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**INNOVATION IN ROAD FREIGHT REGULATION –
AUSTRALIA’S CHAIN OF RESPONSIBILITY
REGULATION**

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ABSTRACT

The movement of freight on roads is important for any economy to function. Efficient movement of freight provides substantial benefits to society. Road freight movement also has negative impact, including accidents, pollution and damage of infrastructure. To limit the negative impact, most governments, regulate road freight movement. The regulation varies from country to country. Some countries focus mostly on the driver, while others focus on the business operator. There have been varied levels of success in regulating road freight movement. In Australia, regulators have come to realise that a different approach to regulation is required as the current regulatory regime had little impact on further reducing the negative effects of the road freight industry. After substantial deliberation, Australia has embarked on a different regulatory regime which covers all parties involved in the road freight supply chain. It is called “Chain of Responsibility” Regulation. This approach is unique and has not been applied by any other country. This conceptual paper discusses the Chain of Responsibility regulation, its origin, implementation and experience to date. It also provides some pointers to other countries wishing to adopt a similar regulatory approach.

Keywords: road freight industry, transport and logistics sector, chain of responsibility regulation, safety, Australia, freight

1. INTRODUCTION

The movements of goods and products are needed for any economy to function. In most countries, a large portion of this movement of products and goods is undertaken by road. For instance, in Australia it is estimated that every year 132,129 million tonnes of freight are shifted along Australia's 810,700 kilometre road infrastructure (Australian Bureau of Statistics, 2002). Every seventh Australian is employed by the Transport and Logistics sector (Apelbaum Consulting Group, 2008), which also accounted for approximately 4.7%, or 49.1 billion AUD, of Australia's GDP in 2007-2008 (Australian Bureau of infrastructure Transport and Regional Economics, 2009).

Although road freight is vital to the success of an economy, it also has some negative impact. This includes injuries and deaths due to accidents, congestion, pollution, reduction in amenity and damage to roads and other infrastructure. In Australia, it has been estimated that annually approximately 330 people are killed in accidents involving heavy vehicles (National Road Transport Commission, 2003). Every fifth road fatality has mainly been caused by driver fatigue or speed (National Transport Commission, 2008).

The Australian Safety and Compensation Council (2008) reports that the transport and storage sectors have the highest number of compensated fatalities among all industries. It confirms that the transport sector is the most dangerous industry and has the worst safety record of all industry sectors in Australia (Australian Safety and Compensation Council, 2008). To facilitate the optimal functioning of the road freight industry and to minimise the negative impacts of the industry, governments all over the world regulate the industry. Some countries have been more successful than others in regulating the industry. In Australia, the government has embarked on a new way of regulating the industry, called the Chain of Responsibility regulation.

This new regulation is unique in the sense that it takes a holistic view of the transport sector and requires collective responsibility to be exercised by the whole road freight supply chain. If successful, this way of regulating the

industry can provide a new approach for governments worldwide to regulate road freight efficiently and effectively in their respective countries.

1.1 Rationale for the study

The aim of this paper is to provide some insight into the new approach to regulation and to point to potential benefits for other countries in adopting this approach. In particular, the paper provides a background to the need for a change in regulation. Additionally, this study provides an overview of the Chain of Responsibility regulation and discusses how it differs from the traditional approaches to road freight regulation. This is followed by a discussion of implementation issues. This paper concludes by providing recommendations of possible implementation strategies that other countries can consider using.

2. A REVIEW OF TRADITIONAL AND NEW APPROACHES TO ROAD FREIGHT REGULATION

Globally, countries regulate their road freight industry in different ways. Although the details of the regulations vary, most countries' regulation covers some, if not all, of the following areas:

- The right to use the road via driver, business operator and vehicle licences and registration;
- Reduction of pollution through design rules and vehicle testing;
- Management of congestion through limits on vehicle length and width and congestion charges;
- Limiting the impact on road infrastructure assets through mass and dimension regulation and heavy vehicle fees;
- Road safety regulation through regulation of driver hours, seat belts, education, alcohol and drug testing etc. (National Transport Commission, 2004).

