

PUSHING THE POLICY BOUNDARIES. REGULATORY ACCREDITATION SCHEMES, POLICY FLEXIBILITY AND OPTIONS FOR DELIVERING A TWO-TRACK REGULATORY SYSTEM FOR THE HEAVY VEHICLE SECTOR.

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Abstract

This paper examines the Australian experience with regulatory accreditation and its role in providing greater policy flexibility in response to changing industry demands. Drawing on the experience of heavy vehicle operators, industry associations, auditors and regulators discussion then examines the potential for developing a two-track regulatory system (Gunningham and Grabosky 1998) as a way of offering greater policy flexibility for industry and at the same time assuring governments and the community that risks are being effectively managed.

Keywords: Accreditation, National Heavy Vehicle Accreditation Scheme (NHVAS), Two-Track Regulation, Regulatory Flexibility

1. Introduction

The Australian trucking industry currently faces one of the most challenging periods in its history as it moves into a highly integrated, increasingly time sensitive and competitive transport sector. Changing economic conditions have encouraged industry consolidation and intensified competitive pressures (BTRE 2003a). The globalisation of markets has exerted pressure on transportation systems to facilitate a seamless and timely flow of goods and materials between production and sales points. Similar to trucking industries in other developed economies, the Australian market is characterized by low barriers to entry, high numbers of small firms, intense competition and low profit margins. The market comes very close to perfect competition (Thornton et al. 2008:279).

Pressure to improve operational efficiency has more recently been driven by the rapid rise of fuel costs forcing many firms to aggressively cut back associated business costs. Heightened political interest in climate change also means government may soon act to impose additional costs on the road transport sector since next to energy it has been identified as the second major contributor to greenhouse gas emissions (DCC 2008). Whilst a small proportion of the total vehicle fleet, heavy vehicles are estimated to produce around 48 per cent of road transport green house gas emissions (NTC and Rare Consulting 2008). As one group of authors recently put it, trucking has been identified as "...a big, tough and environmentally important regulatory target" (Thornton et al. 2008:278).

Against this background of cost and regulatory pressures transport planners anticipate that the Australian freight task is likely to double over the next decade (NTC 2006). Yet in this era of growing demand, the potential for other transportation systems such as rail to carry its share of the freight task is likely to diminish rather than expand (BTRE 2003b), thus putting more pressure on the road network to facilitate the efficient movement of freight. Added to these challenges is the fact that the trucking industry faces a critical shortage of drivers which is expected to intensify over the next decade with fewer than 10 percent of current drivers under 35 years of age (BTRE 2003a). To add further complication, the general negative community attitude towards trucking makes addressing issues of driver recruitment and progressing regulatory enhancements around vehicle productivity even more challenging for the industry.

In this environment of rising costs, increasing demand and capacity constraints government agencies have worked to review and reform road transport regulations. Effective regulation is central to the efficient and safe operation of the heavy vehicle industry. The aim of recent regulatory change has been to increase the efficiency of the road transport sector, develop innovative ways to raise compliance levels across the industry, help protect road infrastructure and improve road safety.

2. Methodology

This paper consists of two parts. Firstly, it provides an analysis of the Australian experience with alternative regulatory accreditation and then drawing on the findings

of this analysis part two examines the potential for a fundamental reform of the heavy vehicle regulatory framework by instituting a two-track system. This consists of a high track that has greater policy flexibility and more onerous accountability requirements and a low track characterized by standard prescriptive limits and traditional deterrent-based enforcement.

This paper draws on qualitative research into stakeholder views and experiences of the Australian National Heavy Vehicle Accreditation Scheme (NHVAS). Discussion examines industry and regulator perspectives on the scheme, its effectiveness and value as an innovative approach to regulation. A total of 41 semi-structured interviews were conducted with participants in the heavy vehicle industry from across Australia. Interviews were held in all Australian states and included 18 representatives of road transport regulatory agencies, 12 representatives of transport industry associations, five auditors and 12 trucking operators. A number of those interviewed had dual roles, for example four representatives of industry associations also operated their own trucking businesses and two representatives of state based industry associations also worked as auditors. The distribution of interviews across Australian jurisdictions is illustrated in Figure 1 below.

