

Understanding Transport Costs and Charges

Phase two - Costs of freight transport: Legislation and freight transport

Prepared by Financial and Economic Analysis Team, Ministry of Transport
ISSN 1173-6712

MAY 2011



1. Introduction

The efficient movement of freight is important to the prosperity of the New Zealand economy. Various legislative measures have been put in place to maximise the socio-economic wellbeing of society by reducing the external impacts of freight transport, such as its effects on safety and air quality. The challenge for the government is to determine an appropriate level of intervention.

To this end, the government has already begun reviews of the effectiveness of important regulatory regimes¹. The purpose of this paper is to understand the effects of existing legislation on supply chain efficiency for domestic road, rail and sea transport.

During March and April 2010, the Ministry interviewed representatives from ten key businesses and industries to better understand the relative importance of transport costs in freight logistics². In the follow-up business survey, participants identified three key pieces of legislation as having an important influence on the efficiency and effectiveness of transport logistics. This paper explores the impacts of these pieces of legislation on supply chain efficiency.

- **Case study 1** – The influence of section 198 of the Maritime Transport Act 1994 on freight transport costs. This Act specifies who can provide coastal shipping services for New Zealand.
- **Case study 2** – The differences in tax requirements between domestic and international shipping operators and their influence on freight transport costs.

- **Case study 3** – The influence of the emissions trading scheme (under the Climate Change Response Act 2002) on freight transport costs.

This paper is organised as follows:

- section 2 clarifies the scope of this paper
- section 3 provides some background about legislation
- section 4 provides an overview of the legislation that affects freight transport
- sections 5 to 7 look at the above three case studies
- section 8 draws out some conclusions.

2. Scope

This paper focuses on the impacts of legislation on supply chain efficiency and investigates the legislation that is perceived as having an important influence on the freight sector.

This paper does not seek to carry out a full review of all legislative measures that apply to freight transport.

¹ Source: The New Zealand Treasury's website (<http://www.treasury.govt.nz/economy/regulation/statement/statement>)

² MOT (2010)

3. Background

3.1 Definitions

3.1.1 Legislation and regulation

There are three main types of New Zealand legislation³:

- Acts of Parliament (or Statutes)
- Statutory Regulations (including Rules)
- other subordinate legislation (including deemed regulations)

Acts of Parliament are laws made by the New Zealand Parliament. There are three main types of Act, namely public Acts, local Acts and private Acts. Examples of transport-related Acts include the Maritime Transport Act 1994, the Land Transport Act 1998 and the Railways Act 2005.

Statutory Regulations are delegated legislation⁴, which are made under the authority of an empowering Act. Statutory Regulations generally consist of laws made by the Governor-General (secondary legislation), Ministers of the Crown, and certain other bodies under powers conferred by an Act of Parliament (tertiary legislation)⁵.

Statutory Regulations may not necessarily have the word 'regulations' in their title. They may instead be called orders, rules, notices, determinations, proclamations, or warrants. However, Statutory Regulations are generally referred to as 'regulations'.

Regulations deal with a vast array of subject matter⁶ and usually provide the

details necessary for the implementation of a law, or matters that are subject to frequent revision, which therefore do not have to go back to Parliament each time they are changed.

This paper refers to all legislative instruments, including regulations, as 'legislation'.

3.1.2 Regulatory framework and legal framework

A 'regulatory framework' is the collection of Acts, laws and regulations that outlines the legal requirements to be met. These may also be complemented by policies, standards, directives and guidelines.

A 'legal framework' is the core of the regulatory framework and includes all the legal requirements that are included in legislation.

This paper uses the term 'regulatory framework' as the broader of the two terms.

3.2 Better regulation

In August 2009, the government announced its statement of "Better regulation, less regulation" to highlight the need to ensure regulations are clearly conceived and implemented in such a way as not to hinder individual freedom, innovation and productivity.

Better regulation is about removing unnecessary costs while maximising the net benefit for society. Good regulation can

- reduce the administrative burden
- reduce the direct and indirect costs of the regulation

ensuring the economy has a competitive environment.

³ Source: <http://www.pco.parliament.govt.nz/about-legislation/> and Burrows (2009)

⁴ Malone and Miller (2009).

⁵ Source: Interpretation Act 1999 and Regulations (Disallowance) Act 1989.

⁶ For example, for the issuing of licences or permits, setting the levels of fees, making transport safety-related requirements, managing our environment and

- make compliance easier
- drive behavioural change
- improve the quality of the services delivered by the regulated sectors
- encourage a more positive perception of regulation

Minimising the use of detailed and prescriptive requirements, without compromising the degree and level of compliance, is an example of making better regulation.

The characteristics of a good regulation are that it:

- has a clear objective
- is targeted to the problems identified
- is proportionate to the size, scale and scope of the problem
- addresses the problem with minimal national costs
- clearly defines accountabilities between the regulators and those being regulated
- is responsive to changing technology, industry needs and community expectations

These characteristics are consistent with what the UK's Department for Business Innovation and Skills (2009) considers as important in making better regulations, namely:

- making regulations in order to become more risk based
- simplifying and modernising existing regulations
- improving the design of new regulations and how they are communicated

The Ministry has recently commenced the Regulatory Reform Programme (RRP) to

advise the government on what aspects of the regulatory framework need to change in order to be responsive to long-term industry, technological and demographic trends for all modes of transport. The RRP will focus on the legislative instruments that fall under the transport portfolio. This paper does not form part of the RRP but does inform the RRP regarding the impacts of some of the specific legislation on freight transport.

3.3 Regulatory intervention

3.3.1 Rationale

The government regulates mainly for public interest reasons and some of the rationales of legislation are related to 'market failure'⁷. Market failure may be a legitimate reason for intervention but it is not in itself sufficient. The standard economic reasons for government's intervention in transport include the following.

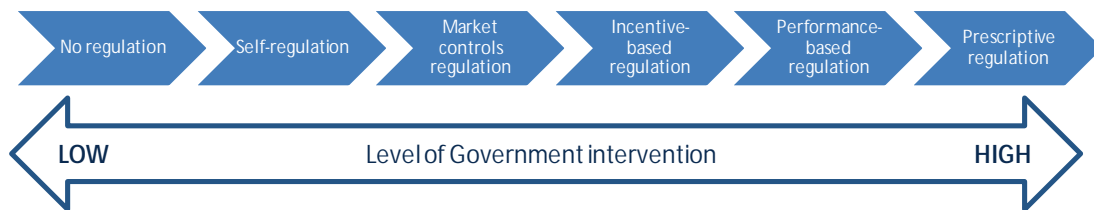
- Anti-competitive behaviours that can limit the choice of transport service providers available to the public.
- Monopolies and natural monopolies that result in higher prices and lower output.
- The provision of boundaries for state-owned enterprises, or Crown entities, regarding their roles and legislative powers.
- The presence of benefits or costs that are not borne by those who take part in the activities resulting in inappropriate demand for, and supply of, transport.
- The non-excludability of users due to the public good nature of road transport infrastructure resulting in free riding problems.