Enforcement of these rules and regulations focuses mostly on the person who directly causes a loss or breach of law or regulation. In particular, drivers of the vehicles have been judicially prosecuted when road laws are

breached. Enforcement often ignores other participants of the process who might be the cause of non-compliance (Jones, Dorrian, and Dawson, 2003). Prosecution of other transport chain members is uncommon and only takes place when severe breaches are made (National Transport Commission, 2004).

Australia's approach to the regulation of the road freight industry has been, at least until recently, much more focused on the driver of the vehicle than in other countries. Most countries regulate the driver and the vehicle, although some countries go further and also regulate the operator of the road transport enterprise. In some countries, such as the UK, Canada and USA, the responsibility for heavy vehicle road safety resides with the operator of the road transport business. The driver also has an important role to play, but ultimately, it is the operator's responsibility to ensure that, to the best of their ability, the driver and others abide by the rules.

In Australia, authorities have come to realise that focusing on enforcement of regulation is self-defeating, in that the incidence of unlawful behaviour did not reduce. Improving road safety really requires a change in behaviour and regulatory regimes did not achieve this. What was required was a change in culture within the whole industry towards a culture of safety and compliance. After substantial research and deliberations, it was decided that behavioural change would best be achieved through extending accountability, not only to the direct perpetrators, but to all parties in the freight supply chain who exert some control over activities that may constitute an offence.

It was decided to broaden the focus of compliance, which traditionally focused on the 'carrying' and "driving" parts of the road freight supply chain, to also include the other participants such as "consigning", "packing", "loading" and "receiving". This is illustrated in Figure 1.

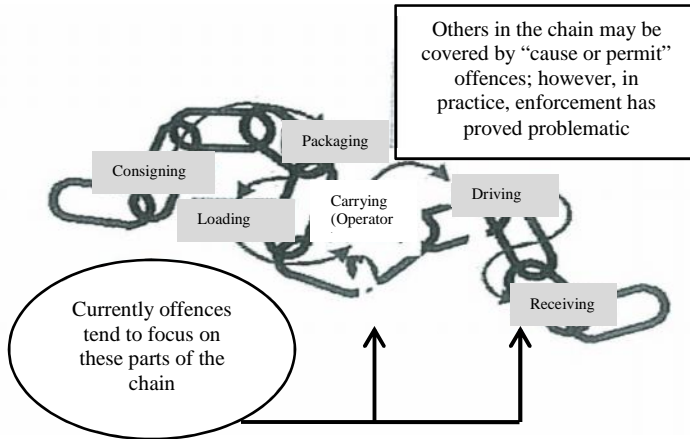


Figure 1: The National Transport Commission chain of responsibility

Source: Corrs Chambers Westgarth (2010)

These realisations have led the Australian regulators to develop a new approach to road freight regulation. The new approach seeks to identify all the parties which have a role in the transport of goods or passengers by road and to make these parties accountable for all their acts and their omissions to act (Bailey and Anderson, 2005). The key aspect of the new approach is to lengthen the chain of responsibility away from drivers and/or operators to include vehicle owners, consignors, consignees and other supply chain members. Each of these parties now has the responsibility to ensure road safety.

2.1 Chain of responsibility regulation

The purpose of the new approach to road freight regulation is the so-called 'Chain of Responsibility' (COR). The Chain of Responsibility increased responsibility and accountability in the road freight supply chain. The legislation identifies the responsibilities of the various parties, makes it clear from the outset what these duties are, and holds participants legally accountable for breaching these responsibilities. The approach applies to all

road transport offences. The extension of the current road freight regulation to include COR is shown in Figure 2.

