operators and confirmed as being representative of “real” vehicles of the category.
Fuel consumption estimates:	Are predictions based on accumulated averages where operation is nominally 50% unladen and 50% laden. Actual consumption will vary with operating conditions.
Emissions:	Reference is based on total fuel consumption only.
20 metre 7 axle Truck & Dog:	The maximum allowable mass limits for this combination at either CML or HML (for standard combination) is 55.5 tonnes.
19 metre 7 Axle B-double:	The maximum allowable mass limits for this combination at either CML or HML (for standard combination) is 55.5 tonnes.
B-triple:	Consists of a complying B-double with an additional complying leading trailer.
Converter Dolly:	All combinations utilizing a converter dolly are configured with a tandem axle. The configured vertical imposed loading of a 6x4 prime mover is similar to the allowable imposed vertical loading of a tandem axle converter dolly.
AB-triple:	Consists of a complying B-double with an additional complying road train leading trailer and a complying converter dolly.
BAB-Quad:	Consists of a complying B-double with an additional complying converter dolly and additional complying set of B-double trailers.

AUSTRALIAN TRUCKING ASSOCIATION Truck Impact Chart June 2010

	GCM	Payload	Load Status			No Trips per 1000 tonnes	ESA's per 1000 tonnes	Nom Fuel / 100k	Fuel Required per 1000k	Driver Requirement	Overall Length (metres)	Low Speed Swept Path (metres)	Referenced Static Roll Stability	High Speed Dynamic Tracking	Emissions / 1000 tonnes		
			Calculated ESA's 4 th Power														
			0%	50%	100%												
	Two Axle Rigid GML	15.0	7.00	0.42	1.18	3.00	143	490	23	65780	186%	<12.5 metres			153%		
	Two Axle Rigid Euro4	15.5	7.63	0.43	1.34	3.57	132	529	23	60720	171%	<12.5 metres			141%		
	Three Axle Rigid GML	22.5	13.12	0.51	1.27	3.58	77	316	28	43120	100%	<12.5			100%		
	Three Axle Rigid Euro4	23.0	13.69	0.53	1.46	4.16	74	347	28	41440	96%	<12.5 metres			96%		
	Six Axle Artic GML	42.5	24.13	1.14	2.03	4.96	42	257	47	39480	55%	19.0			92%		
	Six Axle Artic HML (RFS)	45.5	27.13	1.14	2.03	4.96	37	226	50	37000	48%				86%		
	Six Axle Artic CML (Non-RFS)	43.5	25.13	1.14	2.07	5.29	40	258	48	38400	52%				89%		
	Six Axle Artic HML (Non-RFS)	45.5	27.13	1.14	2.18	6.05	37	267	50	37000	48%				86%		
	Truck & Dog (6 Axle - 45T)	45.0	30.09	1.10	1.93	5.74	34	233	49	33320	44%		19.0			77%	
	Truck & Dog (6 Axle - NSW)	48.0	33.09	1.10	2.08	7.13	31	256	49	30380	40%		19.0			70%	
	Truck & Dog (7 Axle)	50.0	34.19	1.10	1.89	5.57	30	201	51	30600	39%	19.0			71%		
	Truck & Dog (20M - PBS)	55.5	38.69	1.10	2.18	7.71	26	230	53	27660	34%	20.0			64%		
	Truck & Dog (20M PBS CML)	57.0	40.19	1.10	2.27	8.50	25	241	55	27600	32%				64%		
	19M B.double GML	55.5	35.66	1.10	2.12	7.71	29	256	53	30740	38%	19.0			71%		
	19M B.double CML & HML	57.0	36.20	1.10	2.20	8.50	28	269	55	30800	36%				71%		
	B.double GML	62.5	38.93	1.15	2.24	6.34	26	195	62	32240	34%	26.0	8.9		75%		
	B.double HML (RFS)	68.0	44.43	1.15	2.24	6.34	23	173	65	29900	30%				69%		
	B.double CML (Non-RFS)	64.5	40.93	1.15	2.34	7.00	25	204	63	31500	32%				73%		
	B.double HML (Non-RFS)	68.0	44.43	1.15	2.50	8.26	23	217	65	29900	30%				69%		
	B-triple GML	82.5	52.44	1.16	2.51	7.72	20	178	68	27200	26%	35.0	10.6	Approximately same as equivalent B-double	63%		
	B-triple HML (RFS)	90.5	60.44	1.18	2.51	7.72	17	152	72	24480	22%					Better than Type 1 R/train	57%
	B-triple CML (Non-RFS)	84.5	54.44	1.16	2.60	8.34	19	181	69	26220	25%						61%
	B-triple HML (Non-RFS)	90.5	60.44	1.16	2.88	10.47	17	198	72	24480	22%						57%
	AB-triple GML	99.0	64.20	1.18	2.90	9.78	16	176	75	24000	21%	42.5	11.2	Better than Type 1 R/train	56%		
	AB-triple HML (RFS)	107.5	72.70	1.18	2.90	9.78	14	154	79	22120	18%					Better than Type 1 R/train	51%
	AB-triple CML (Non-RFS)	101.0	66.20	1.18	3.00	10.47	16	187	76	24320	21%						56%
	AB-triple HML (Non-RFS)	107.5	72.70	1.18	3.30	12.80	14	196	79	22120	18%						51%
	Type 1 R/train - GML	79.0	47.77	1.20	2.77	8.41	21	202	68	28560	27%	36.5	10.3		66%		
	Type 1 R/train - HML (RFS)	85.0	53.77	1.20	2.77	8.41	19	183	72	27360	25%					63%	
	Type 1 R/train - CML (Non-RFS)	81.0	49.77	1.20	2.88	9.12	21	217	69	28980	27%					67%	
	Type 1 R/train - HML (Non-RFS)	85.0	53.77	1.20	3.08	10.59	19	225	72	27360	25%					63%	
	Type 2 R/train - GML	115.5	71.41	1.26	3.51	11.85	15	197	80	24000	19%	53.5	13.7		56%		
	Type 2 R/train - HML (RFS)	124.5	80.41	1.26	3.51	11.85	13	171	83	21580	17%					50%	
	Type 2 R/train - CML (Non-RFS)	117.5	73.39	1.26	3.61	12.55	14	194	81	22680	18%					53%	
	Type 2 R/train - HML (Non-RFS)	124.5	80.41	1.26	3.98	15.12	13	214	83	21580	17%					50%	
	BAB Quad - GML	119.0	77.37	1.21	3.20	11.16	13	161	81	21060	17%	51.5	12.4	Better than Type 2 R/train	49%		
	BAB Quad - HML (RFS)	130.0	88.37	1.21	3.20	11.16	12	149	85	20400	16%					Better than Type 2 R/train	47%
	BAB Quad - CML (Non-RFS)	121.0	79.37	1.21	3.30	11.82	13	170	82	21320	17%						49%
	BAB Quad - HML (Non-RFS)	130.0	88.37	1.21	3.72	15.01	12	195	85	20400	16%						47%

