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| **Submission to:** | NSW Minister for Roads and Ports |
| **Title:** | The Intelligent Access Program and Prescriptive Modular Combinations |
| **Date:** | August 2011 |

**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.*

Austroads 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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# 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.

# 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 (UHOC) that tare at 200 tonne are a major risk to infrastructure compared to standard vehicles such as B-doubles. The UHOC 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 UHOC 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 UHOC, 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.

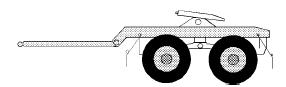
# What are prescriptive modular combinations?

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.

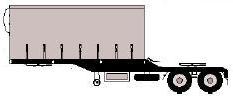
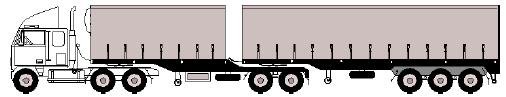
**“B” coupling connection point for trailer following**

**“A” coupling connection point**



**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.**

**“B” coupling connection point for trailer following**

**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**



**“A” coupling connection points**



**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.

**B-double**



**“B” coupling connection point**



**B-triple**

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.

**AB-triple**



**“B” coupling connection point**

**“A” coupling connection point**

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.

**BAB-quad**

**“A” coupling connection point**



**“B” coupling connection point**

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.

**ABB-quad**

**“A” coupling connection point**



**“B” coupling connection point**

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.

# 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.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | | **Load Status** | | |
| **0%** | **50%** | **100%** |
| **Vehicle Type** | **GCM**  **(tonnes)** | **Payload**  **(tonnes)** | **Calculated ESA's 4th 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.

# 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.

# 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.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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?

# 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:

|  |  |
| --- | --- |
| Ensure information is accurate, up-to-date and complete  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.  One jurisdiction has also required that the information not be misleading. | 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. |

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.

# 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

# 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.

# 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.

# 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.

# 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.

# 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.**

# Abbreviations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ATA | Australian Trucking Association |  | NHVR | National Heavy Vehicle Regulator |
| ATC | Australian Transport Council |  | NTC | National Transport Commission |
| C&E | Compliance and Enforcement |  | OHS | Occupational Health & Safety |
| CML | Concessional Mass Limit |  | PBS | Performance Based Standards |
| ESA | Equivalent Standard Axle |  | RFS | Road Friendly Suspension |
| GML | General Mass Limit |  | RTA | Roads and Traffic Authority |
| HML | Higher Mass Limit |  | SIO | Supervisory Intervention Order |
| HVNL | Heavy Vehicle National Law |  | TCA | Transport Certification Australia |
| IAP | Intelligent Access Program |  | UHOC | Ultra Heavy Oversized Cranes |

# 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.

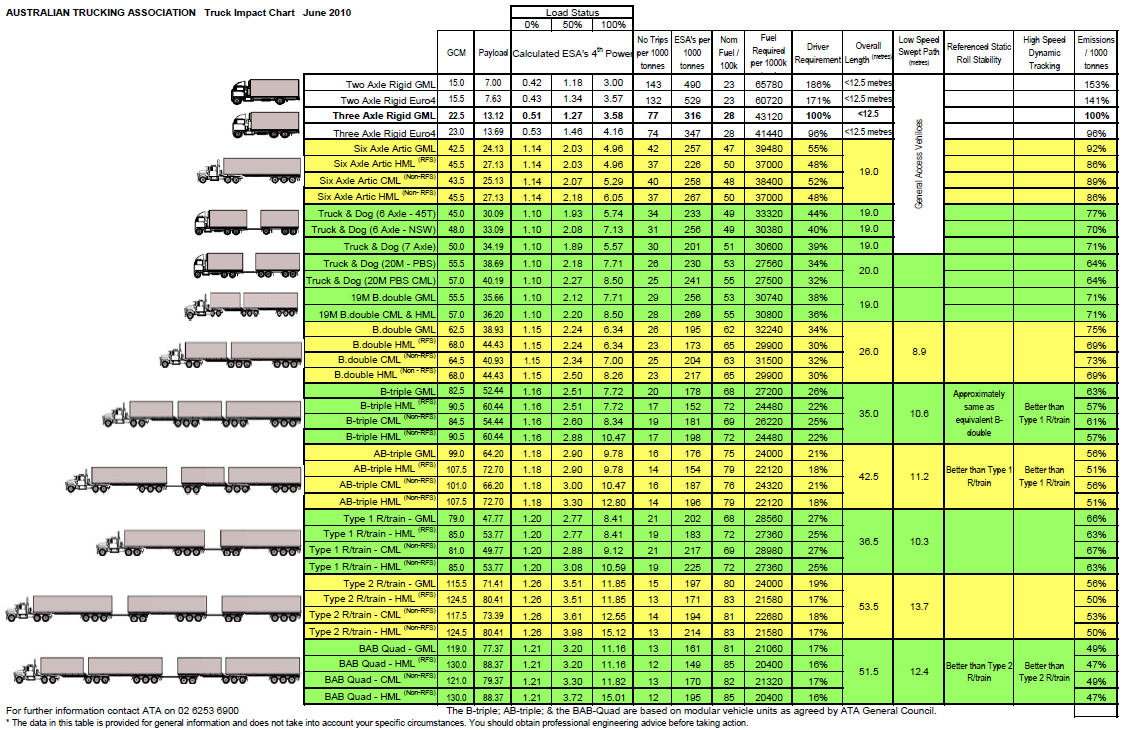
The Truck Impact Chart has been reviewed RTA’s Senior Pavement Engineer, Ravindra Prathapa. The Truck Impact Chart has also been separately peer reviewed by Bob Pearson, Pearson Transport Resources, and was referred to by TheCIE in the Benefit/Cost Analysis for the National Heavy Vehicle Regulator draft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