⁷ Baldwin & Cave (2002)

- Information inadequacies or asymmetries that impede transport users from making appropriate decisions (eg vehicle purchase decisions).
- For social reasons, the government may also want to maintain the continuity and availability of services (eg public transport for remote communities).

Regulation and legislation provide a formal channel for: organising funding and charging; prescribing various standards and rules; and prescribing the roles and obligations of government agencies, service providers, operators and individual transport users. Many of the points discussed above apply to the freight transport sector.

Figure 1: The regulatory spectrum



3.3.2 Range of regulatory intervention

There are six broad categories on the range of regulatory options (Figure 1) for the transport sector.

- **Laissez-faire (ie free from regulation)** – The government can intervene via education⁸ and information⁹ provision without intervening in the market. The government may also wish to deregulate previously regulated markets to allow them to operate in a market environment. For example, the Transport Amendment Act 1993 was introduced to provide an orderly phase-out of the 150 kilometre rail protection by allowing freight owners to use road transport.

⁸ For example, Safe and Fuel Efficient Driving New Zealand, a driver development course for truck, bus and coach drivers, has been developed to help organisations reduce fuel and maintenance costs, reduce CO₂ emissions and improve safety.

⁹ For example, the fuel economy labelling regime that was introduced in 2008 to bridge the information gaps relating to vehicle fuel consumption in order to influence vehicle purchase decisions.

- **Self-regulation** – Some interventions can be implemented by having the government oversee the regulation, but the participants self-regulate themselves. An example is the Health and Safety in Employment Act's concept of taking 'all practicable steps'. This Act aims to ensure the health and safety of people who are responsible for work safety and that of others through self-regulation.

This type of regulation recognises the fact those being regulated have their own interest in making the system work. It can be more flexible and usually does not require Statutory Regulations. A key disadvantage is that self-regulation is more difficult to enforce and monitor.

- **Market controls regulation** – Common market-based regulations include competition laws (eg the Commerce Act 1986), price-quality regulation (eg the Emissions Trading Scheme or ETS) and information disclosure regulation (eg Airport

Companies Information Disclosure regulations).

These regulations minimise the need for government intervention¹⁰.

However, they can only be applied to issues with market solutions and can be costly to administer.

- **Incentive-based regulation** – This type of regulation provides a system of reward and sanction in an attempt to modify the behaviour of those being regulated. The proposed Operator Safety Rating (OSR) system¹¹ that will be applied to heavy vehicle operators has such an element. Under the proposed OSR, the safety rating information will be used for police enforcement activities to target high-risk operators and activities.

This type of regulation allows a degree of flexibility for those being regulated to decide on the level of compliance, based on the system of reward and sanction. The success of such a scheme relies on a well-designed reward and sanction regime.

Incentive-based regulation may incur high monitoring and enforcement costs.

- **Performance-based or goal-based regulation** – This type of regulation sets goals and the performance required, and allows the adoption of any appropriate means to achieve compliance. An example of this type of regulation is international standards of ship construction¹².
- **Prescriptive regulation** – This type of regulation imposes standards backed up by legal sanctions if certain

requirements are not met. The law is used to prescribe the types of actions or activities that are prohibited, and standards are set to prescribe the minimum requirements to be met. Many vehicle safety rules fall into this category.

The main advantage of this type of regulation is that limits or standards can be clearly defined at a high level of detail. However, the key drawbacks are that such regulation can be complex, inflexible and overly intrusive. It is often difficult to draw up precise rules that can also be responsive to a changing environment. The complexity of the rules can also make enforcement difficult.

When prescriptive requirements exist in the form of guidelines and standards that sit outside the legal framework, compliance issues are resolved under the regulatory framework, which typically consists of monitoring, enforcement, information provision and education components.

¹⁰ O'Driscoll and Hoskins (2006)

¹¹ The OSR system (to be implemented in 2012) will also apply to bus operators, which are outside the scope of this paper.

¹² Hoppe (undated).

4. Freight transport-related legislation

This section provides an overview of the legislation that affects freight transport. Legislation that applies to all transport modes is discussed in Section 4.1. Sections 4.2 to 4.4 discuss mode-specific legislation.

4.1 Multi-modal

Apart from transport legislation, transport infrastructure and service providers are also subject to other legislative requirements that aim to regulate company compliance, resource management, and health and safety in employment (see Table 1). Such legislation can have various degrees of direct and indirect impacts on the performance of the domestic freight sector. Some examples are as follows.

- **Carriage of Goods Act 1979** – This Act restates and reforms the law relating to the carriage of goods within New Zealand. The Act clarifies the liabilities of carriers (ie freight operators) and their employees, the rights of carriers, the actions that can be undertaken by consignors (eg freight owners) against carriers. This Act protects the rights of the freight owners and those of freight operators in case of any disputes.
- **Climate Change Response Act 2002** – This Act was amended in December 2009 and the Emissions Trading Scheme (ETS) is now in operation. Domestic freight operators do not participate directly in the ETS but will face additional costs associated with the scheme, estimated at three cents per litre of fuel¹³ their vehicles consume.

¹³ This is based on \$12.5 per tonne of carbon dioxide equivalent (CO₂-e).

Transport currently accounts for just over 40 percent of total national CO₂-e emissions¹⁴. The impacts of the ETS on freight transport costs will be discussed in Section 7.

- **Commerce Act 1986 and Companies Act 1993** – These Acts are important for prescribing the obligations of companies and for affirming the value of the company as a means of achieving economic and social benefits through the aggregation of capital for productive purposes.

Section 6 of the Commerce Act 1986 provides that “This Act applies to every body corporate that is an instrument of the Crown in respect of the Government of New Zealand engaged in trade.” Therefore, this Act applies to all transport modes, including KiwiRail.

Registered company operators have a responsibility (and their directors have a potential personal liability) under the Companies Act 1993 to ensure company compliance with approved safety standards. The Companies Act 1993 applies to all transport companies. But it does not apply to New Zealand Railways Corporation (NZRC), trading as KiwiRail. NZRC is a statutory corporation pursuant to the New Zealand Railways Corporation Act 1981, and a state-owned enterprise under the First Schedule of the State-Owned Enterprises Act 1986.

However, a number of NZRC subsidiary companies (eg Ontrack Infrastructure Limited and KiwiRail

¹⁴ In 2009, road transport accounted for 12,386 kilo-tonnes (or 40%), maritime transport accounted for 300 kilo-tonnes (or 1%) and rail transport accounted for 166 kilo-tonnes (or 0.5%). Source: Ministry of Economic Development (2010).

Holdings Limited) are registered as companies and therefore are subject to the Companies Act 1993.

- **Health and Safety in Employment Act 1992** – This Act emphasises the systematic management of health and safety to prevent harm to all persons at work and other persons in or around places of work. The Act applies to all New Zealand workplaces, and places duties on employers, the self-employed, employees, principals and others who are in a position to manage or control hazards. The Act requires employers and others to maintain safe working environments, and implement sound practice.

The New Zealand Police work with the Department of Labour to enforce the Act in relation to commercial vehicles. For freight transport companies, this health and safety requirement may add minor compliance costs to operators for meeting necessary standards and procedures regarding the operation of vehicles and places where the loading and unloading of cargo takes place (eg wharves).