For further information contact ATA on 02 6253 6900

* The data in this table is provided for general information and does not take into account your specific circumstances. You should obtain professional engineering advice before taking action.

The B-triple; AB-triple; & the BAB-Quad are based on modular vehicle units as agreed by ATA General Council.

Appendix B – Legal Advice, Lovegrove & Lord Lawyers



LOVEGROVE & LORD

Commercial & Construction Lawyers
ABN 25 348 332 938

9 November 2009

Mr David Coonan
National Manager Policy
Australian Trucking Association
Minter Ellison Building
25 National Circuit
FORREST ACT 2603

Our ref: 100911
Writer: Tony Hulett
Your ref: David Coonan
Email: tonyh@lcc.com.au

By e-mail

Dear Mr Coonan

TRANSPORT LAWS AND INTELLIGENT ACCESS PROGRAM

Thank you for asking us to advise the Australian Trucking Association (ATA) in relation to this matter.

Before answering the questions you ask, we make some general observations.

- In road transport law, specifically heavy vehicle regulation, there are still considerable jurisdictional differences in the law and in enforcement approach. These differences come sharply into focus in relation to the questions we have been asked.
- The Intelligent Access Program (IAP) is officially a voluntary program which enables heavy vehicles to have access to the road network in return for monitoring of compliance with specific conditions by vehicle telematics solutions. These conditions include adherence to approved routes, at approved times and operation on appropriate roads.
- Its application varies from jurisdiction to jurisdiction but is generally linked to higher mass limits. It is mandatory for large cranes and concrete pump trucks in Victoria.
- Despite general acknowledgement that the manual work diary system is not entirely satisfactory on grounds of efficiency, integrity and evidentiary value, it is in widespread use and is convenient and simple.
- Electronic systems clearly have an important role to play in regulatory compliance. However, no system, manual or electronic, will be foolproof or incapable of being misused or circumvented by technological means.

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- These points are of equal application to an electronic work diary or IAP. What guarantee is there that IAP will produce accurate information or that techniques or devices may not be utilised to circumvent its operation?
- The law can only go so far. It can make conduct unlawful. It cannot of itself prevent that conduct occurring. In the last resort penalties can be imposed. The role of the regulator in compliance and enforcement is a key factor in the success of regulation.

If an operator's electronic fatigue management system was approved as a EWD, could a successful enforcement action be obtained under existing NSW laws? ¹

Yes. As a general principle, if the RTA were to approve an *ewd*², that diary could be used to prosecute a driver or operator for failure to comply with the working hours requirement under the relevant standards or for failure to keep the diary either at all or in breach of the *Regulation*. Each prosecution depends upon its facts and the evidence led for the prosecution and the defence. There are no certainties in this process. An unsuccessful prosecution does not mean that the law is inadequate or flawed.

The RTA must approve the use of an electronic work diary and that approval must be based on stringent requirements including requirements that the system:

- has the capacity to accurately monitor and record the work and rest times of the driver
- has a mechanism to ensure that the driver cannot alter any information that the driver records in the system once the driver has had an opportunity to confirm the accuracy of the information
- is capable of readily reproducing the information it contains in a form which
 - is readily accessible by the officer
 - reasonably capable, on being accessed by an authorised officer, of being understood by the officer and
 - that can be used as evidence³

The *Regulation* specifically provides that documents produced by an electronic work diary are admissible in evidence - they are evidence of the matters contained in the document.⁴ The RTA argues that "a regulatory system must be more than admissible". We are not sure what they mean by this. Once a document is admitted into evidence, it is a matter for the court to determine its value. It is not possible for evidence, coming from a manual or electronic source, to provide an assured basis for a successful prosecution. The rules of evidence and the procedural rules in our developed legal system do not allow for this, nor should they.