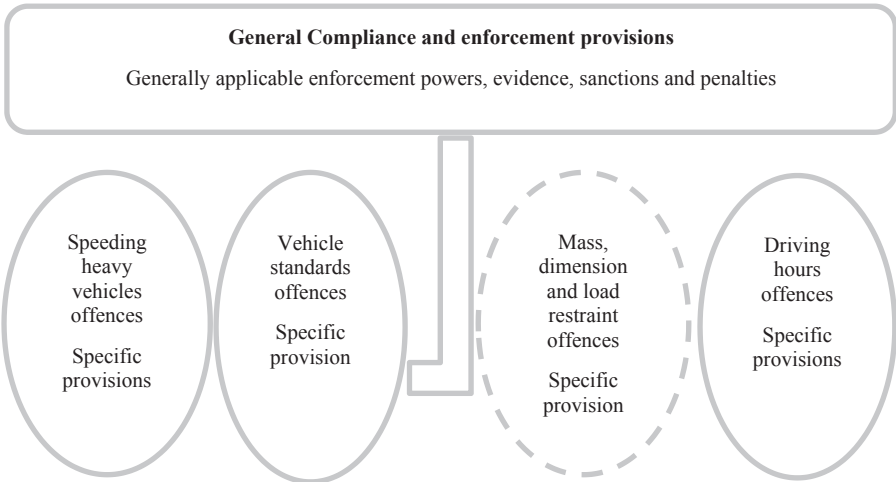


Figure 2: The National Transport Commission Compliance and enforcement provisions

Source: Corrs Chambers Westgarth (2010)

The diagram shows current legislation that covers speeding offences, vehicle standards offences and the number of hours spent driving. The new legislation expands mass, dimension and load restraint offences, and importantly provides an overall framework of general compliance and enforcement provisions. Under the specific Chain of Responsibility provisions, anybody involved in any of the following road transport activities may be held responsible for breaches of the road law:

- Consignors - those who commission the carriage of a load by road;
- Packers - those who place goods in packages, containers or on pallets transported by road;
- Loaders - those who place or restrain the load on a heavy vehicle;
- Drivers - those who physically drive a heavy vehicle;

- Operators and schedulers - those who operate the business that controls the use of a heavy vehicle;
- Receivers - those who pay for the goods or take possession of the load, and
- Employers or managers of the business may also personally be liable for breaches by an employee.

To help enforce the new COR legislation, new powers are introduced for a new Authorised Officer to investigate and enforce the legislation.

The powers of the new Authorised Officer include:

- Entry, inspection and search of vehicles and business premises, both to monitor compliance and where an offence is suspected;
- Power to direct a vehicle to be moved, or to move an unattended vehicle;
- Requiring documents, records or devices to be produced;
- Requiring names and addresses be supplied and drivers' licences to be produced;
- Direct "responsible person" to provide reasonable assistance, and
- Declaring failure to comply with any direction, which is an offence, unless one can establish a reasonable excuse.

The COR also introduces special provisions for mass, dimensions and load restraints. The intention is to regulate breaches of mass, dimension or load restraint that may involve appreciable risk of harm to the public, environment, road infrastructure or public amenity. As not all offences have the same impact on safety or road infrastructure, they are classified according to the risk profile (minor, substantial, and severe). These risk classifications apply to mass, including axel weight, dimensions, and load restraint. Break points for each of these classes and risk levels have been included in the legislation. A cornerstone of the COR is a new set of sanctions and penalties. These are depicted in Figure 3.

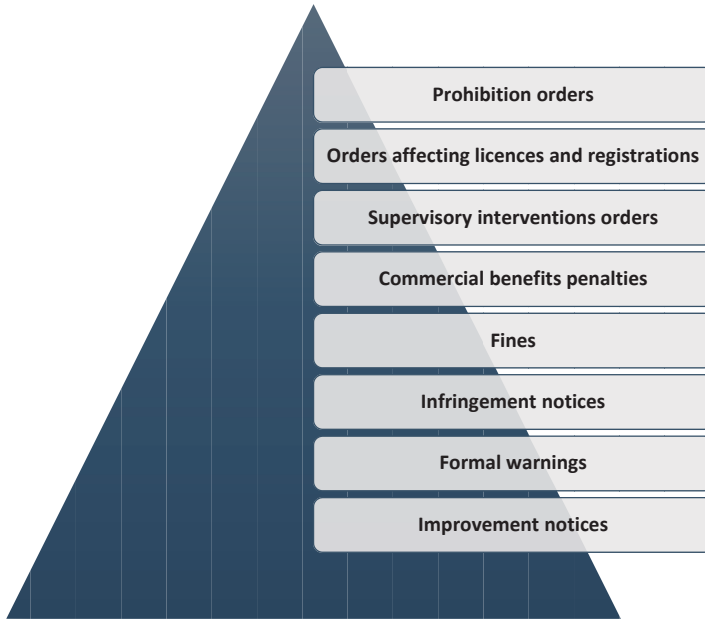


Figure 3: Hierarchy of sanctions and penalties

Source: National Transport Commission (2004)

The sanctions are divided between administrative and court-based sanctions. In particular, it is expected that the administrative sanctions will play a big role in changing behaviour and culture within the road freight industry. The new administrative sanctions include improvement notices, formal warnings and infringement notices; these are non-court based and can be levied by the authorised officer.