- **The Resource Management Act 1991** – This Act sets out the functions, powers and duties of local government, and the resource consent and designation process. When building or maintaining the transport network, the RMA requires road controlling authorities to avoid, remedy or mitigate adverse environmental effects caused by the infrastructure.

Furthermore, local authorities have the power under this Act (through local district scheme requirements) to impose limits on noise levels and emissions and apply other

requirements. These restrictions can influence freight schedules and travelling speeds on certain sections of a freight route.

A resource consent from the relevant council is required if an activity is not allowed in the relevant district or regional plan. The RMA process can indirectly affect the freight sector if it creates additional delays to network construction, or to improvements that aim to increase freight transport efficiency.

The RMA was reviewed in 2004 and 2009 to simplify and streamline the plan development process and to establish specific approval processes for proposals of national significance.

In early 2010, the government appointed two Technical Advisory Groups to review policies relating to urban design and infrastructure. The Ministry for the Environment is currently analysing whether improvements could be made in the land use and transport planning areas. Such improvements could help to improve freight transport efficiency by reducing the interactions between different traffic mixes and improving network connectivity.

- **Regulations related to fees and charges** – The key purposes of these regulations are to allow the recovery of the government costs of providing certain services. As part of the wider value-for-money review of the government sector, Maritime New Zealand, the Civil Aviation Authority and the NZ Transport Agency are reviewing the effectiveness and efficiency of their fees and charges regimes as well as their business operation models.

Table 1 Key generic legislation that affects the freight transport sector (all modes)

Name of legislation and/or enabling Act	Description	Relevance to transport
Climate Change Response Act 2002	This Act provides for the implementation, operation and administration of a greenhouse gas emissions trading scheme in New Zealand that supports and encourages global efforts to reduce greenhouse gas emissions.	Environment and international obligations
Commerce Act 1986	This Act promotes competition in markets for the long-term benefit of consumers within New Zealand.	Competition
Companies Act 1993	This Act provides basic requirements for the incorporation, organisation, and operation of companies and defines the relationships between actors involved.	Company compliance
Customs and Excise Act 1996	This Act reforms the law relating to customs, excise, and other duties (such as accident compensation levies). It also provides for the administration and enforcement of Customs controls at the border. This Act also provides for making regulations relating to customs and excise matters.	Petroleum Excise Tax and Customs control
Energy (Fuels, Levies and References) Act 1989	Clauses 22 and 24 of Part 3 of this Act prescribe the levies payable on the use of electricity, petroleum or engine fuel (eg marine diesel) at point of sale.	Electricity and petroleum fuels monitoring levies
Goods and Services Tax (GST) Act 1985	This Act makes provision for the imposition and collection of goods and services tax. All transport fees and charges are subject to GST.	Goods and Services Tax
Health and Safety in Employment Act 1992	This Act promotes the prevention of harm to all persons at work and other persons in, or in the vicinity of, a place of work. The 1992 Act was extended in 2002 to cover maritime, rail and air industries and people who are in vehicles for work. The HSE requirements for the maritime sector are administered by Maritime New Zealand.	Health and safety
Income Tax Act 2004	This Act defines and imposes tax on net income; obligations concerning tax and sets out rules for calculating tax and for satisfying the obligations required.	Taxation
Injury Prevention, Rehabilitation, and Compensation Act 2001	This Act provides a fair and sustainable scheme for managing personal injury to minimise the impact and the overall incidence of injury in the community. The Act also prescribes the management of the scheme and the duties of the Accident Compensation Corporation (ACC) regarding levy collection and claims management. ACC levies are payable for motor vehicle accounts, income accounts and employer accounts.	Accident Compensation Corporation Levy
Resource Management Act 1991	This Act restates and reforms the law relating to the use of land, air and water. The Act was reviewed in 2004 and 2009 and an Amendment Act was passed to improve the operation of the Act to achieve better national consistency and speed-up decision-making on resource consents.	Environmental
Transport Accident Investigation Commission (TAIC) Act 1990, and TAIC Amendment Act 1992	These Acts establish and define the functions, duties and powers of the Transport Accident Investigation Commission. These Acts cover aviation, rail and maritime transport that are defined under the Civil Aviation Act 1990, Railways Act 2005 and Maritime Transport Act 1994. The Acts give the TAIC the power to investigate any accidents or incidents that are likely to have significant implications for transport safety, or allow the TAIC to make recommendations which may increase transport safety.	Safety

4.2 Rail freight transport

While much of the legislation is established from a whole of transport perspective, separate legislation is needed for mode-specific requirements.

The key purposes of legislation that apply to rail freight operators and infrastructure are to clarify the requirements for safety, environment, rail operations and the performance and accountability of the

state-owned rail enterprise (ie KiwiRail Group) (see Table 2). At the time when legislation was passed, rigorous regulatory impact assessments were made to ensure the social benefits outweighed the compliance costs of the legislation. In cases where legislation may need to be extended or removed, similar assessments are required to ensure any change would deliver net benefits to the nation.

Table 2 Key regulations that affect rail freight transport

Name of Legislation and/or enabling Act	Description	Relevance to transport
Electricity Act 1992	This applies to all railways/tramways using electric overhead power for their operation, and to the repair and maintenance of electric drive motors, electrical control systems and other appliances.	Repair and maintenance related to electric overhead power
Land Transport (Road User) Rule 2004 – under the Land Transport Act 1998	This Rule affects the operation of any railway or tramway that occupies a public road as all or part of its route; and imposes obligations on road users at a road/rail crossing.	Road and rail safety
Land Transport Rule: Dangerous Goods	This Rule applies to rail transport.	Safety carriage of dangerous goods
New Zealand Railways Corporation Restructuring Act 1990	This Act enables the NZ Railways Corporation to be restructured and to provide for the vesting in companies incorporated under the Companies Act 1993 and in the Crown of railways assets and liabilities. This Act amends the New Zealand Railways Corporation Act 1981, which establishes a corporation to maintain, operate, and develop the services previously carried out by the NZ Government Railways Department.	Railways corporation operation
Railways Act 2005	This Act sets out the requirements for the licensing of rail (including both light and heavy railways) operations in New Zealand. It also includes basic safety obligations of operators and the general public when near a railway, as well as the powers the railway operators have to protect and manage the railway corridor.	Safety and operation
Railways Regulations 2008 – under Railways Act 2005	The Railways Regulations 2008 prescribe the fees and charges payable for the purposes of meeting the costs and expenses incurred by the NZ Transport Agency in the exercise of its functions under the Railways Act 2005. The fees and charges include annual licensing, safety assessment fees, fees applying to access providers and operators.	Fees and charges
State-Owned Enterprises Act 1986	This Act specifies principles governing the operation of State enterprises; authorises the formation of companies to carry on certain Government activities and control the ownership thereof; and establishes requirements about the accountability of State enterprises, and the responsibility of Ministers.	State enterprises performance and accountability

4.3 Road freight transport

Much of the legislation that applies to heavy vehicles aims to minimise the safety and, to a lesser extent, environmental impacts of heavy vehicle operation (see Table 3). However, the following legislation can have effects on the supply chain performance of the road freight sector.