In New South Wales the *Evidence Act 1995* allows evidence to be adduced by tendering documents produced by computers or electronic systems. Documents produced by processes, machines and other devices in the course of a business are presumed to have been produced by that device or process.⁵ The original document rule has been abolished.⁶

¹ The heavy vehicle driver fatigue provisions are contained in *Road Transport (General) Regulation 2005*

² "electronic work diary" is defined in Clause 39 of the *Regulation*

³ Clause 94 of the *Regulation* – the requirements listed are in Clause 94(3)(c), (e) and (h)

⁴ Clause 101 of the *Regulation*

⁵ Sections 48 and 146

⁶ Section 51

In our view, given the stringent approval processes required for ewds and the *Regulation* and *Evidence Act* provisions, the concerns expressed about the evidentiary value of electronically generated documents have been overstated. Apart from a work diary itself (manual or electronic) other documentation, such as journey or transport documentation,⁷ or an operator's general business records can be used to support a prosecution. For the purposes of prosecution, the state of mind of a director, employee or agent of a body corporate may be attributed to that body corporate.⁸

In a prosecution, documentary evidence is but one evidentiary tool. A driver charged with an offence against the work diary requirements would have to give evidence and be subject to examination in the witness box. Any individual in the chain of responsibility charged with an offence would also have to give evidence and be subject to cross-examination if they rely upon a reasonable steps defence.

Not only are there stringent approval requirements, there are prohibitions upon making false entries in a work diary and, in particular, tampering with an electronic work diary.⁹

A driver has specific obligations:

- to carry a work diary in the vehicle
- to record information in the diary¹⁰

Employers, prime contractors, operators and schedulers must ensure that the driver complies with the work diary requirements. Any person in this chain accused of an offence against this requirement has the benefit of the reasonable steps defence.¹¹

The purpose of the work diary requirement is to monitor a driver's work and rest hours for the purposes of the fatigue laws.

The offences for breach of the work and rest hours requirements and driving whilst fatigued are tied in with the work diary requirements. A prosecution for breach of these requirements may well involve the work diary as evidence to support a breach.

- a driver must not drive a heavy vehicle whilst impaired by fatigue¹²
- a party in the chain of responsibility must take all reasonable steps to ensure that a driver does not drive while impaired by fatigue¹³
- employers, prime contractors and operators have specific duties in relation to the driver's obligation not to drive while impaired by fatigue¹⁴
- schedulers have specific duties¹⁵
- consignors and consignees have specific duties¹⁶
- loading managers have specific duties¹⁷

⁷ Section 238 *Road Transport (General) Act 2005*

⁸ Section 232

⁹ Clause 94 of the *Regulation* sets out the approval process. Clause 84 prohibits the making of false entries in a work diary (manual or electronic) Clause 87 prohibits a work diary being defaced or changing a correct entry. Clause 91 prevents tampering with an electronic work diary. Penalties for offences against these provisions are not high - \$1,650 for individuals and \$8,250 for corporations. These are maximum penalties. These penalties are calculated on a penalty unit basis. A penalty unit is \$110 - section 17 *Crimes (Sentencing Procedure) Act 1999*

¹⁰ Clauses 75 and 76. Clause 77 stipulates how the driver must record the information.

¹¹ Clause 80 of the *Regulation*. See also Clauses 40 and 41 which explain the reasonable steps requirements. The penalties are the same as set out in footnote 6

¹² Clause 45

¹³ Clause 46

¹⁴ Clause 49

¹⁵ Clause 50

¹⁶ Clause 51

¹⁷ Clause 52

There are also duties upon those in the chain to assess and manage fatigue of drivers.¹⁸

Fatigue is a subjective concept and it would be difficult to succeed in a prosecution of a driver without strong objective evidence. The examples in the *Regulation* could be the result of other causes.¹⁹

The duties in relation to work and rest times cover 3 options:

- standard working hours²⁰
- BFM hours²¹
- AFM hours²²

These duties are imposed on the driver and there are no specific obligations upon those in the chain of responsibility to ensure compliance by the driver or to take any reasonable steps to do so.

However a person must not ask a driver or a party in the chain of responsibility to do something that have the effect or cause a driver to drive in breach of his or her work and rest hours option.²³

Would the situation be different if the NTC model provisions were fully implemented in NSW law?

We do not believe so. The *Regulation* substantially adopts the National Transport Commission Model Law.

For the reasons stated above, our view is that the *Regulation* and the *Act* contain provisions adequate to enforce the law and maintain a prosecution.

New South Wales, Queensland and South Australia have adopted the heavy vehicle fatigue provisions by regulation.²⁴ The Australian Law Reform Commission has been critical of the use of delegated legislation in relation to penalties imposed in the civil and administrative area and has recommended:

".....that provisions creating contraventions which impose civil or administrative penalties should only be implemented by primary legislation."²⁵

Although dealing with Commonwealth legislation the ALRC's recommendation is in our view relevant to all jurisdictions. It relates to civil or administrative penalties and it becomes an almost unchallengeable recommendation when, as is the case here, criminal offences and penalties are involved.