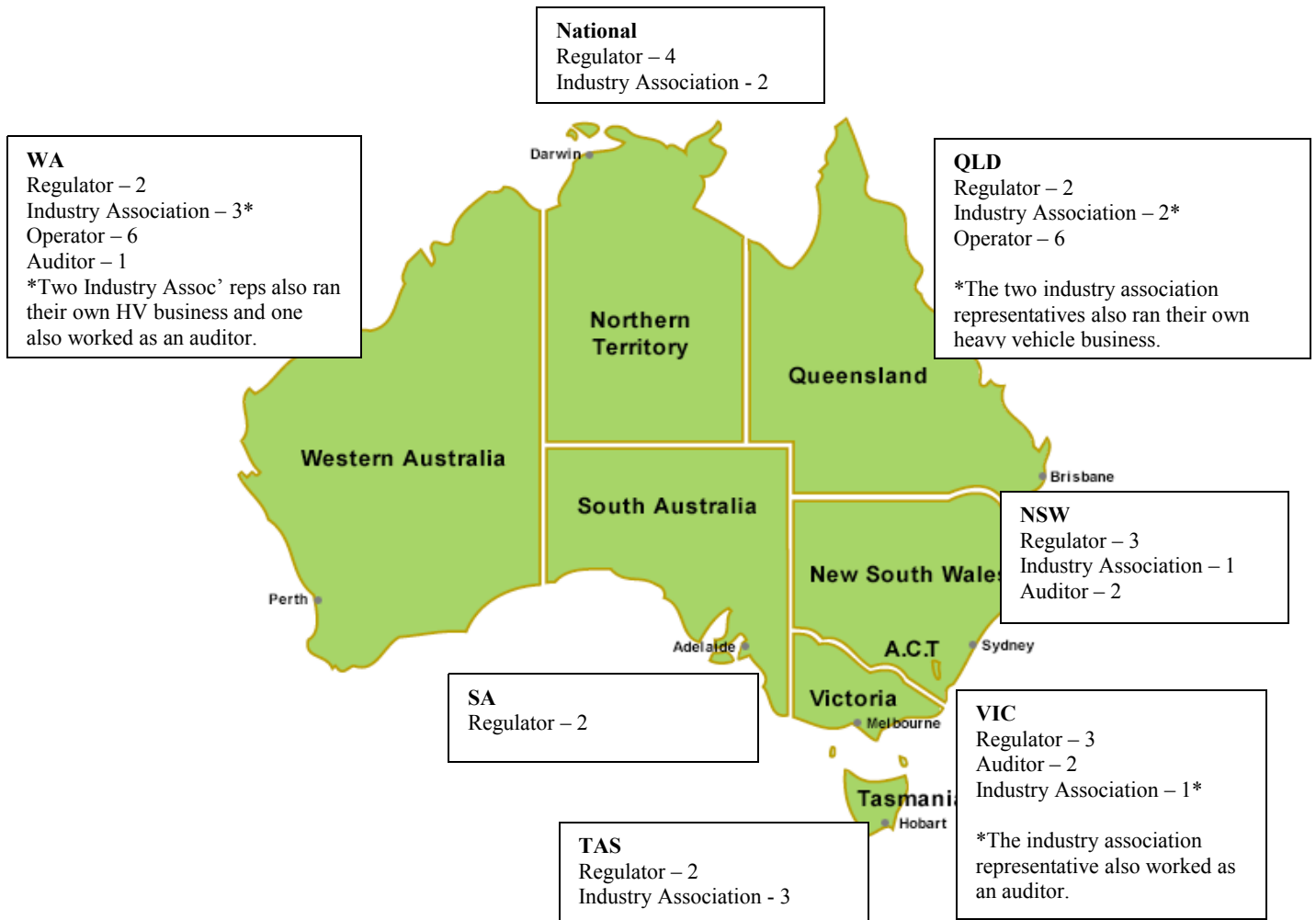


Figure 1 - Interviews by stakeholder categories across Australian jurisdictions

Discussion draws on regulation theory, policy documents and the findings of the research to develop a regulatory model that has the potential to more effectively deal with the future challenges and demands both industry and regulators face from changing markets, global competitive pressures and shifting community expectations. It is argued that the productivity and compliance benefits that can be derived from voluntary self-regulatory schemes such as NHVAS suggest there is potential for the development of a comprehensive two-track regulatory framework for the heavy vehicle industry. Such a model may fit well with the changing institutional landscape as Australian jurisdictions work to establish an independent national heavy vehicle regulator to be operational from 2012.