- **Road User Charges Act 1977 –** Road user charges (RUC) are perceived as a major cost component for road freight transport, especially for low value heavy freight. It has been estimated that RUC represents between 8 and 10 percent of total operator costs¹⁵. The use of electronic distance recorders will make RUC purchasing easier and reduce compliance costs. The Ministry is working on a package of proposed reforms to simplify the RUC system. The review of the RUC system is intended to make the system easier to understand and fairer to all those who pay RUC.
- **Land Transport Rule: Vehicle Dimensions and Mass 2002 –** Under this rule, oversized vehicles must meet certain travel time restrictions (e.g. during peak hours and public holidays) so that they do not cause unreasonable delay to other road users¹⁶. If the swept path performance of a heavy vehicle has been verified, it is possible to obtain permission to operate during the travel restrictions. However, having this extra verification procedure can be seen as onerous by the agriculture industry especially during harvesting seasons. From the national benefit perspective though, the cost of delays to society and businesses can be

very high without such travel time restrictions.

Prior to May 2010, the heaviest permitted weight without a permit was 44 tonnes and vehicles could not exceed 20 metres in length. To increase heavy vehicle productivity, a permit system was set up in May 2010 to allow certain vehicles to operate at between 44 and 53 tonnes on certain routes.

The Rule was amended in 2010 to allow some increases in vehicle lengths to allow certain vehicles to operate without the need to obtain a permit (eg logging trucks that already operate at 22 metres overall length). Some businesses believe there would be further productivity gains if the permitted weights or dimensions were to be further increased, or the coverage of the routes was further expanded.

A large proportion of the road network and infrastructure (such as some bridges) is not designed to carry heavier or longer vehicles. Therefore, increases in vehicle dimension and mass limits have safety and road wear implications. The NZ Transport Agency is working with regional councils to identify potential High Productivity Motor Vehicle (HPMV) routes that may be used by the industry in the near future.

- **Land Transport Rule: Work Time and Logbooks 2007 –** This rule limits the number of hours that can be worked by drivers of heavy vehicles and some commercial light vehicles (such as taxis). The intention of this rule is to reduce fatigue-related crashes. However, the paper logbooks requirement can add minor compliance cost to operators. On 1

¹⁵ RTF (2006)

¹⁶ NZTA (2009)

January 2010, legislation was passed to enable the use of electronic distance recorders. Some of these recorders also have the ability to monitor and record vehicle activity such as driving hours.

- **Land Transport Rule: Operator Safety Rating 2008** – This Rule is scheduled to be implemented around mid-2012. Under this rule, the New Zealand Transport Agency will publish all operator ratings on the internet, so that potential customers can make informed choices about which operator they use.

Under the Chain of Responsibility legislation (Part 6C of the Land Transport Act 1998), all the people who influence drivers' behaviour and compliance are held accountable if that influence results in non-compliance with traffic rules and laws. Therefore, operators with a high rating can be expected to have better business opportunities because safe operation of vehicles can reduce cargo owners' exposure to risk of non-compliance. The threat of losing customers would provide incentives for operators to improve their safety performance.

Table 3 Key legislation that applies to road freight transport

Name of Legislation and/or enabling Act	Description	Relevance to transport
Heavy Motor Vehicle Regulations 1974	The Regulations set out the requirements and standards relating to heavy vehicles and their operation.	Safety
Land Transport Act 1998 and its amendments	This Act promotes safe road user behaviour and vehicle safety; provides for a system of Rules governing road user behaviour, the licensing of drivers and the technical aspects of land transport. Land Transport Rules that affect heavy vehicle operations are listed in the Annex.	<ul style="list-style-type: none"> • Registration, licensing and fees and charges • Safety and environmental
Road User Charges Act 1977 & Road User Charges Regulations 1978	The RUC Act imposes a charge for the use of roads by heavy vehicles and certain other vehicles. The RUC Regulations prescribes a range of matters relating to administration of the RUC system, including licence, hubodometer requirements and exemptions.	Fees and charges
Transport Services Licensing Regulations 1989	This Act provides for fees payable for transport service licenses.	Fees and charges

4.4 Maritime freight transport

Much of the legislation that applies to maritime operators and infrastructure providers focuses on competition, health and safety, the environment and international obligations (see Table 4).

Table 4 Key legislation that applies to maritime freight transport

Name of Legislation and/or enabling Act	Description	Relevance to transport
Biosecurity Act 1993	This Act provides a legal basis for excluding, eradicating and effectively managing pests and unwanted organisms, and its powers can be variously used by Biosecurity New Zealand, other government agencies, regional councils and pest management agencies. It is an enabling tool that provides a range of functions, powers and options for the management of risk organisms.	Management of risk organisms
Maritime Security Act 2004	This Act enables New Zealand to meet its international maritime security obligations; enhances ship and port security and prevents international terrorism.	Safety and security
Maritime Transport Act 1994	This Act consolidates and amends maritime transport law; enables the implementation of New Zealand's obligations under international maritime agreements relating to carriage of goods by sea, limitation of liability, salvage and compensation for oil pollution damage and various international conventions. The Act includes a number of regulations such as: <ul style="list-style-type: none"> • Marine Safety Charges Regulations 2000 • Maritime (Offences) Regulations 1998 • Maritime Transport (Certificates of Insurance) Regulations 2005 • Maritime Transport (Fund Convention) Levies Order 1996 • Oil Pollution Levies Order 1998 The Act includes section 198, setting out the economic requirements for carriage of coastal cargo. It also provides for making of maritime transport rules setting out specific requirements for the safety and security of ships and people and for the protection of the marine environment.	International obligations, health, safety and environmental
Maritime Transport Rule: Dangerous goods	Part 24A of the Maritime Transport Rule prescribes the requirements for the packaging, handling and transporting of dangerous goods by sea, domestically and internationally.	Safety carriages of dangerous goods
Port Companies Act 1988	This Act provides for the formation of port companies to carry out port-related commercial activities and control the ownership thereof; establishes requirements concerning the accountability and ownership of such companies.	Port operations
Shipping Act 1987	This Act aims to promote fair dealing and safeguard competition in New Zealand's outwards shipping services, and discourage discrimination against New Zealand shipping and trading interests by foreign governments. It exempts outwards shipping services from the Commerce Act 1986.	Competition
Ship Registration Act 1992	This Act provides for the registration of ships in New Zealand and related matters, and Shipping (Fees) Regulations 2000 and Shipping (Charges) Regulations 2000.	Registration, fees and charges

The high level of involvement by international participants in the maritime sector means understanding of (and, where appropriate, alignment with) international requirements can be important, both for accessing overseas markets, and for minimising additional compliance costs to participants due to ambiguity about operational requirements.

The following legislation can have effects on the supply chain performance of the maritime freight sector.

- **Shipping related legislation** – Under Section 198 of the Maritime Transport Act 1994, international shipping lines can trade on New Zealand's coast whilst in the process of embarking and disembarking passengers or loading and unloading foreign cargo. This is seen as important to increase the frequency and the number of trade routes served at ports. This legislation will be discussed in detail in Section 5.