Delegated legislation is not subject to parliamentary debate or scrutiny. Whilst it has the full force of law it must still be read and interpreted subject to the primary legislation upon which it is made.

¹⁸ Clause 53

¹⁹ Clause 44(2) (a). An incident, crash or near miss, poor driving judgement or inattentive driving may be the result of other causes

²⁰ Clauses 64 and 66

²¹ Clauses 68 and 69

²² Clauses 71 and 72

²³ Clause 54. The maximum penalties for an individual are \$2,750 for a first offence and \$5,500 for a second or subsequent offence. For a corporation they are \$13,750 and \$27,500 respectively.

²⁴ *Transport Operations (Road Use Management – Fatigue Management) Regulation 2008 (Qld)*, *The Road Traffic (Heavy Vehicle Driver Fatigue) Regulations 2008(SA)*

²⁵ Australian Law Reform Commission ALRC 95, *Principled Regulation: Federal Civil and Administrative Penalties in Australia*, 2002 Recommendation 6-1. The issue is discussed in some detail in Chapter 6

We note that the New South Wales legislation provides for IAP to be implemented by regulation.²⁶

Victoria has only used primary legislation to adopt the heavy vehicle laws. New South Wales has done so in the case of the mass, dimension and load restraint.²⁷

If a truck's speed limiter is tampered with, and an excessive open road speed (excluding terrain related overrun) offence is detected, what sanctions are available for application to the truck and its operator in NSW?

Under the *Road Transport (Safety and Traffic Management) Act 1999* the responsible person²⁸ for a vehicle is guilty of an offence unless the vehicle is speed limiter compliant when being driven on a road or road related area.²⁹

We note that the excessive open road speed is 115km/h.³⁰

If the vehicle is not speed limiter compliant the registered operator is liable to a maximum penalty of:

- \$3,300 in the case of an individual
- \$16,500 in the case of a corporation³¹

If the driver caused the registered operator to commit a speed limiter offence the driver could be liable as an accessory and subject to a maximum penalty of \$2,200.³²

Tampering with a monitoring device is prohibited with a maximum penalty of \$5,500.³³

A vehicle may not be speed limiter compliant but it could still be driven at or below 100km/h. Any speed in excess of that would render the driver subject to prosecution for a speeding offence.³⁴ The driver might also be subject to a licence disqualification order.³⁵

The registered operator could also be subject to prosecution for an offence of causing or permitting or allowing a heavy vehicle to be driven in excess of 100km/h. The maximum penalty is \$3,300³⁶

The heavy vehicle speeding provisions of the *Regulation* may also apply.³⁷

An employer, prime contractor or operator of a heavy vehicle must take reasonable steps to ensure that their business practices will not cause, by act or omission, the

²⁶ *Road Transport (General) Act 2005* – section 11A. The reference is to intelligent transport systems.

²⁷ *Road Safety Act 1986 (Vic) Parts 9, 10, 10A, 11 and 12. Road Transport (General) Act 2005 (NSW) Chapter 3*

²⁸ A registered operator of the vehicle as defined in section 6 of the *Road Transport (General) Act 2005*

²⁹ section 69C(1) of the *Road Transport (Safety and Traffic Management) Act 1999*. This covers heavy vehicles with a GVM exceeding 12 tonnes if manufactured on or after 1 January 1991 or 15 tonnes if manufactured on or after 1 January 1988 – clause 139 of the *Road Transport (Safety and Traffic Management) Regulation 1999*

³⁰ section 69C(2)

³¹ section 69C(1). It is prima facie evidence of a breach if there is proof that the vehicle was driven at a speed of more than 115km/h (section 69C(2)). It is no defence if the defendant had a mistaken but reasonable belief as to the facts that constituted the offence (section 69C(4)). Photographic evidence of speed may be given (section 69E).

³² *Road Transport (Safety and Traffic Management) Regulation 1999* – regulation 136

³³ *Road Transport (Safety and Traffic Management) Act 1999* - section 67

³⁴ Under Rule 10-2 of the *Road Rules 2008*

³⁵ See for example section 187 of the *Road Transport (General Act) 2005*

³⁶ *Road Transport (Safety and Traffic Management) Regulation 1999* – regulation 38

³⁷ *Road Transport (General) Regulation 2005*... The provisions are contained in Part 7 (Clauses 151-187)

driver to exceed any speed limit that applies to the vehicle. The penalties for breach of this requirement are:

- in the case of an individual maximum penalties of \$5,500 for a first offence and \$11,000 for a second or subsequent offence
- in the case of a corporation maximum penalties of \$13,750 for a first offence and \$27,500 for a second or subsequent offence³⁸

Are these sanctions within the capacity of a reasonable regulator to apply at the roadside either through general duties police, or trained HV inspectorate staff or via, automated enforcement systems?

Heavy vehicle offences are presently subject to roadside enforcement and based upon significant investigatory and evidence gathering powers.