|  |  |  |  |
| --- | --- | --- | --- |
| E:\Public\Logos\Internal\ATA LOGO C.bmp | **Authors:** | **David Coonan - Australian Trucking Association** | BARKWOOD CONSULTING Pty Ltd |
| **Bob Woodward - Barkwood Consulting Pty Ltd.** |

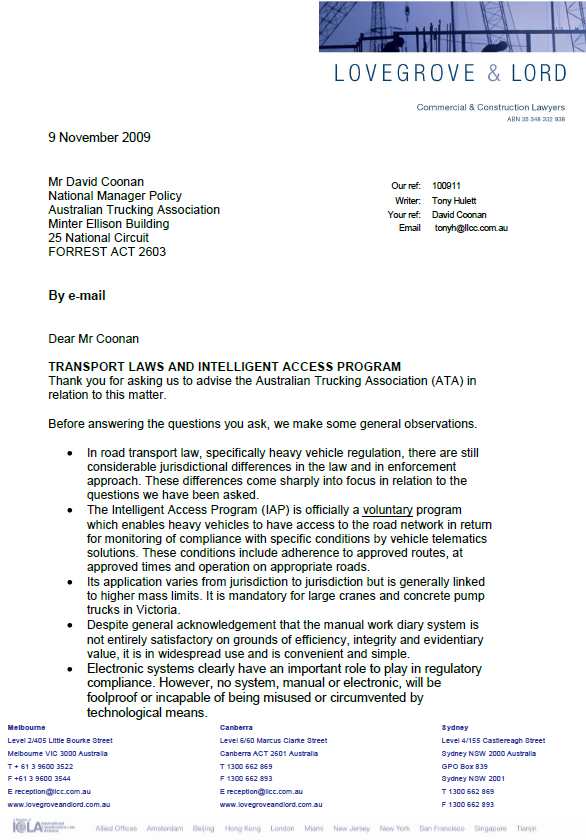
This document has been prepared to assist operators and road asset managers in assessing the merits of utilising larger vehicle combinations in a transport task.

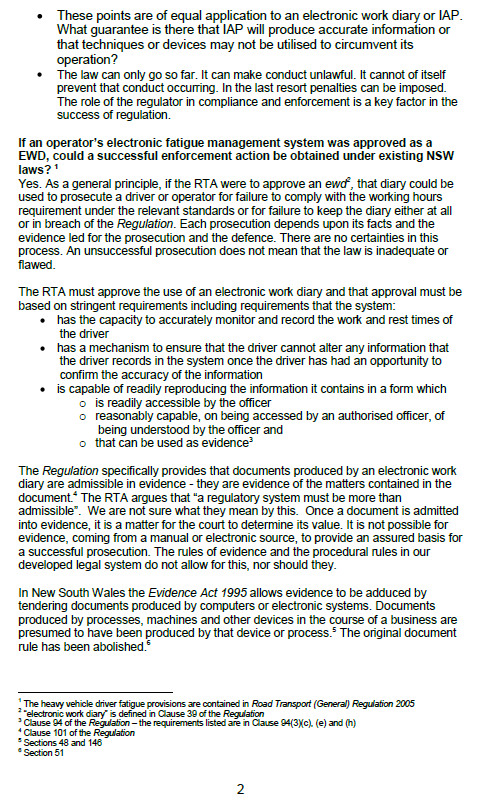
The assessment process assumes that the vehicle is dedicated to a specific task, operating travel being 50% unladen and 50% laden. The task relativities are 1000 tonnes with a lead of 1000 kilometres.