Court-based penalties include fines, commercial benefit penalties, compensation orders for damaging roads or infrastructure through overloading, supervisory intervention orders for up to twelve months, licences and registration sanctions, and prohibition orders.

The liability under the COR is extended to personal liability for corporate offences and includes directors, officers, managers and supervisors. In these cases, the employer is held responsible for the employee's offence. In addition, specific whistle blower protections are included for employees and contractors under service agreements.

2.2 Achieving compliance with chain of responsibility

Given the umbrella approach of COR, everyone in the road freight supply chain is required to undertake a number of actions to ensure compliance. For businesses, broad-based actions to improve compliance include:

- Reviewing and adjusting business processes;
- Introducing and implementing risk management procedures;
- Applying for accreditation schemes;
- Developing and integrating an industry code of practice, and
- Changing or aligning existing commercial arrangements.

COR requires that, in the event of an offence, it must be shown that reasonable steps have been taken to avoid a breach. These reasonable steps include:

- Steps taken to weigh or measure the vehicle accurately;
- Steps taken to provide or obtain sufficient and reliable evidence from which the width or measurement of the vehicle is calculated;
- Steps taken to manage, reduce or eliminate a potential breach arising from weather and climatic conditions;
- Steps taken to exercise supervision and control over others involved in activities leading to the breach;
- Measures taken to include compliance assurance in relevant commercial arrangements with other responsible persons;
- Steps taken to provide instruction information training and supervision to employees to enable compliance;
- Steps taken to maintain equipment and work systems to enable compliance, and
- Steps taken to address and remedy similar compliance problems that may have occurred in the past.

3. CHAIN OF RESPONSIBILITY IMPLEMENTATION IN AUSTRALIA

The implementation of COR in other countries bears reference, and this paper, as noted, focuses on Australia. As Australia is a federation, it is up to the member states to implement relevant legislation. The National Transport Commission, which is a national advisory body, has assisted in this process by developing a model bill – the Compliance and Enforcement Bill (C&E Bill). Each State uses the C&E Bill as a starting point and then develops and promulgates their own legislation. To date, all states except Western Australia have passed the relevant legislation. This section will provide a summary of the progress that each state has experienced, with the exception of Western Australia.

3.1.1 New South Wales

NSW has been a forerunner in implementation the C&E legislation under the Road Transport Act 2005 (RTA). The RTA has also implemented a system of heavy vehicle tracking stations. They perform a number of functions including monitoring of heavy vehicle traffic for fatigue management. These are supplemented by the *safe-t-cam* systems, which electronically monitors heavy vehicles for mileage as well as dimension checks over given times.

3.1.2 Victoria

The compliance in Victoria is managed by *VicRoads*. The chain of responsibility had already applied to some extent under driving hours and dangerous goods regulations. New provisions in the Road Safety Act cover the extra compliance and enforcement provisions.

3.1.3 South Australia

South Australia introduced the legislation in 2006 to bring the model of national compliance and enforcement provision into state law involving amendments to the Road Traffic Act of 1961, the Motor Vehicle Act of 1959, and the Summary Offences Act of 1953. These amendment legislations are known as the Statutes Amendment (Road Transport

Compliance and Enforcement) Act of 2006, which came into effect in 2007. It affects all businesses that operate or use heavy vehicle road transport.

3.1.4 Queensland

The Queensland Government (2010) passed the Transport Legislation Amendment Act of 2007, based on the National Road Transport Reform Compliance and Enforcement Bill. The NRTR Bill was developed by the National Transport Commission, in conjunction with representatives from the federal, state and territory road transport agencies, industry groups and other stakeholders (Queensland Government, 2010).