In New South Wales, the RTA has investigatory powers including:³⁹

- powers to give directions to stop, move or leave vehicles⁴⁰
- powers of inspection and search over vehicles and premises including additional search powers relating to fatigue offences⁴¹
- powers to give directions to produce records devices or other things⁴²
- powers to give directions to give name and other personal details in cases of heavy vehicle offences⁴³
- powers to give directions to provide information⁴⁴
- powers to issue search warrants and powers of seizure of electronic equipment⁴⁵

These powers can be delegated to authorised officers or by the Commissioner of Police to specified police officers.⁴⁶

To some extent there is an automated enforcement system in place through the use of speed cameras. The penalty notice regime also backs up roadside enforcement.⁴⁷

The issue of enforcement, including proper training and a consistent approach by regulators has been at the forefront of industry concern in the heavy vehicle regulation reform processes of recent years, particularly for those operating across more than one jurisdiction. For example, we have anecdotal evidence that, because of different interpretations of the work diary requirements in New South Wales and South Australia some drivers operating in both jurisdictions are keeping 2 work diaries, itself an offence.⁴⁸ As an example of jurisdictional differences, the maximum penalty for keeping 2 work diaries is \$1,650 in New South Wales and \$10,000 in South Australia.

We comment about a reasonable regulatory approach and automated enforcement systems further on.

³⁸ Clause 155 of the *Regulation*

³⁹ These are contained in Chapter 4 of the *Road Transport (General) Act 2005*

⁴⁰ sections 135-140

⁴¹ sections 144-149

⁴² section 150

⁴³ section 151

⁴⁴ section 152

⁴⁵ sections 157 and 160

⁴⁶ section 128

⁴⁷ Section 183 of the *Road Transport (General) Act 2005* provides for the penalty notice regime. Clause 189 of the *Regulation* sets out the penalty notice offences (contained in Schedule 3)

⁴⁸ An offence in each jurisdiction: clause 85 of the *Regulation* (New South Wales) and regulation 48 of *Road Traffic (Heavy Vehicle Driver Fatigue) Regulations 2008* (South Australia)

If pursued, and applied as intended, are these sanctions likely to deter tampering?

Yes. In our view tampering would be deterred. However it is most likely that it would minimise it, but never entirely eliminate it.

Heavy penalties combined with a fair and consistent enforcement policy are generally acknowledged as having strong to substantial deterrent value, depending, of course, upon circumstances.

A trite observation perhaps, but the criminal law prohibits a range of conduct, from minor to serious, with attendant penalties, including imprisonment, but that does not prevent crime being committed.

Continuous enforcement grade monitoring such as IAP is very onerous, costly and intrusive; can it be justified for road transport law related matters?

IAP is part of the sanctions or penalty package in the *Road Transport (Compliance and Enforcement) Bill (C&E Bill)* as a potential component of a Supervisory Intervention Order (SIO) for systematic or persistent offenders in the mass, dimension and load restraint area.⁴⁹

As far as we are aware there have been no SIOs made in any jurisdiction which has adopted the *C&E Bill* provisions. In New South Wales, SIOs are only available for breaches of mass, dimension and load restraint laws.⁵⁰

IAP has since moved to a voluntary program for specified heavy vehicles on a higher mass limit basis based on an assessment of risk to infrastructure (roads and bridges). The exception to this voluntary basis is its mandatory use for certain heavy mobile cranes and concrete pump trucks in Victoria.

Moving from the use of IAP first as a court ordered sanction for systematic or persistent offenders against mass, dimension and load restraint laws, then to a voluntary program for higher mass limit on a risk to infrastructure basis, to one mandated for heavy vehicles as a means of monitoring *ewds* and speeding compliance is far-reaching and unique. Far-reaching in that it moves from a sanction for recidivists in an identified area of infrastructure risk to a condition of daily operation in an entirely different area not identified as having significant infrastructure risk. Unique in that it proposes electronic surveillance of industry participants as a condition of operation, unrelated to systematic or persistent offending. No other area of commerce in any Australian jurisdiction is subject to such surveillance. The proposal is based upon a presumption that some industry participants cannot be trusted to comply with the law. This, itself, is a unique regulatory view. By way of comparison, we point out that the approach of the Australian Competition and Consumer Commission is to:

*Conduct campaigns that target industries and sectors where the risk of failure to comply with the Act is high.*⁵¹

The National Transport Commission released a Model Law on IAP in 2006.⁵²

⁴⁹ Clause 6 defines "intelligent transport system" and Clause 138 (2) (a) (iv) provides for installation of such equipment

⁵⁰ Section 97 *Road Transport (General Act) 2005*

⁵¹ Australian Competition and Consumer Commission: Annual Report 2008-2009, 24. Available at www.accc.gov.au

⁵² *National Transport Commission (Model Legislation – Intelligent Access Program) Regulations 2006*. The Model law was produced in conjunction with Queensland Transport at the request of Austroads

However IAP is given force of law in 2 jurisdictions: in Victoria through the *Road Safety Act 1986*⁵³ and in Queensland through the *Transport Management (Road Use Management – Mass Dimensions and Loading Regulation 2005*. It is also fair to point out that, in Queensland, the *Transport Operations (Road Use Management – Fatigue Management) Regulation 2008* contemplates or anticipates the electronic work diary as forming part of IAP.⁵⁴

We are not aware of any laws in any Australian jurisdiction which are the subject of continuous enforcement grade monitoring. As you point out it is costly and intrusive.