Overseas shipping lines are exempted from some New Zealand taxes, and some lines may also receive foreign assistance from their own governments. Therefore, domestic shipping operators consider that the asymmetry in government taxes and compliance costs between domestic and international carriers disadvantage their operations. The taxation issue will be discussed in detail in Section 6.

- **Ports related legislation** – The Port Companies Act 1988 provides for ports to be operated as commercial enterprises, recognises local authority ownership of ports, and allows for such ownership to be sold. Port companies are subject to the Commerce Act, and therefore may

not engage in anti-competitive behaviour.

The market power of New Zealand ports was reviewed twice by Charles River Associates (CRA) Limited in 2002 and in 2005¹⁷. In summary, CRA found that the New Zealand ports industry was generally competitive and that they were not achieving excessive levels of profitability. They concluded that market power of ports was limited (mainly to a few bulk cargoes and to Cook Strait traffic) and therefore there was not a strong case for government intervention on an industry-wide basis.

Some commentators argue that inter-regional competition between ports has led to duplication of port infrastructure investment and unsustainable price competition. However, claims about excessive investment in ports have existed for many decades (eg Ross, 1977 and Reveley and Tull, 2002)¹⁸, regardless of whether ports were locally or centrally planned. Among other things, Reveley and Tull (2002) noted the duplication of container terminals across New Zealand ports despite the New Zealand Ports Authority, largely due to regional interests.

In a business survey on the relative importance of transport and logistics costs, MOT (2010) found that, on average, port charges account for around six percent of total logistics cost for the surveyed freight owners.

- **Biosecurity Act 1993** – Under this Act and the Biosecurity (Costs) Regulations 2003, Ministry of

¹⁷ Charles River Associates Ltd (2002) and Charles River Associates Ltd (2005)

¹⁸ Ross, John (1977 and Reveley, J and Tull, M (2002).

Agriculture and Forestry charges biosecurity-related clearance fees for providing inspections of ships, approval or audit of transitional facility. Costs are payable for a range of imported cargoes including sea containers, used vehicles, machinery, primary produce, animals and logs.

5. Case study 1 – Section 198 of Maritime Transport Act 1994

Section 198 of Maritime Transport Act 1994 prescribes the conditions under which New Zealand and foreign ships may carry coastal cargo, and the penalties for breaching these. In effect, the section is a compromise between a ‘closed coast’ and an ‘open coast’.

The term ‘coastal cargo’ refers to goods loaded for carriage from one New Zealand port to be unloaded at any other port in New Zealand, and to passengers embarked for carriage from one New Zealand port to be disembarked at any other port in New Zealand.

5.1 The issue

When the Transport Law Reform Bill 1993 (later the Maritime Transport Bill 1994) was developed to introduce qualitative licensing¹⁹ in maritime transport services, the Bill also repealed the provisions that, in effect, protected the carriage of coastal cargo by local operators from overseas operators. To reduce the unintended negative impacts on local operators, section 198 of Maritime Transport Act was amended to allow only limited access for foreign ships to carry coastal cargo.

¹⁹ Qualitative licensing refers to a licensing regime that seeks to control the standards required to carry out activities competently. In the mid to late 1980s, the government began a series of economic reforms to improve the performance of the New Zealand economy. One of these reforms was to move away from quantitative licensing (control/limit the number of suppliers in an industry) to qualitative licensing.

Rather than allowing foreign ships to carry coastal cargo ‘anytime and anywhere’ in New Zealand, they could do so only during the domestic leg of an international voyage to load exports or unload imports at New Zealand ports.

This legislation allows New Zealand shippers to benefit from any spare capacity in foreign ships that are visiting New Zealand for the purpose of international trade, while still protecting local operators from foreign ships coming to New Zealand mainly to operate full time in coastal trades.

There are two counter arguments for and against this legislation. Firstly, foreign vessels tend to be more competitive in terms of freight rates (due to differences in ship sizes, labour costs and taxation obligations). Therefore, any legislation that restricts the supply of foreign ships available for coastal trade can be seen as restrictive by freight owners. On the other hand, from local operators’ perspective, there is a degree of unfair competition given the differences in the taxation obligations, cost levels and overseas government assistance between foreign and domestic operators. The taxation issue will be discussed in detail in Section 6.

5.2 The impacts

While no formal review of Section 198 of the Maritime Transport Act 1994 has been conducted, the following developments in the industry have been observed.

- **Domestic coastal ship fleet** - The number of locally-operated ships providing dedicated coastal services (general cargo, interisland services and bulk cargo) has remained relatively static over time (there were 14 dedicated coastal ships in 1990 compared to a total of 14 in 2000 and

16 in 2009²⁰). This means the coastal shipping legislation did not reduce the local coastal shipping fleet, but it may have reduced some potential growth in the local fleet through coastal cargo diverted to overseas ships.

Furthermore, there has been a significant change in the composition of locally-operated coastal shipping fleet. There are fewer bulk cargo vessels, and more inter-island and general cargo vessels. Since coastal shipping legislation had little or no impact on bulk cargoes, it is possible that the change in composition of the local fleet may have happened irrespective of the legislation.

- **Coastal services availability** – There are at least eight foreign carriers carrying coastal cargo, increasing coastal shipping services to main, regional and local ports. In 2009, foreign carriers provided around 37 percent of all direct port-to-port weekly visits between New Zealand ports and around 35 percent of the corresponding twenty-foot equivalent unit (TEU) slots²¹.
- **Competition** – A majority of the cargo carried by foreign operators was from north to south, increasing competition in the associated routes and reducing ocean freight rates generally by around 25 percent²².

However, while foreign carriers had a competitive edge on price and in non-time sensitive cargo, domestic carriers had a competitive edge on service levels and in time sensitive cargo.

5.3 Discussion

While the coastal shipping legislation may have increased the competition between foreign and domestic carriers for certain routes and services, the effects are limited by the business interest of foreign carriers and the New Zealand policy framework.

- The core business for foreign carriers is the carriage of international freight, and the re-positioning of empty containers to meet the demands of exporters. Foreign carriers would not risk delaying their schedules to accommodate coastal cargo only.
- Foreign carriers are allowed to carry domestic cargo during the domestic leg of an international voyage to load exports or unload imports at New Zealand ports. This means these carriers can only provide very limited frequency of services, routes and directions.
- Under the Immigration Act 2009, the crew on any foreign ship authorised to carry coastal cargo can be exempted from holding a permit to work in New Zealand provided that they do not stay for a period of over 28 days. This adds an extra constraint in the number of port calls that can be made by foreign carriers under the visa waiver programme.

From the perspective of freight owners, the coastal shipping legislation is important to improve supply chain efficiency. The Shipping Industry Review (2000) found that reintroducing protection of local operators (that is, repealing Section 198 of the Maritime Transport Act 1994 and reverting to the previous legislation) could increase domestic and international freight costs to New Zealand industry by some \$13 million per year.

²⁰ Shipping Industry Review (2000) and Rockpoint (2009), pp.94-95.

²¹ Rockpoint (2009), pp.87-88.