3.2 Examples of implementation

3.2.1 The retail industry: Retail Logistics Supply Chain (RLSC) Code of Conduct

The RLSC Code of Conduct was developed by the Australian Logistics Council, together with representatives from the retail, transport and logistics industries (Australian Logistics Council, 2010). The code defines a minimum requirement, in terms of business standards, and provides a self-audit framework to identify areas of improvement from the consignor to the receiver, taking into account all areas of the Chain of Responsibility (Australian Logistics Council, 2010). Recently, the Australian Trucking Association (ATA) announced its official endorsement of the RLSC Code of Conduct (Logistics Material and Handling, 2008).

The ATA has seen the Code of Conduct as the key support to creating more awareness of the responsibility in conjunction with each member in the supply chain. Importantly, the Code of Conduct aims to contribute and improve the driver's conditions and safety to be in line with the advocacy of the new Chain Of Responsibility laws (St. Clair, 2008). For retail industry implementation, *Woolworths*, and other major players in the retail logistics supply chain such as *Toll*, *Verscold* and *Metcash*, have joined this code (Logistics Material and Handling, 2008). The ATA's subsidiary company *TruckSafe*, is currently one of the three approved auditors for the RLSC. *TruckSafe* is a business and risk management system. It aims to

improve the safety and professionalism of trucking operators and to manage their obligation to take reasonable steps to ensure their subcontractors are compliant with the Chain of Responsibility law.

3.2.2 The Livestock Industry: The development of the Australian Animal Welfare Standards and Guidelines experience

The development of the Australian Animal Welfare Standards and Guidelines for the Land Transport of Livestock (Land Transport Standards and Guidelines), is an attempt to develop consistent animal welfare standards and guidelines in Australia (Witte, 2009). The objective of this standard is to ensure that the conditions of livestock transport on wheeled vehicles are according to animal welfare requirements. The standards and guidelines cover the transport of livestock by road and rail, in a livestock transport vehicle aboard a ship. It applies to the major commercial livestock industries in Australia.

Livestock supply chain begins when livestock is loaded onto a vehicle, and it ends when the livestock is unloaded at the final destination. The Chain of Responsibility for the livestock starts from the owner, then expands the responsibility to the final receiver of the livestock. This includes drivers, transport companies, owners, agents and livestock handlers at farming enterprises, depots, sale yards, feedlots, and livestock processing plants.

The important major topic of the standards that linked to the Chain of Responsibility principle is the concept of “change in ownership” and “transfer of responsibility”. It is vital to define “person in charge”, who is responsible for the livestock transportation, and always has a “duty of care” to ensure the welfare of the livestock along the journey (Witte, 2009).

The chain of responsibility for livestock welfare in the transport process (Department of Primary Industry, 2012), is as follows:

- The **consignor** for the assembling and preparation of livestock, including the assessment and selection as 'fit for the intended journey', feed and water provisions, and holding periods before loading;

- The **transporter** for the journey, which involves loading, the final inspection as 'fit for the intended journey', the loading density, inspections, spelling periods during the journey, and unloading;
- The **receiver** after unloading.

The Livestock Management Act 2010 (LMA) is the primary legislation adopted to ensure all livestock operators involved in the livestock transport comply with the *Livestock Transport Standards*. There will be court penalties and/or infringements for those operators found to be in breach of the standards.

3.2.3 The Steel Industry- The Australian Steel Logistics Safety Code (ASILSC)

BlueScope Steel, One Steel and the Safety Network Group have also established a Code of Practice for the steel industry, The Australian Steel Industry Logistics Safety Code (ASILSC). The purpose of the code is to ensure that all supply chain members are aware of their responsibilities when they manage the transportation of the freight task (Australian Steel Institute, 2010). The purpose of this Code is to provide guidance to the Australian Steel Industry as follows (Steel Transport Safety Network, 2010):

- Controlling, managing, operating and auditing of heavy vehicle road transport freight movements;
- Minimising the risk along the steel supply chain associated with freight movements;
- Complying with the Chain of Responsibility legislation, which imposes liability for heavy vehicle offences on all people and/or businesses whose actions, inactions or demands influence conduct on the road, as well as on-road parties such as drivers and carriers.