We query the potential effect upon drivers and whether the proposal would be in breach of any human rights principles. Human rights legislation is in force in Victoria⁵⁵ and the Australian Capital Territory.⁵⁶ The National Human Rights Consultation has just recommended that a *Human Rights Act* be introduced at federal level.⁵⁷

In Victoria the legislation outlines a number of basic human rights including:

- recognition and equality before the law. This includes equal protection of the law without discrimination⁵⁸
- the right to privacy and reputation⁵⁹
- the right to liberty and security of person⁶⁰

These human rights protections only apply to individuals.⁶¹

Use of IAP as a monitoring device of a driver at work might, arguably, involve a breach of the right to equality before the law and be classed as discriminatory. It might also involve a breach of the right to privacy and the right to liberty. These are only some of the rights listed - there may be others which come into consideration.⁶²

These human rights considerations may also apply to individuals within the chain of responsibility and other individuals such as directors, partners or employers who are taken to have committed offences by companies, partnerships and employees.⁶³

There are also privacy issues with IAP and safeguards have been built into the existing legislation.⁶⁴ Given its cost and intrusiveness, we can see its use justified in high risk situations and as a court ordered sanction for persistent offenders.

We do not see its use justified as a fundamental, across-the-board surveillance tool as a matter of general regulatory principle and certainly not because of concerns about the evidentiary value of electronic work diaries.

This brings up the matter of regulatory approaches to compliance and enforcement and we draw your attention to the approach taken by 3 major Commonwealth Government bodies.

⁵³ Part 12 – sections 223-273. The definition appears wide enough to include any type of electronic system, including an electronic work diary, but so far appears to be confined to mass limits for a confined class of heavy vehicle.

⁵⁴ Regulation 114

⁵⁵ *Charter of Human Rights and Responsibilities Act 2006*

⁵⁶ *Human Rights Act 2004*

⁵⁷ <http://www.humanrightsconsultation.gov.au/> Recommendation 18

⁵⁸ Section 8 - section 8 of the ACT statute

⁵⁹ Section 13 – section 12 of the ACT statute

⁶⁰ Section 21 – section 18 of the ACT statute

⁶¹ Section 6 – also section 6 of the ACT statute

⁶² In New South Wales the *Workplace Surveillance Act 2005* prohibits and restricts surveillance at work.

⁶³ Section 178 *Road Transport (General) Act 2005*

⁶⁴ *Road Safety Act 1986 (Victoria)* sections 234 -242 *Transport Management (Road Use Management – Mass Dimensions and Loading Regulation 2005 (Qld)* regulations 55m -55W

The Australian Taxation Office has a Compliance Guide which states:

Our primary objective is to achieve high levels of voluntary compliance with Australia's tax and superannuation laws

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*Australia's strong culture of voluntary compliance means our strategies are highly weighted to helping people and businesses comply and can be summed up as where possible, prevention is better than cure.*⁶⁵

The ATO has a tax audit program which is used to see if taxpayers have complied with the law. In the 2008-2009 the ATO conducted 10,858 audits.⁶⁶ The ATO's audit and other investigatory powers are in line with those of the RTA listed on page 6 of this letter.

The ATO will prosecute if necessary and in the 2008-2009 year the results of prosecutions were as follows:

Prosecutions

In 2008-09 a total of 2,959 cases were successfully prosecuted from a total of 3,264 cases taken to court. Of these:

2,909 successful prosecutions from 3,234 cases related to non-lodgment and failure-to-comply tax offences; this included 2,834 successful prosecutions from 3,118 cases handled in-house, and 75 successful prosecutions from 92 cases referred to the CDDP

50 successful prosecutions from 54 cases related to serious non-compliance; we referred 48 of these cases to the CDDP and six to the AGS (on excise).

The conviction rate for serious non-compliance cases decreased to 93%, from last year's result of 100%. However, in 2008-09 the overall custodial sentence rate was 72%, with 36 custodial sentences from 50 convictions. This was higher than the 60% rate in 2007-08 and 2006-07.

*Reparation orders for serious non-compliance were up from \$4.3 million in 2007-08 to \$10.3 million this year. Court fines for serious non-compliance were up from \$37,200 to \$14.3 million.*⁶⁷

The Australian Competition and Consumer Commission states in its Compliance and Enforcement Policy:

To achieve its compliance objective the ACCC employs three flexible and integrated strategies:

- *Enforcement of the Law, including resolution of possible contraventions both administratively and by litigation*
- *Encouraging compliance with the law by educating and informing consumers and businesses about their rights and responsibilities under the Trade Practices Act*
- *Working with other agencies to implement these strategies*⁶⁸

⁶⁵ <http://www.ato.gov.au/corporate/content.asp?doc=content/00...>

⁶⁶ Commissioner of Taxation: Annual Report 2008-2009, 78. Available at www.ato.gov.au

⁶⁷ Commissioner of Taxation: Annual Report 2008-2009, 80

⁶⁸ <http://www.accc.gov.au/content/index.phtml/item1d/969764>. This was published on 7 April 2009

The ACC will take action if its non-litigious strategies fail. In the 2008-2009 year for example the ACCC commenced:

- litigation in 17 competition matters and accepted 5 court-enforceable undertakings
- 2 proceedings alleging misuse of market power
- 4 proceedings under the unconscionable conduct provisions
- 27 consumer protection matters and accepted 62 undertakings⁶⁹

The Australian Securities and Investments Commission has a Statement of Intent which provides:

In its guidance and regulatory work, ASIC shares the Government's preference for regulation to focus on outcomes rather than the prescription of means by which those outcomes are to be achieved. In its compliance and enforcement functions, ASIC will continue to maintain the integrity of the market by working closely with regulated entities to encourage compliance with the legislation, and acting vigorously against those who breach it. Effective enforcement not only protects those directly affected by illegal conduct, but acts as an incentive for others to comply. An example is the priority we have placed on insider trading and market manipulation.⁷⁰

In the 208-209 year ASIC completed a number of civil and criminal proceedings:

This year, in collaboration with the CDPP, we completed 39 criminal proceedings, with 34 criminals convicted, including 19 jailed. We completed 35 civil proceedings and obtained over \$14.5 million in recoveries, costs and fines, with \$13.8 million in assets frozen for investors and creditors. ASIC's enforcement actions led to two convictions for market manipulation.⁷¹

In our opinion regulatory strategies based on voluntary compliance and education are more likely to have positive outcomes as against a mandatory surveillance system imposed upon market operators not guilty of any offence on the premise that some market operators cannot be trusted to comply with the law.

The Australian Law Reform Commission has recommended that:

The ALRC considers that regulators who administer legislation under which criminal, civil or administrative penalties may be imposed or arise should develop and publish enforcement guidelines setting out their enforcement approach⁷²

Although directed towards federal regulators the recommendation has equal force and merit to road transport regulators at State or Territory level.⁷³

On general principles of fair and reasonable compliance and enforcement principles we do not see the mandatory use of IAP as justified.

⁶⁹ Australian Competition and Consumer Commission: Annual Report 2008-2009, 24. Available at www.accc.gov.au
⁷⁰ Letter dated 27 June 2007 from the Chairman of ASIC to the then Treasurer
[http://www.asic.gov.au/asic/asic.nsf/byheadline/Statement+of+expectations+and+statement+of+intent?openDocument-23k-\[html\]](http://www.asic.gov.au/asic/asic.nsf/byheadline/Statement+of+expectations+and+statement+of+intent?openDocument-23k-[html])

⁷¹ Australian Securities and Investments Commission Annual report 2008-2009, 18. Available at www.asic.gov.au

⁷² Australian Law Reform Commission ALRC 95, *Principled Regulation: Federal Civil and Administrative Penalties in Australia*, 2002 paragraph 10.90

⁷³ It does not appear, for example, that the RTA in NSW or VicRoads in Victoria has a published enforcement policy

Discuss circumstances from other legal frameworks that allow continuous monitoring of proven serious offenders and form views on IAP against these structures, with particular consideration of monitoring of road access with IAP relative to risk of infrastructure damage in route compliance for:

- i) Higher Mass Limit (HML) vehicles;
- ii) new generation High Productivity Vehicles (HPV); and
- iii) vehicles operating under a Performance Based Standards (PBS) approval.

As stated above we are not aware of any legal framework within Australia that provides continuous monitoring of proven serious offenders.

In the general criminal law electronic monitoring devices are used to track the whereabouts of convicted offenders eg in a home detention scenario. This is permitted either by specific legislation⁷⁴ or, as we understand it, through the inherent sentencing discretion of the judiciary.

Alcohol or speed interlocking devices are also used as a sanction for drink driving and speeding offences, but these are not monitored.

In aviation flight data recorders (commonly known as "black boxes") must be used in certain aircraft, but this is a safety and information tool rather than a compliance tool.

Within the criminal law, various surveillance techniques are available to the police and there are certain powers given to the Australian Federal Police and Australian Security Intelligence Organisation under anti-terrorism laws. We mention these for the sake of completeness as we do not consider that they provide an appropriate basis for comparison.

IAP is officially a voluntary system and may apply to the 3 categories of vehicle you mention under present jurisdictional requirements. It has become mandatory in relation to certain heavy mobile cranes and concrete pump trucks in Victoria.

As we understand it the voluntary nature of the system was meant to provide operators with a choice – to use IAP as a condition of access for nominated classes of vehicle, or use alternative vehicles to carry out the task. The nominated vehicles in Victoria are task specific, so voluntary use of IAP is not possible.

As ATA points out, the cost of IAP in New South Wales and Queensland has caused a decline in the use of HML vehicles.

In Victoria IAP is confined to:

- heavy mobile cranes
- concrete pump trucks⁷⁵

In New South Wales IAP Applications are:

- Higher Mass Limits(HML)
- B-Triple and AB-Triple combinations in Western NSW
- Quad Axle Semi-Trailer Pilot Scheme
- Mobile Crane Concessional benefit Scheme
- Some Performance Based Standards(PBS) Vehicles⁷⁶

⁷⁴ For example section 101 of the *Corrective Services Act 2001 (Qld)*

⁷⁵ <http://www.vicroads.vic.gov.au/Home/HeavyVehicles/VehicleManagementAndSafety/>

⁷⁶ <http://www.iap.gov.au/About-IAP/Road-Transport-Authorities/IAP-In-NSW.html>

These examples highlight the jurisdictional differences

Given the importance of road transport to the Australian economy, the cost of mandatory IAP across the heavy vehicle regulatory landscape is a factor the legislature would have to take into account in making any legislative change.