3. Regulatory Change and Alternative Compliance Schemes

Over the past two decades the regulatory environment of the Australian heavy vehicle sector has been comprehensively reformed. Industry frustration with inconsistencies and variations between state based regimes has generated ongoing demands for regulatory uniformity across the country. A key driver of regulatory change both in Australia and internationally has been the demands of industry and governments for deregulation (Rose et al. 2006). Since the 1980s governments throughout the world have been committed to reform public sector administration and regulation making greater use of incentives and price signals to influence the behaviour of firms and individuals.

This shift in public sector thinking and practices, generally referred to as New Public Management (NPM), has had a major impact on approaches to regulatory problems (Vogel 1996). The pressure of fiscal constraint has encouraged public sector agencies to promote light-handed regulation and look for alternate forms of influence for achieving policy objectives. Regulators now consider how markets and other less intrusive mechanisms can be utilized to shape behaviour (Jessop and Sum 2006).

In Australia, the establishment of the National Road Transport Commission and its subsequent successor the National Transport Commission has created opportunities for proponents of deregulation to progress a reduction in the regulatory burden on the trucking industry through formal programs of regulatory review and innovation. Whilst the output of the Commission suggests there has been more re-regulation rather than any measurable reduction in the regulatory burden on the industry, regulatory reforms have however sought to progress greater uniformity across jurisdictions (Banks 2006). This has helped simplify and build consistency into the heavy vehicle regulatory regime across jurisdictions. A characteristic of recent reform has seen road transport regulators move away from the “one-size-fits-all” approach and attempt to work with industry to address the productivity concerns of firms as well as the compliance and safety goals of the regulator in manners that are less intrusive and costly than prescriptive regulation. Key reforms that reflect this new approach towards compliance include the National Heavy Vehicle Accreditation Scheme (NHVAS) and the chain-of-responsibility legislation.

National Heavy Vehicle Accreditation Scheme (NHVAS)

NHVAS was introduced as an alternative compliance regime allowing operators to choose to either comply with prescriptive standards or to self-regulate by demonstrating they have adequate internal control systems that ensure compliance

with the standards of the scheme. The scheme has a modular structure allowing firms to select to enrol in mass management, maintenance management or fatigue management. The purpose of NHVAS is to enable efficiency improvements in road transport by allowing a lesser degree of on-road enforcement for operators who can demonstrate a high degree of compliance through other means. In this way, the efforts of responsible operators to comply with regulatory standards can be recognized and enforcement resources targeted on other sectors of the industry that represent higher risk (Yeo and Moore 1998). The use of accreditation programs as alternative means for demonstrating compliance is increasingly common across a range of industrial sectors in Australia (Bibby 2010).

In response to adopting alternative compliance processes the transport regulator provides concessions against prescriptive compliance requirements. Regulatory concessions are included to help offset operator costs in establishing internal monitoring systems and purchasing audits. The cost of compliance in sectors dominated by small firms like trucking is seen as a significant factor influencing a firm's willingness to comply (Thornton et al. 2008). Under NHVAS regulatory concessions associated with each module, such as an entitlement to carry additional mass under the mass management module, act as incentives to join the scheme. These benefits help operators remain competitive and compliant in a hyper competitive industry where the tendency to breach regulations is high and chances of detection generally low (McIntyre and Moore 2002). As one national regulator commented, "... you are not going to get anybody in a scheme except for the very community minded ones if its not got some incentive because it is such a competitive industry. You have to give them some edge" (Regulator 01). A key feature of NHVAS is that it aims to align the economic self-interest of the firm with the compliance goals of the regulator through a system of incentives and rewards.