²² Shipping Industry Review (2000).

6. Case study 2 – Taxation and coastal shipping

As discussed in Section 5, there are 16 domestic cargo ships (Table 5) operating coastal services in New Zealand waters.

Table 5 New Zealand Operated Ships²³

Ship type	Owner	Fleet size
Specialist bulk carriers	Sliver Fern Shipping	2
	Ports of Auckland	1
	Holcim	2
	Golden Bay Cement	1
	Coastal Bulk shipping	1
RORO ²⁴ ferries	KiwiRail Group	3
	Strait Shipping/Bluebridge	3
	Pacifica Shipping	1
General freight ships	Pacifica Shipping	1
	Black Robin Freighters	1

Due to commercial confidentiality reasons, ship operation cost information is rarely available to the public. From publicly available cost estimates, the information is typically aggregated at a level that prohibits any informative analysis. The following discussions are based on information that is readily available, either from publicly available information or past analyses.

6.1 The taxation issue

The key issue seen by coastal shipping operators is that the lower wage rate for non New Zealand seafarers, coupled with the tax obligations for New Zealand

operators and the tax incentives provided by overseas jurisdictions means international shipping operators are able to undercut New Zealand shipping operators on coastal shipping freight rates²⁵. The three aspects of taxation differentials include corporate and income taxes, goods and services tax and non-resident with-holding tax.

6.1.1 Corporate and income taxes

Domestic resident shipping operators are subject to New Zealand income tax on profits from their operations (either domestic or international operations). Similarly, New Zealand resident employees are required to pay income tax and accident compensation corporation's levies via the Pay-As-You-Earn (PAYE) system.

As a tool to avoid double taxation for income derived across an international border and to minimise any impediments to trade and investment between two countries, New Zealand has a network of double tax agreements (DTAs) with its main trading and investment partners. Under the DTAs, non New Zealand resident shipping operators (without a fixed base in New Zealand) and their employees (who are in New Zealand for 183 days or less in a year) are exempted from profits and income tax in New Zealand. For non-resident contractors, they can be exempted from tax requirements if certain criteria (present in New Zealand for 92 days or less in a year and contract payment of less than \$15,000 in a year) are met. Otherwise they are taxed at either 15 or 30 percent, depending on circumstances. Furthermore, certain international

²³ Rockpoint (2009), pp.94-95.

²⁴ RORO – roll-on-roll-off.

²⁵ Taxation asymmetry between domestic and international coastal services providers is not unique to New Zealand. In Australia, the operation cost differential between a local and foreign ship is estimated at A\$1-3 million. (Source: Commonwealth of Australia (2008).

jurisdictions (e.g. Hong Kong, Liberia, Marshall Islands, Panama and Singapore) also offer tax incentives to encourage shipping operations²⁶.

6.1.2 Goods and services tax (GST)

The GST that applies to purchasing of supplies is known as input GST, whereas the GST that applies to the supply of goods and services is known as output GST. For New Zealand businesses that are registered for GST, all input GST is deductible against the output GST.

Foreign shipping operators do not pay GST on fuel and other ships' consumables. For GST that is charged on some goods and services provided to foreign ships (such as cargo handling and berthage), the New Zealand agents that act on behalf of the foreign shipping lines are able to deduct the GST incurred against their GST liability. Therefore, the net GST effect is neutral to foreign shipping operators.

On the other hand, domestic shipping operators have to pay GST for fuel and other ships' consumables and domestic shipping lines have to pay GST for offering carriage of domestic cargo between ports (irrespective of whether the cargo is moved on a domestic or international ship). But the GST incurred is deductible from the GST liabilities of these companies. Therefore, the net GST effect is also neutral to domestic shipping operators.

In summary, due to the deductibility of input GST against GST liabilities, New Zealand resident shipping operators or shipping lines are not disadvantaged by the GST rules against their international counterparts.

6.1.3 Other non-resident withholding tax

Rockpoint (2009) noted that foreign shipping operators also benefit from the non-resident withholding tax provision. For New Zealand vessels there are taxation obligations on insurance premiums (at three percent of gross premium), charter fee and container hire charges but they are exempted for foreign vessels²⁷.

6.2 The cost impacts

As discussed in Section 6.1.2, there is no net cost effect to New Zealand resident shipping operators or shipping lines as a result of the GST rules. However, this will have a small implication on cash flows and the associated costs of capital.

As for other taxations, New Zealand Shipping Federation looked at the cost differences between locally operated and foreign operated ships in 2004 by comparing a New Zealand operated merchant ship carrying coastal cargo with the same ship operated full time in New Zealand under foreign conditions. While this counter-factual comparison was flawed (foreign operated vessels are not allowed to carry coastal cargo full time in New Zealand, and therefore cannot match the service levels provided by local ships), the study was useful in highlighting the main cost differences.

According to the information from New Zealand Shipping Federation, New Zealand owned shipping lines that ship 10,000 TEU per annum serving between Auckland and Lyttelton ports can face an annual additional cost²⁸ of around \$761,000 (or \$76 per TEU). While this taxation gap may be out-of-date, the cost magnitude is significant.

²⁷ Source: New Zealand Shipping Federation

²⁸ This includes PAYE, ACC levies, insurance and other withholding taxes and excludes Maritime Safety Charges and oil pollution levies as they apply to both domestic and international shipping lines.

²⁶ Price Water House Coopers (2009)

Since many taxation components are either fixed, or varied only marginally with volume (eg if labour hours increase due to higher volume), increasing throughput can reduce the impact of taxation for each TEU movement.

6.3 Discussion

Domestic coastal shipping service providers have previously argued the need to provide tax breaks for their operation to better compete with international carriers. Opponents argued this will create uneven playing field for other domestic modes.

The impact on competition of allowing foreign carriers to provide coastal shipping services is similar to that of the import of goods and other services. In both cases, locally produced goods and services are produced at local cost levels, while imported goods and services are produced at foreign cost levels. Therefore, there is no specific reason to treat coastal shipping any differently from other industries.

However, as discussed in Section 5, overseas ships may not operate 'anytime and anywhere' in New Zealand, which allows local operators advantages in marketing and service levels.

Furthermore, there are several strategies that have been used by coastal shippers to maintain the level of competitiveness with international carriers and road and rail modes.

- Adoption of cargo handling technologies to allow a higher degree of capital-labour substitution.
- Improvement of voyage scheduling to shorten delivery time and minimise labour idle.
- Increasing focus on high volume routes to maximise capital and labour utilisation.

- Developing time slots and routes that are not served by international carriers.

7. Case study 3 – Emissions trading scheme (ETS)

Most transport is fuelled by liquid fossil fuels such as diesel and petrol, which results in emissions of greenhouse gases into the atmosphere and the associated climate change effects. The New Zealand ETS is a means for meeting our international obligations around climate change.

The ETS covers liquid fossil fuels used for domestic transport movements but fuels used for international transport are exempted from the scheme. The ETS puts a price on greenhouse gases (commonly referred to as the carbon price) to provide an incentive to reduce emissions and to encourage carbon offsetting schemes such as tree planting.