The Code encompasses practices in relation to fatigue management, safe loading practices, speed management, vehicle compliance and safety and contractor safety. The code applies to all steel-related business, including their employees, contractors and whoever is involved in the supply chain

and work sites. This may include their consignor, loading, manager, packer, loader, transport operator, driver and receiver.

3.3 The Australian experience to date

Since the initial C&E Bill was developed by the NTC, it has taken almost ten years for most of the Australian States to implement the legislation. To date, some States have still not implemented the legislation – notably Western Australia and Tasmania. Where the legislation has been promulgated, a number of successful prosecutions of severe road law offences have been made under the new Chain of Responsibility legislation that do not include the driver. In NSW alone, the RTA has now laid 2,186 Chain of Responsibility charges against 226 people, including 9 consignees, 59 consignors, 16 company directors, 2 employees, 2 employers, 6 loaders, 127 operators, 1 owner, and 2 responsible persons and schedulers (NSW Transport Roads and Maritime Service, 2012).

Some high-profile convictions include:

- Bartter Enterprise was required to pay more than \$54,000 in fines and costs after being convicted of inducing or rewarding breaches of the road transport law for severe overloading breaches on 31 occasions (Darley, 2009). It was the first successful prosecution under the Chain of Responsibility laws of a company consigning goods (Transport and Logistics News, 2012);
- The first Prohibition order in NSW was handed down to the director of the trucking company Bullin Pty Ltd, accompanied by a personal fine of more than \$160,000. The director was categorised as a “systematic or persistent offender” and charged with 97 mass and dimension offences (Roads and Traffic Authority NSW, 2009). The company was also banned from engaging in any business that involves moving to, or from, a NSW road (Transport and Logistics News, 2012);
- Sims Group Holdings, pleaded guilty in Victoria to a charge of failing to secure a load of steel as a consignor (Freeston, 2010);

- A NSW Coal mine, LakeCoal, was required to pay more than \$238,000 in fines and costs after pleading guilty to multiple breaches as a consignor (Gardner, 2010);
- Fred's Interstate Transport was fined \$12,000 and was ordered to install equipment on all of its fleet to the cost of \$400,000, due to the continuous breaches of loading regulations (Australian Transport News, 2009);
- Manway Leading Edge Logistics was fined \$300,000, and the company was required to pay compliance costs of \$400,000 (Australian Transport News, 2009);

These successful prosecutions have marked the beginning of a substantial force in enhancing industry safety compliance. This has sent a strong message to the transport industry, and made them aware of the consequences of unlawful practices. They consequently place a barrier for those who put their commercial interests ahead of the safety of transport chain members and road users (Roads and Traffic Authority NSW, 2009). Furthermore, companies also have to ensure that their subcontractors have systems in place to ensure compliance (*TruckSafe*, 2012).

3.4 Lessons for other countries

Even though the COR regulations are still being implemented in the various Australian States, the initial experience shows that substantial benefits can be achieved through the implementation of the new approach. Some of the benefits are the following:

- The COR requires a different way of approaching safety and accountability in the road freight supply chain. There is a move away from individual accountability to a collective responsibility and accountability. This has substantial benefits for the industry and society;
- A cultural change can be achieved through a new approach to regulation;
- When major change is introduced, a supportive environment needs to be developed for some time to facilitate the new approach;

- A combination of administrative and court-based sanctions is best to enforce the new regulations, and
- Substantial political leadership is required to implement major reform. This will only be successful if it can be shown that there are substantial benefits to society.

4. CONCLUSION

This paper provided an overview of a new approach to road freight regulation that is currently being implemented in Australia. Traditional regulation, focusing on the driver, or to some extent, the operator of the transport business, has not resulted in a culture of focusing on safety within the industry. Australia has, therefore, embarked on a regulatory reform programme which focuses on a “chain of responsibility”, requiring every member of the road freight supply chain to take responsibility for safety.

Although the COR legislation is still being implemented, initial indications are that a shift in attitude towards safety is occurring. Instead of individual responsibility to safety, a more collective approach to safety is being observed. This should over time translate to reduced safety incidents with overall improvement in road travel behaviour in the industry. Other countries could benefit from reviewing the change in regulation in Australia and assessing the applicability of the Chain of Responsibility regulation within their jurisdictions.

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