Chain-of-Responsibility

The other key compliance reform that also acts as a push factor, encouraging firms to join NHVAS, is the chain-of-responsibility legislation. This legislation extends legal liability for compliance to all parties who exercise some degree of control over on-road outcomes. This reform has helped extend the enforcement focus beyond the driver and the vehicle. For example, a grain receival depot that knowingly rewards overloading by paying for loads delivered in excess of legal weight limits may be held legally accountable for the overloading offence (McIntyre 2005:5). The legislation provides a defence for parties where they can demonstrate they have put into place processes that ensure high levels of compliance by on-road parties. This often results in consignors and receivers requiring transport operators to demonstrate they have in place effective self-management and compliance control systems (Leyden et al. 2003; McIntyre 2005:9-11). In this environment, accreditation systems like NHVAS, which require much greater levels of documentation and detail on processes and management systems, are seen as "...an avenue to provide these evidence trails..." (Leyden et al. 2003:9).

The above regulatory reforms reflect a move away from tightly prescribed enforcement, shifting greater responsibility onto management and the use of internal control systems and audits. Roadside detection is costly for agencies and operators and is potentially indiscriminate in its approach. The important role that accreditation schemes play in the enforcement process has increased as compliance accountability

progressively moves away from roadside detection to more sophisticated approaches that rely on the office based documentation held by the trucking firm and other parties in the transport chain. This new regulatory framework has also effectively drawn on market forces to help push compliance. The productivity incentives under NHVAS as well as the contracting obligations that major companies impose on trucking firms encourages operators to consider the commercial benefits that result from having in place their own documented compliance systems. Evidence of the growing interest in establishing more sophisticated internal control practices is reflected in the range of industry and government accreditation programs that now operate across the Australian heavy vehicle sector.

4. Accreditation Programs in the Australian Trucking Industry

The majority of heavy vehicle accreditation schemes are voluntary. However, access to certain conditions or entitlements is usually dependent on successful accreditation thus making the schemes obligatory for operators who want to fairly compete in certain sectors. Current available schemes include;

- the National Heavy Vehicle Accreditation Scheme (NHVAS),
- the Western Australia Heavy Vehicle Accreditation scheme which is compulsory for restricted access vehicles operating in Western Australia only,
- CattleCare, an animal welfare scheme concerned with the transportation of livestock,
- a range of schemes concerned with the transportation of dangerous goods, chemicals, fuels and foodstuff, and
- TruckSafe, the national industry association’s (Australian Trucking Association) quality business management accreditation program.

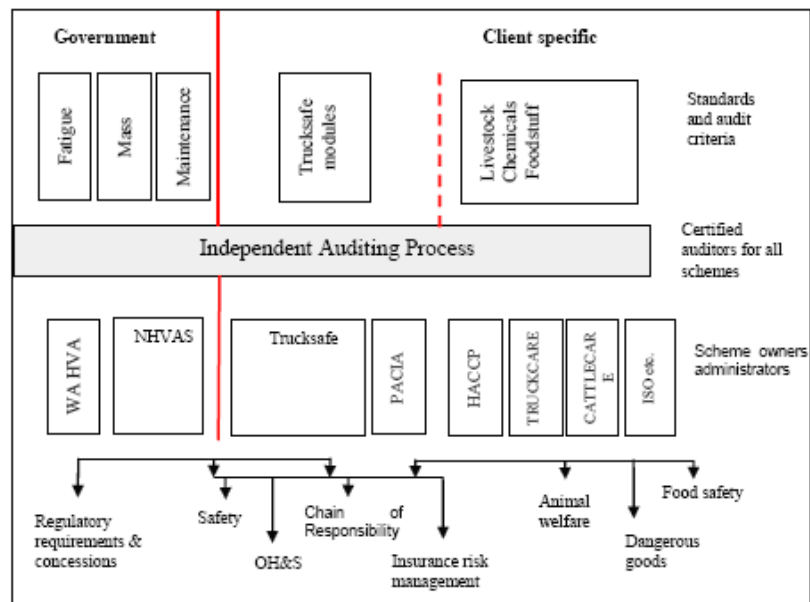


Figure 2 – Accreditation Programs in the Australian Heavy Vehicle Sector

Source: Rufford, P and P Bass. 2006. Policy review of road transport heavy vehicle accreditation. Discussion Paper. Melbourne: National Transport Commission: 17.