7.1 The issue

The government has set a fixed price of NZ\$25 for emission units during the transition period to December 2012. Each emission unit can be used to offset two tonnes of carbon dioxide equivalent (CO₂-e) emissions²⁹. This means each tonne of CO₂-e has a price of NZ\$12.5. Domestic freight operators do not participate directly in the ETS but will face additional costs associated with the scheme, estimated at three cents per litre of fuel consumed. Although this cost increase may seem small, the aggregate effects to the supply chain can be significant.

²⁹ From 2013, each emission unit can only be used to offset one tonne of CO₂-e.

Table 6: Cost impacts of Emissions Trading Scheme for heavy vehicles

	Operator type				
	Whole industry	Urban	Intercity	Rural North	Rural South
Average fuel consumption (litre per km)	0.33	0.24	0.27	0.38	0.34
distance (km)	Additional fuel cost due to ETS (based on 3c/L)				
10	\$ 0.10	\$ 0.07	\$ 0.08	\$ 0.11	\$ 0.10
50	\$ 0.49	\$ 0.36	\$ 0.41	\$ 0.57	\$ 0.51
100	\$ 0.98	\$ 0.72	\$ 0.81	\$ 1.15	\$ 1.03
500	\$ 4.88	\$ 3.62	\$ 4.05	\$ 5.75	\$ 5.14

Note: Average fuel consumption derived from RTF (2006).

7.2 The impacts

From 1 July, 2010, Pacifica Shipping line added an ETS levy to their freight rates to cover the cost of the ETS imposed on domestic transport operators. Based on the \$25 per carbon credit unit per two tonnes of CO₂-e, the current ETS levy added by Pacifica is \$6 per TEU. For an average voyage distance of 1,000 kilometres and 7 tonnes per container³⁰, the ETS adds an average of \$0.86 per 1,000 tonne kilometres. Coastal shipping traffic (excluding Cook Strait traffic) for 2006/07 was estimated at 4 billion tonne kilometres. This means the ETS adds around \$3.4 million p.a. to coastal shipping for a similar level of cargo movements as in 2006/07.

For road freight transport, the additional operation cost to heavy vehicles due to the ETS is estimated at around \$0.98 per 100 kilometres (see Table 6). The average net tonnage per vehicle is 7.4 tonnes³¹, thus ETS adds around \$1.32 per 1,000 tonne kilometres to vehicle operating costs (based on an additional 3c/L of fuel consumption). In 2009, a total of 16,509 million tonne kilometres of road freight

have been moved around the country. This means the ETS adds approximately \$22 million p.a. to the cost of road freight transport for a similar level of cargo movements as in 2009.

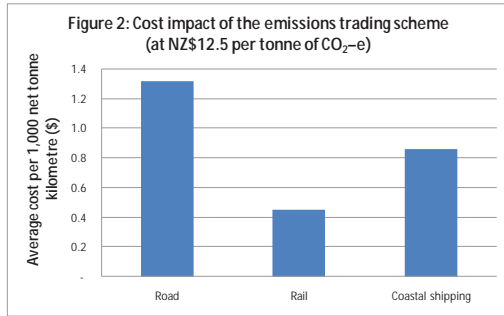
However, these estimates are based on fuel consumption information collected during 2006. If the heavy vehicle fleet has gradually been replaced by more fuel efficient vehicles since then, the effects of the ETS would be lower than those illustrated above.

For rail transport, existing diesel locomotives use around 15 litres of diesel per 1,000 net tonne kilometres³². Thus, ETS adds \$0.45 per 1,000 net tonne kilometres, at \$12.5 per tonne of CO₂-e. In 2010, KiwiRail's diesel locomotives handled a total of 3.42 billion net tonne kilometres of freight. Thus the annual total cost of rail freight movement as a result of the ETS would be around \$1.54 million.

³⁰ Rockpoint (2009) estimated that the average weight of coastal containers (including movement of empty containers) is less than 7 tonnes per TEU (p.181).

³¹ Source: Transport Monitoring Indicator Framework, Ministry of Transport.

³² KiwiRail's Turnaround Plan includes the intention to acquire more fuel efficient diesel locomotives to replace the existing fleet over ten years. It is anticipated that new diesel locomotives will reduce fuel consumption by ten percent. Source: KiwiRail Group, personal communications.



In summary, the effect of the ETS on freight transport cost within New Zealand is estimated at between \$0.45 and \$1.32 per 1,000 net tonne kilometres (Figure 2).

8. Summary

This paper provides an overview of the legislation that affects freight transport and looks at three pieces of legislation that some freight owners consider as having important influences on the efficiency and effectiveness of transport logistics.

The analysis found that the coastal shipping legislation that specifies the conditions under which a foreign ship shall carry coastal cargo do not have any obvious impact on the size of the domestic coastal ship fleet but have increased coastal services availability and competition. However, such effects are limited by the interest of the foreign carriers to meet long haul freight schedules and the demands of freight owners. The New Zealand policy framework also limits the routes and level of services that can be operated by foreign carriers. For these reasons, there is no immediate need for further government intervention.

In terms of the tax differential between domestic and foreign carriers of coastal cargoes, the impact on competition is not dissimilar to that of the import of goods and other services. In both cases, locally produced goods and services are subject to local cost levels and tax requirements,

while imported goods and services are subject to foreign cost levels. There is no specific reason to treat coastal shipping any differently from other industries.

Finally, on the effects of the ETS on freight transport cost, the analysis found that, on average, ETS adds between \$0.45 and \$1.32 per 1,000 tonne kilometres of freight movement, depending on mode choices.

9. References

- Baldwin, R and Cave, M (2002), "Understanding regulation: theory, strategy, and practice", Oxford University Press Inc., New York, ISBN 0-19-877437-0.
- Burrows, J (2009), "Legislation, Primary, Secondary and Tertiary Lecture", presented to the New Zealand Treasury 26 May 2009, <http://www.treasury.govt.nz> [accessed on 30 November 2010].
- Charles River Associates Ltd (2002), "Port Companies and Market Power – A Qualitative Analysis", Report prepared for the Ministry of Transport and the Minister of Economic Development.
- Charles River Associates Ltd (2005), "A review of 'Port Company Profits to 2004, by Simon Terry Associates Ltd' ", Report to the Ministry of Transport and the Minister of Economic Development.
- Commonwealth of Australia (2008), "Rebuilding Australia's Coastal Shipping Industry: Inquiry into coastal shipping policy and regulation", House of Representatives Standing Committee on Infrastructure, Transport, Regional Development and Local Government, Canberra, Australia.
- Hoppe, H (undated), "Goal-Based Standards – A New Approach to the International Regulation of Ship Construction", Maritime Safety Division, International Maritime Organisation, <http://www.imo.org/OurWork/Safety/ShipDesign/Documents/Goal.pdf> [accessed on 14 December 2010].
- Malone, R and Miller, T (2009), "Regulations Review Committee Digest", Third edition, Victoria University of Wellington and New Zealand Centre for Public Law. Available at <http://www.victoria.ac.nz> [accessed 18 October 2010].
- Ministry of Economic Development (2010), "New Zealand Energy Greenhouse Gas Emissions: 2009 Calendar Year Edition", Wellington, New Zealand.
- Ministry of Transport [MOT] (2010), "Understanding Transport Costs and Charges Phase Two – Transport costs in freight logistics", Wellington, New Zealand.
- New Zealand Transport Agency [NZTA] (2009), "Agricultural vehicles' guide". Available at <http://www.nzta.govt.nz> [accessed 1 October 2010].
- O'Driscoll, G and Hoskins, L (2006), "The case for market-based regulation", Cato Journal, Vol. 26, No. 3.
- PricewaterhouseCoopers (2009), "Choosing a profitable course around the globe: Corporate taxation of the global shipping industry".
- Reveley, J and Tull, M (2002), "Centralised Port Planning: An Evaluation of the British and New Zealand Experience", in: Resources and Infrastructures in the Maritime Economy, 1500-2000, St John's Newfoundland.
- Road Transport Forum [RTF] (2006), "2006 Operator Comparison Report", prepared by the University of Waikato, New Zealand.
- Rockpoint (2009), "Coastal Shipping and Modal Freight Choice", Report to the New Zealand Transport Agency, Wellington, New Zealand.