IAP is a risk based tool against infrastructure damage. Assessment of risk is a matter for case by case determination and it is likely that risk might be assessed differently across the jurisdictions. The standard and quality of roads and bridges will vary as will the risk of damage. However it is essential that the same methodology of risk assessment be used across the jurisdictions. We agree that the risk must be assessed as high to justify IAP as a condition of access.

Given the strong powers to take driver and operator generated data as evidence in the compliance and enforcement package; in a legal prosecution, is there a gap in evidence standards between commercial systems data and regulatory systems data?

The distinction between commercial systems data and regulatory systems data is not one we have seen made before in any regulatory or law reform context.

It seems to derive from a view that the electronic systems used by some transport operators are there only for commercial advantage. Compliance may of itself be seen as providing a commercial advantage. If an electronic system collects data and provides information which complies with work diary requirements, it is irrelevant whether it is there for commercial or compliance purposes, or a combination of both. It is like the difference between reasons for compliance – it doesn't matter whether compliance is voluntary or based on a fear of penalty. The reason doesn't matter, the only relevant consideration is compliance. There also seems to be a view that an electronic system should not contain a mix of commercial and statutory information.

In the legal profession, for example, there are strict legal rules about the operation of trust accounts.⁷⁷ There are a number of software packages available which enable practitioners to comply with their strict legal obligations in relation to trust accounts and which include additional modules including legal accounting, automated legal forms and precedents, document management, websites and legal practice guides. Use of these types of package enable practitioners to comply with trust account obligations, which have mandatory audit requirements, and provide a number of other commercial benefits.

Companies have an obligation to maintain certain accounting records for the purposes of the *Income Tax Assessment Act 1936* and the *Corporations Act 2001*. The accounting packages used to prepare these accounts will comply with the strict legislative requirements but will also often include other information or reporting tools for commercial purposes. Neither the ATO nor ASIC has direct electronic access to those packages and certainly does not monitor the information entered into or contained in such packages on a continuous basis.

If a transport operator collects information electronically to comply with work diary requirements we cannot see any advantage to that operator in having a system which does not comply with the legal requirements or produces information which is not accurate.

⁷⁷ eg Part 3.3 of the *Legal Profession Act 2004 (Victoria)* and Part 3.3 *Legal Profession Regulations 2005 (Victoria)*

A transport operator using IAP must not permit tampering of an in-vehicle-unit (IVU) and report instances of tampering or malfunction to the IAP Service Provider.⁷⁸

In view of the concerns expressed about the evidentiary value of electronic work diaries it does not appear that like concerns have been expressed about Non - Compliance Report produced by an IAP Provider, although there are clear concerns about tampering.

If an electronic system complies with the work diary requirements and also produces commercial information, we see no reason why that system should not be acceptable to a regulator.

For reasons stated above we believe the evidentiary problems have been overstated. The contents of a work diary must be the same whether data is entered manually or by electronic means.

The problem is, as the ATA points out, that regulators have thus far refused to approve any *ewd* on the basis that the documentary information it produces will be of limited evidentiary value compared to a manual system, which, at the same time, is conceded as flawed.

The suggested use of IAP as a mandatory monitoring tool appears to have a prosecutorial bias. As the Australian Law Reform Commission has said:

In general, agencies seek to demonstrate their effectiveness by reference to the activities taken by the agency and the effect of the regulatory activity.

Measures of success, as indicated in annual reports, can be broadly categorised by reference to:

.....

penalties or remediation — numbers of court actions, levels of penalties and other imposed outcomes;

.....

There may also be an element of regulatory convenience about the suggestion.

As electronic systems are in use we believe that it would be open to a regulator to trial an operator's system or, perhaps, the systems used by more than one operator by giving conditional approval to the use of such systems for a limited period - say 6 or 12 months. That might alleviate any concerns or point to standards or protocols that need to be adopted to establish a workable *ewd* regime.

If this gap exists, is it such that reasonable effort by the regulator cannot close the gap adequately for the data to be used to sustain a sanction action?

We do not believe this gap exists for the reasons set out above.

Given that the requirements for an Electronic Work Diary include significant powers to prevent tampering of data, is there a need for tamper evident devices, or can secondary evidence from journey or transport documentation be used to establish adequate evidence of tampering of driving hour records to sustain a prosecution?

⁷⁸ This appears to be an administrative requirement in New South Wales (see footnote 53) and a legal requirement in Victoria, - sections 232 and 242 of the *Road Safety Act 1986* and in Queensland section 55U of *Transport Management (Road Use Management – Mass Dimensions and Loading Regulation 2005*

Given the stringent approval processes there appears to be no strict need for a tamper evident device. As advised above, a regulator can use transport or journey documentation and an operator's general business records in a prosecution and also rely upon verbal evidence.

We would be pleased to discuss any aspects of this advice with you or provide any further information or advice you require.

Yours faithfully,

Lovegrove & Lord

Tony Hulett
Tony Hulett
Special Counsel