The above figure illustrates these accreditation programs and separates government from industry-based schemes. The diagram aims to illustrate the link between the accreditation schemes and the areas of industry performance that they target in respect of compliance and operational improvements.

Currently in Australia, NHVAS and TruckSafe are the two most dominant schemes in the eastern states and the WA Heavy Vehicle Accreditation Scheme is the most dominant scheme in the west (Rufford and Bass 2006). The government schemes (NHVAS and WA Heavy Vehicle Accreditation Scheme) are linked to issuing regulatory concessions or permit road access. The industry schemes such as TruckSafe, essentially offer management systems to promote best practice and safety.

In 2006 the NTC conducted a review of heavy vehicle accreditation schemes with a view to examine the safety benefits that accrue to members (Rufford and Bass 2006). The review found that operators were strong supporters of accreditation arguing that their operations became more productive and reliable. They used the accreditation process to drive change within their organisations and they saw membership of an accreditation program as an effective marketing tool (Rufford and Bass 2006:11). A key finding of the NTC review was evidence suggesting the crash rate of vehicles in NHVAS and other accreditation schemes is significantly lower than non-accredited vehicles. The NTC review found that non-accredited articulated vehicles in Victoria, NSW and Queensland have an average crash rate 2.5 times higher than accredited vehicles. The review suggests that if all non-accredited vehicles became accredited one could expect a 50% reduction in the crash rate of articulated vehicles (Rufford and Bass 2006).

5. Flexible Regulation: Experience and Evidence Under NHVAS

In the Australian context, accreditation schemes are used to match the demands of industry for more flexibility in regulation with government and industry responsibility for maintaining high standards of road safety and asset protection. The principal example of this approach is NHVAS. The impressive road safety findings of the NTC accreditation review (Baas 2008; Rufford and Bass 2006) suggest that compliance and accountability systems like accreditation programs can be effective instruments to lift the performance standards of industry. The potential benefit that may derive from self-regulatory and quasi self-regulatory programs has been well documented in the regulation literature (Ayres and Braithwaite 1992; Grabosky 1995a, b; Gunningham and Grabosky 1998; Parker 2002). However, little work has been carried out in the trucking industry.

The following discussion draws on interview material with key stakeholders from the Australian trucking sector and highlights their observations about the benefits that may derive from the rewards based accreditation program, NHVAS. The evidence suggests that certain sections of the industry can respond to greater demands for accountability and higher safety and compliance standards, particularly where greater access to regulatory flexibility is guaranteed. This evidence is useful in then exploring the potential that a two-track regulatory system may hold for the trucking industry. Is it possible that greater regulatory flexibility can be achieved in road

transport by building on the achievements of NHVAS?

Cultural Change and Building Engagement: A New Approach in Trucking Regulation.

Interviewees from all stakeholder groups were highly supportive of NHVAS. The scheme is seen to embody a new and needed approach in the heavy vehicle sector that provides greater opportunity for responsible industry self-regulation and a change in industry-regulator relations. This change in relations is seen to be indicative of a shift in sector wide culture away from antagonism towards cooperation and jointly working to resolve compliance, safety and productivity concerns. For some regulators and industry participants the basic combative culture that has traditionally existed between regulators and the trucking industry has been fundamental to keeping regulatory approaches confined to the definition of prescriptive limits. With the introduction of NHVAS all participants have observed a move towards greater tolerance of uncertainty and the joint management of compliance issues. One operator explicitly stated it was about industry and regulators working towards common goals.

I think it was more like the industry wanted to work with people, for the government to be working with the industry so they're working towards a common goal and not working against each other. (Operator 01)

This cultural shift is indicative of modern regulated sectors that see a much higher level of engagement between industry and regulators (Coen 2005) and highlights the emerging maturity and sophistication of the Australian trucking sector. As one state regulator noted;

"...I think the relationship between our enforcement people particularly, and industry has been improved markedly through a number of initiatives and NHVAS is one of them, where instead of taking the approach "Well we're here to bust you", we now say, "We're actually here to help you run your business better so we don't have to bust you", and actually getting a lot of the officers, not all, but a lot of the officers actually on board with that philosophy, has actually improved the relationship markedly." (Regulator 02)

Respondents indicated that their experience under NHVAS reveals a willingness of firms and regulators to share information and help improve the effectiveness of the regulatory and enforcement framework. Many firms that participate in NHVAS understand the strategic advantage of working with the regulator since this helps them not only solve compliance problems that may improve their competitive position, but also enables them to promote regulatory change and new policy initiatives that favour their business objectives (Coglianese et al. 2004). As one operator noted;

Those that are prepared to get in and ... and take advantage of these schemes have input into it to start with, so they're doing the ground work, they're doing the research that is key to how we can fit in with what the regulators want to do. So they are actually having input...But it's the same as anything, the more you put into something the more you'll get back out of it. (Operator 02).