Ross, John (1977), 'Pride in their ports – the story of the minor ports', Dunmore Press, Palmerston North, New Zealand.

Shipping Industry Review (2000), "A Future for New Zealand Shipping", New Zealand Shipping Industry Review.

UK Department for Business Innovation and Skills [UK BIS] (2009), "Striking the right balance: Better Regulation Executive Annual Review 2009", United Kingdom. Available at <http://www.bis.gov.uk> [accessed 18 October 2010].

Annex

Land transport rules that affect heavy vehicle operations

Land Transport Rule:	Purposes	Effects on heavy vehicle operations
Dangerous Goods 2005	This Rule sets requirements for the safe transport of dangerous goods on land in New Zealand.	Affect transport of dangerous goods such as chemicals and fertilisers.
Door Retention Systems 2001	This Rule covers the design, construction and maintenance of door retention systems used by passengers and drivers for entrance and exit.	Small compliance cost associated with heavy vehicle standards.
Driver Licensing 1991	This Rule specifies the requirements for obtaining and renewing a driver licence or licence endorsement in New Zealand. It also specifies the requirements for driver licensing service providers.	Small effect on the availability of suitable commercial drivers.
External Projections 2001	The Rule requires that external projections on vehicles be designed and maintained with due regard to the safety of other motor vehicles, and the safety of pedestrians and cyclists.	Affect loading of heavy vehicles (logging trucks for example).
Glazing, Windscreen Wipe and Wash, and Mirrors 1999	This Rule establishes minimum safety levels for vehicle glazing. It also sets out requirements for windscreen wipe systems and windscreen wash systems, and for rear-view mirrors.	Small compliance cost associated with heavy vehicle standards.
Heavy Vehicles 2004	This Rule sets out requirements and standards for heavy vehicle safety. It applies to vehicles with a gross vehicle mass of more than 3500 kg.	Small compliance cost associated with heavy vehicle standards.
Heavy Vehicle Brakes 2006	This Rule sets out requirements to ensure that heavy vehicles and heavy-vehicle combinations (over 3500 kg GVM) can brake safely, with balanced brake performance, under any road-legal load condition.	Small compliance cost associated with heavy vehicle standards.
Operator Licensing 2007	This Rule sets out requirements for obtaining and retaining a licence to operate a passenger, rental, vehicle recovery, or goods service. Also requirements that apply to transport service drivers, 'dial-a-driver' service drivers, hirers of rental service vehicles, and approved taxi organisations.	Small effect on the availability of suitable commercial drivers.
Operator Safety Rating 2008	This Rule sets out the key aspects of the operator rating system. The rating of operators will allow NZ Transport Agency compliance units, and Police enforcement units, to focus on operators of vehicles covered by the Rule. This Rule is scheduled to be implemented in mid-2012.	As discussed in Section 4.3.
Road User Rule 2004	This Rule establishes the rules under which traffic operates on roads. It applies to all road users, whether they are drivers, riders, passengers, pedestrians, or leading or droving animals.	All road users are obliged to comply with the Rule.
Seatbelts and Seatbelt Anchorages 2002	This Rule states in which seating positions seatbelts must be fitted in vehicles, as well as the type of seatbelt that must be fitted.	Small compliance cost associated with heavy vehicle standards.
Seats and Seat Anchorages 2002	This Rule covers the design, construction and maintenance of seats and seat anchorages.	Small compliance cost associated with heavy vehicle standards.
Setting of speed limits	This Rule establishes procedures whereby road controlling authorities may set enforceable speed limits on roads within their jurisdictions.	Affect heavy vehicles operating speed on the road
Steering Systems 2001	This Rule covers the design, construction and maintenance of steering systems in motor vehicles.	Small compliance cost associated with heavy vehicle standards.

Land Transport Rule:	Purposes	Effects on heavy vehicle operations
Traffic Control Devices 2004	This Rule sets out the requirements for the design, construction, installation, operation and maintenance of traffic control devices, and the functions and responsibilities of road controlling authorities	All vehicles are obliged to comply with traffic signals.
Tyres and Wheels 2001	This Rule sets out the requirements relating to tyres and wheels and their assembly with hubs and axles, on all motor vehicles and also on pedal cycles.	Small compliance cost associated with heavy vehicle standards.
Vehicle Dimensions and Mass 2002	This Rule sets out the requirements for dimension and mass limits to enable vehicles, in particular, heavy truck and trailer combinations, to be operated safely on New Zealand's roads.	Affect loading of heavy vehicles (such as log).
Vehicle Equipment 2004	This Rule covers safety and maintenance requirements for equipment fitted to motor vehicles: warning devices, speedometers, sun visors, mudguards, footrests on motorcycles and mopeds, child restraints, televisions, fuel tanks and fuel lines.	Small compliance cost associated with heavy vehicle standards.
Vehicle Exhaust Emissions 2007	This Rule is aimed at achieving improvements in air quality by reducing the levels of harmful emissions from motor vehicles. The Rule applies to motor vehicles that are required to be certified for entry into, or operation in, service.	Small compliance cost associated with heavy vehicle standards.
Vehicle Lighting 2004	This Rule sets out standards and safety requirements for lighting equipment that is fitted to a vehicle (including a pedal cycle), to allow the vehicle to be operated safely and not endanger the safety of other road users.	Small compliance cost associated with heavy vehicle standards.
Vehicle Repair 1998	This Rule sets a standard for repair for vehicles and requires repairers to use suitable methods in attaining that standard. Includes structural, mechanical and electrical repair.	Small compliance cost associated with heavy vehicle standards.
Vehicle Standards Compliance 2002	This Rule sets out requirements to control the entry of vehicles into, and operation of vehicles in, the land transport system.	Small compliance cost associated with heavy vehicle standards.
Work Time and Logbooks 2007	This Rule sets out how the limits to the work time hours for a driver of a vehicle that requires a Class 2, 3, 4, or 5 licence, or is used in a transport service (other than a rental service), or carries goods for hire or reward, are to be administered.	Small compliance cost to record work time hours