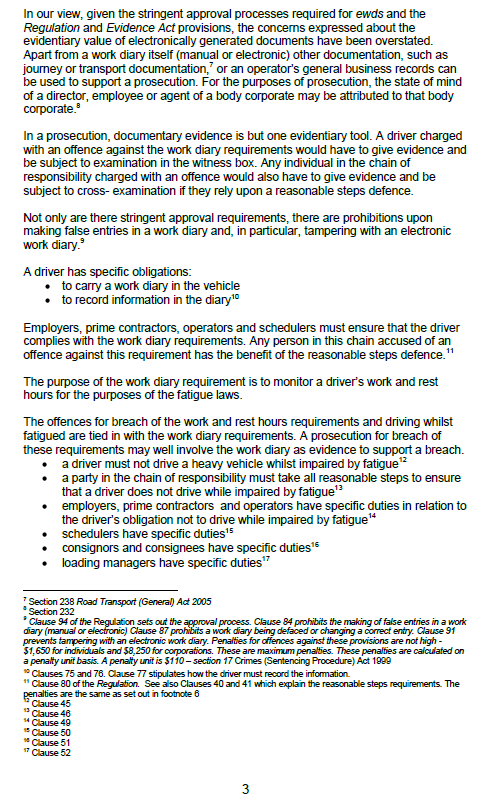
|  |  |
| --- | --- |
| **Equivalent Standard Axles:** | ESA’s are calculated by the average of the sum of ESA’s for zero load (empty) plus ESA’s for 100% load and multiplied by the number of trips as required for the transport task. |
| **Vehicle tare weights:** | Are predictions based on the averages 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. |

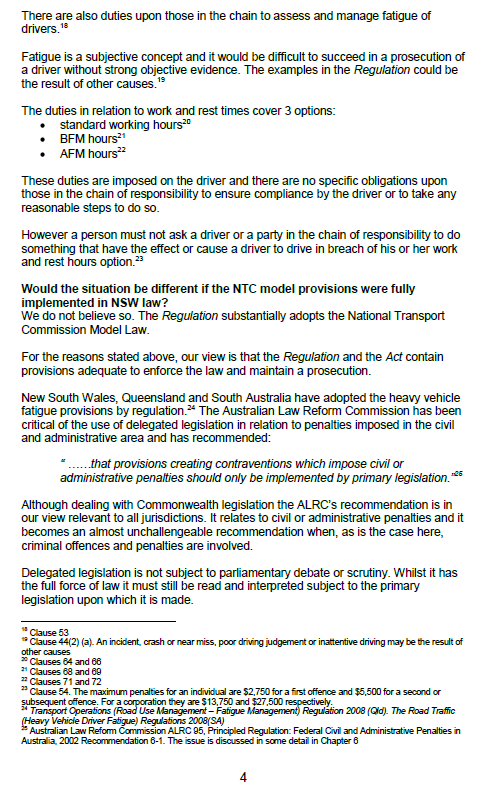
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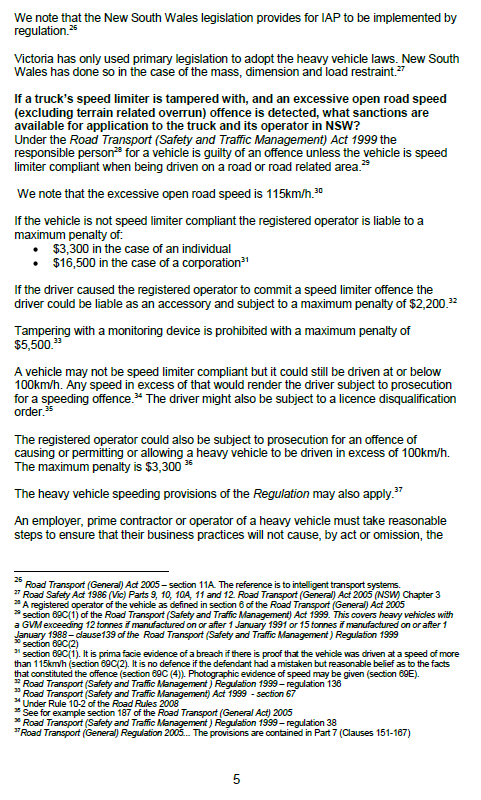
# Appendix B – Legal Advice, Lovegrove & Lord Lawyers