Interest Group Involvement in Regulatory Design

The development of NHVAS was based on pilots with industry input. This means the compliance standards and regulations have been developed with an understanding of what can work for operators. Industry representatives argue that this is a far better approach to the development of regulation than the simple imposition of black letter law developed by some ‘*bureaucrat removed from the day-to-day practices of industry*’.

Communicating around the detail of an accreditation program, like NHVAS is seen as building an understanding between both parties of what is achievable through accreditation.

to me,... it (accreditation) improves communication. It develops a constructive working relationship with government... (Industry Association 07)

Industry involvement is seen as important in stimulating interest and motivating take-up.

...that is why any accreditation scheme needs to have industry help develop it. It needs to have the right drivers behind it. Otherwise the chance of significant complexity is high. Especially with accreditation schemes that are optional, high complexity leads to low pick up. (Industry Association 05)

Many operators talk about accreditation giving the firm more control over how it manages and goes about meeting compliance requirements. Some operators say accreditation under NHVAS is a way of handing back control to the firm in shaping how compliance requirements are structured. This includes control at the micro level in terms of the firm’s own operating procedures and business practices and at the macro level where both industry associations and firms argue their involvement contributed to shaping the regulatory scheme. One operator observed;

Looking forward its really the only way to go ... from an operator perspective to head down that track because you are maintaining some form of control over what can and can't be done from an industry perspective. I mean, ultimately it's about what the industry needs in order to perform a task. We need to have some form of control on that because historically when government controls have been based without industry input it's been a white elephant. (Operator 03)

Being involved and party to the design and development of regulatory arrangements is seen as essential in building competitive markets and ensuring regulation supports business activity. The experience from NHVAS suggests it will be critical to engage industry in the conceptual development and refinement of operational detail of any future two-track regulatory system.

Building Operator Capacity to Cope with Regulatory Complexity and Change

NHVAS operators noted that participation in the scheme has enabled them to more effectively cope with emerging layers of regulation and regulatory complexity. Whilst most operators do not find NHVAS by itself, an overly complex or difficult regulatory scheme to master, some have commented on the fact that the broader mix

of accreditation programs and regulatory concession schemes offered by different states and territories has made the regulatory landscape more complex. A number of operators see emerging layers of regulation and understand that the regulatory environment in their industry is dynamic and changing. Operators experienced with working under NHVAS observe that this has been a valuable exercise and helps them more effectively tackle and manage their business within an environment of constant regulatory change.

...the accreditation scheme actually helps people to understand the new regulations coming in...because you've got systems in place that will help you to deal with the new regulations. I mean...the way of dealing with any new regulations is to already have a system in place... (Operator 04)

...any operator needs to have a really good understanding of the regulations and keep on top of it so I guess, having a system that requires you to know regulations is better than one that doesn't. Yes, so I think accreditation probably facilitates a better understanding of regulations. (Operator 05)

The experience gained from operating under NHVAS suggests firms are therefore more capable of dealing with greater regulatory complexity, particularly where this may also involve accessing a more flexible and responsive regulatory regime.

Aligning Regulatory and Business Interests: Delivering Better Business and Compliance Outcomes

Operators that have had experience with NHVAS note that meeting the accreditation standards requires a more detailed investigation into their business practices and through the process of detailed documentation they actually learn more about how their business operates. In meeting regulatory requirements operators learn how to improve their business practices in a manner that also contributes towards the compliance objectives of the regulator. This was particularly the case in respect of the NHVAS maintenance module where firms recalled the cost savings achieved by establishing systematic processes for record keeping, repair and general maintenance work and at the same time reported running safer, more compliant vehicles.

... it's a lot of preventative maintenance so its cost effective...a few years ago you'd probably break down on the side of the road, scratch your head and say "Didn't know that was going to go". But now you actually document the parts that are changed, the maintenance, the scheduling, so that you really know that this part has been in the truck for X amount of kilometers or X many years, best change it now before it gives up the ghost in the next few months. So its cost effective...(Operator 04)

Similar observations were made by auditors who believed the regulatory model helped develop more efficient business operations.

Some of the smaller operators, say with 10 trucks, get a benefit. They are the sort of people I found that did not have good records of each individual truck. They had pretty good records overall, but if truck no. 6 was one of those trucks that created problems all the time they really didn't know. They just kept fixing it. Now they have records that show how it has broken down over

time so it enables them to look at it more carefully and ask what is wrong with the truck or what is wrong with the driver? (Auditor 04)

The regulatory model is seen to improve the overall reliability of the firm and this is considered a significant competitive factor in the trucking business.

..ultimately I think the operators benefit because they are more profitable, they have less breakdowns, they have better maintained equipment. There is nothing worse for a transport company to have a breakdown on the side of the road. They way the economic climate is now, if you are a transport company and your fleet is unreliable, you just wont get work. Because your customers expect you to deliver from A to B without any hiccup. So in maintenance, and mass because they get a better payload, ultimately if it is done correctly, they get a benefit out of it. (Auditor 02)

These observations clearly demonstrate that regulatory systems can have positive outcomes for businesses whilst seeking to achieve better safety outcomes.

Strategic Enforcement and the Constitution of Markets

Regulators tended to have a more expansive view of NHVAS. They valued its current and potential contribution to compliance and enforcement objectives. Their consideration of issues included a longer-term view about how to improve safety within a public sector environment of constrained resources whilst facing increasing industry demand for more liberal concessions against regulatory limits. Regulators see NHVAS as a strategic use of their limited resources that helps manage risk and raise safety standards across the industry.

Operators tended to emphasise the importance regulation and effective enforcement play in maintaining fair competition in their business sector. This meant they saw roadside enforcement as an ongoing and necessary component of the regulatory framework and that self-regulatory schemes such as NHVAS were supplementary to existing regulatory effort. NHVAS operators were concerned with the efficiency and effectiveness of direct forms of enforcement targeted at cheats and noncompliant operators. There was an expectation that non-accredited operators would be more frequently subject to direct roadside enforcement.

A key factor for industry participation in NHVAS was the expectation that other segments of the industry would face stronger enforcement. Regulators draw on the resources and effort of industry to effectively self-regulate allowing the enforcement resources of the state to be redirected to areas of strategic concern.

It's a more cost effective way of regulating. Because I think that with regulation, if you are putting the burden of regulating on government then it is going to mean increased costs to enforce those regulations. So I think with accreditation... operators are learning about how best to manage their fleets so they can comply with regulations... it actually means that the regulators can actually start to focus on those that are poor performers in the industry... what you can do is take the burden off the really good performers in the industry and place the burden back on those that aren't performing at the standard. (Industry Association 07)

Programs such as mass management under NHVAS are seen as effective ways of reducing the demand and costs on the state to enforce and police regulatory compliance.

Look at the current mass management regulations you need to have in place. ...It goes through a process of vehicle control, driver training, employee training, vehicle maintenance control, to a very tight degree of how much the vehicle is actually loaded, so its never actually overloaded...So to enable that person to run under mass management they need to work to these strict guidelines and for that they're allowed to carry extra weight on their vehicle, so therefore earn extra revenue, but in doing all that they're actually taking away a requirement that the law enforcement haven't to regulate the operation or enforce any rules, because the company is actually following their own rules which they set down in the first place. At the end of the day transport industry interference from regulators should become zero. (Industry Association 01)

These comments are consistent with those made by auditors and reflect an expectation that with the introduction of NHVAS enforcement resources will not diminish and will more effectively contribute to the constitution of fairer markets. Operators also acknowledged that an effective enforcement system is likely to be diverse and to some extent complex if it is to effectively address the varying capacity and behavioural characteristics of industry members. This finding suggests that whilst the development of a two-track regulatory system may be complex, it is likely to still have appeal to industry, particularly where it helps stamp out unfair competition.