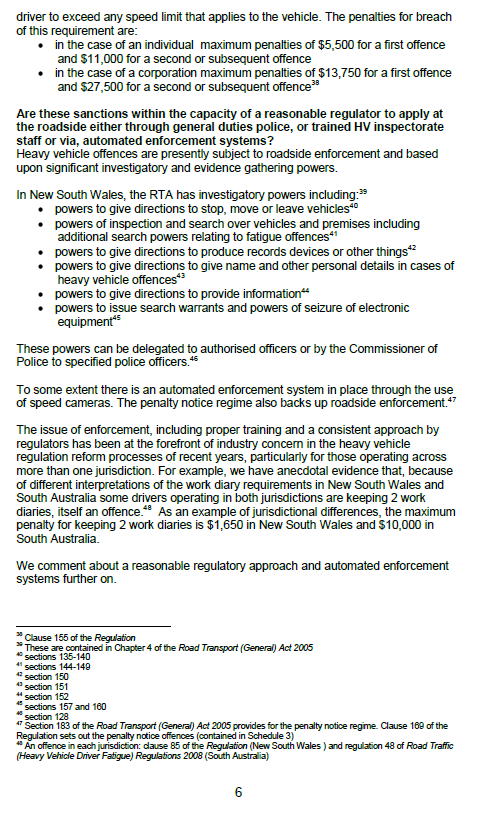
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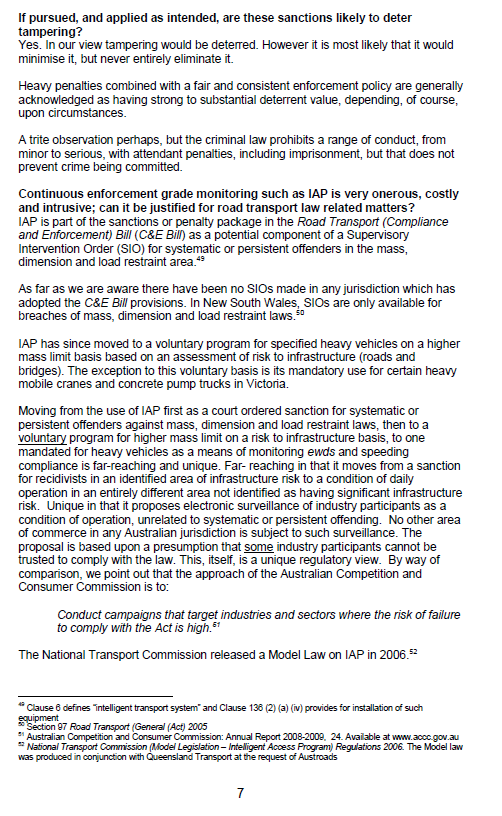
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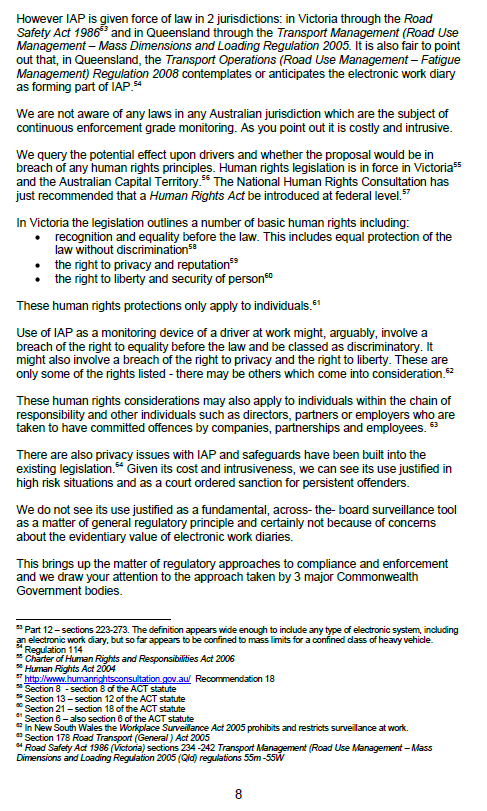
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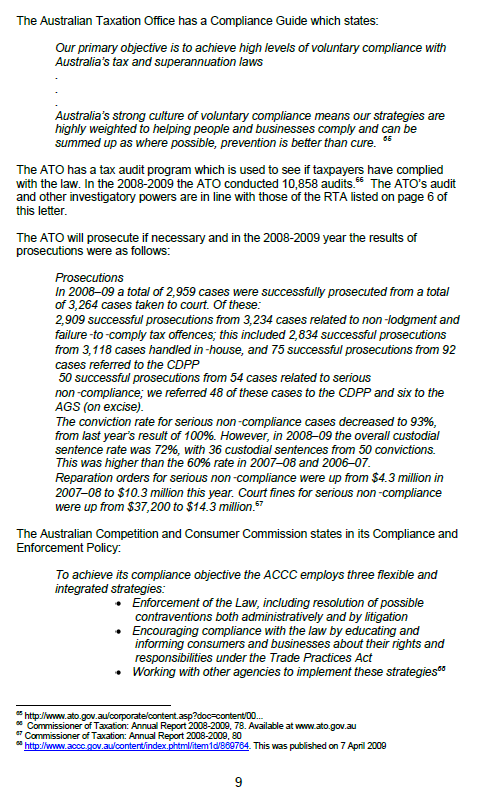
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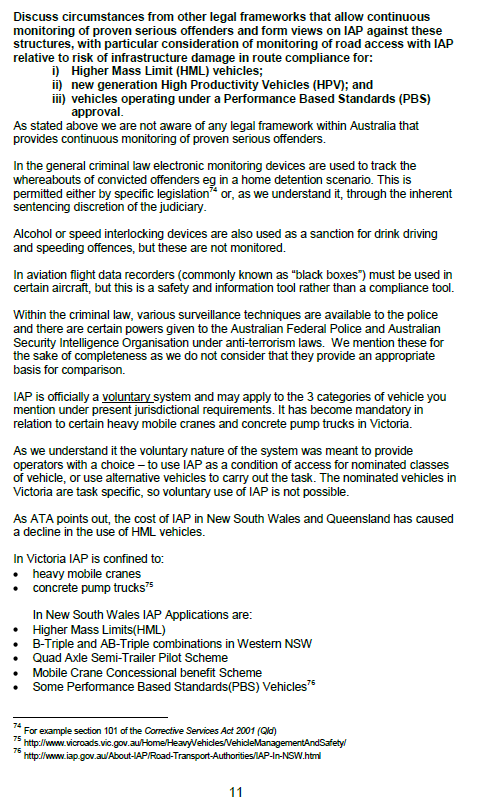
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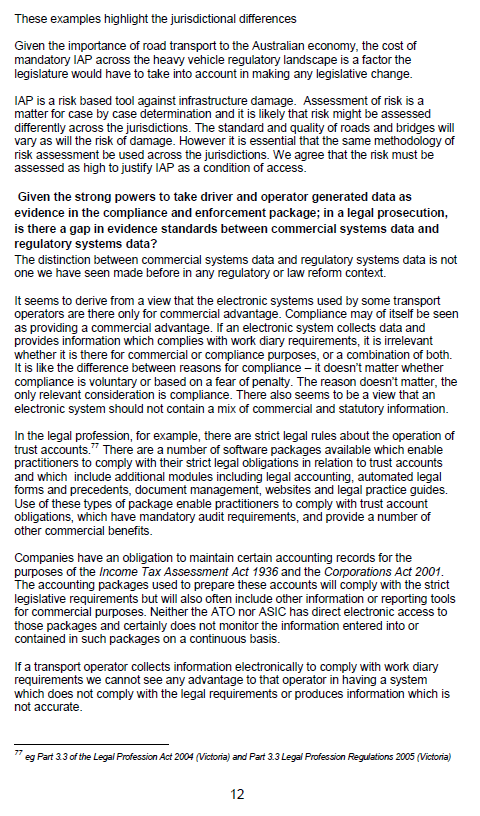
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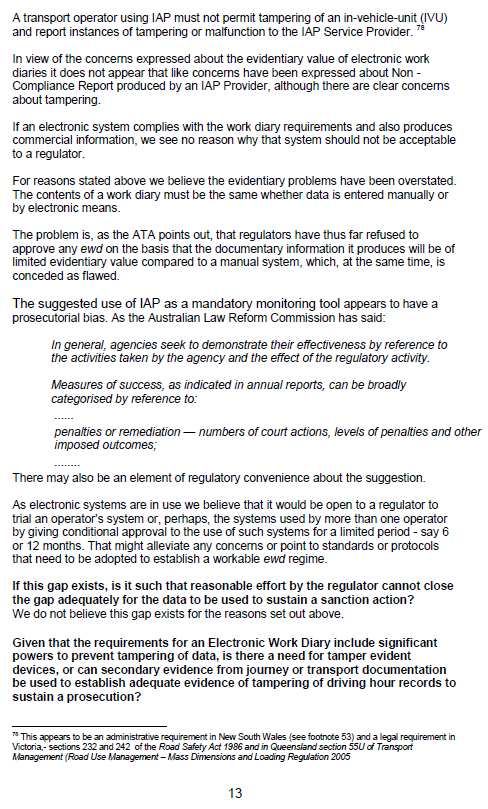
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