The Role of Auditors: Collaborative Capacity Builders and Intermediaries

The interview data reveals that auditors have played a role in influencing industry-regulator relations. Auditors have acted as intermediaries facilitating an understanding of compliance requirements amongst operators. The role that auditors play in extending and developing industry's understanding of regulatory requirements appears to have been undervalued by most other stakeholder groups. Auditors express a genuine concern for improving the safety standards of the industry. The behaviour and attitude of auditors illustrates how private sector interests may act to progress public sector goals. This involves acting to ensure the private actions of trucking firms contribute to improved community welfare in terms of better road safety outcomes. Auditors play a constructive role building the compliance capacity of the industry and greater collaboration with regulators (Weber and Khademian 2008). Within a complex network of public and private organisations auditors work in a manner that supports the policy objectives of the state. The following comment illustrates how auditors find themselves modifying, assisting and interpreting regulations to achieve positive compliance outcomes for operators.

Well, you need to understand the people within the industry, particularly you know, we're talking about the small operator. ... they're hard working honest diligent people ... and these people that are hurting because of the economic downturn in the bush. And they might have drivers that work for them who are illiterate. People who have poor numeracy skills ... With these people... you really have to help them through these processes. My attitude is if I find a

non-conformance and I can explain to the person why they've got this non-conformance and get them to understand how to take improvement action, particularly with this driver that can't read or write or whatever. I think the outcome from that is far better than just writing up a non-conformance and walking away and saying, well you fix it. (Auditor 03)

This comment reveals how auditors play a nurturing and supportive role. It is not uncommon for the audit to be viewed as a learning exercise where knowledge is transferred amongst industry participants with the aim of improving compliance standards. Auditors are exposed to a broad range of industry responses to numerous compliance problems and this experience and information is unlikely to be accessible to 'your average truck operator'. Whilst larger firms may be dealt with in a strict auditing manner, smaller firms should be able to draw on the knowledge and experience of auditors to shape their corrective action. Such an approach is particularly helpful in an industry such as trucking that is dominated by large numbers of small firms.

Third party participants, such as auditors would have a greater role in complex two-track regulatory regimes. Under a two-track system greater leverage needs to be made of the contribution external third parties such as auditors, can make towards building compliance capacity across the industry. This includes lifting lower track participants into the higher track as well as helping higher track firms to remain compliant. The contribution such parties can make towards improving industry understanding of regulations and finding innovative compliance solutions should not be underestimated.

Weaknesses: A Tendency Towards Ritualism

A key concern expressed by regulators, auditors and industry participants was the extent of ritualism carried out under NHVAS. Regulators themselves were seen to engage in regulatory ritualism. This is where regulation is not fully enforced and regulatory requirements not followed through with the necessary checks and inspections (Braithwaite et al. 2007). These forms of ritualism are obstacles to continuous improvement and hold back enhancements in safety standards and levels of compliance.

The perceived failure of regulators to institute effective systems of random inspections gave industry associations and operators the impression that the scheme lacked the appropriate level of external enforcement pressure on compliance requirements. The absence of a substantial threat of being checked for ongoing compliance was seen to reduce the motivation of some operators to remain compliant with the standards of NHVAS. Auditors and operators claimed that ritualistic participation in NHVAS was common and that many smaller operators used the scheme as a means to avoid enforcement and regulatory requirements. One auditor recalled his concerns after an audit of a firm that had been operating under NHVAS for some years.

"I gave them 25 non-conformances! They hadn't done an annual review or a quarterly compliance review. Now that meant those people had operated very effectively underneath a maintenance accreditation program without actually being able to be pinged (detected) for not complying. That's the loophole in

the system.” (Auditor 03)

Without the enforcement aspects of NHVAS being effectively carried out, the scheme does not drive continuous improvement and lift overall levels of industry compliance. However, despite the negative implications of ritualism, a number of auditors argue that their experience suggests the level of fraudulent and ritualistic participation is actually quite low amongst NHVAS operators. NHVAS firms are seen to have a predisposition for compliant practice. A number of auditors commented on this characteristic of participating firms.

Under accreditation, you generally wont see the bad operators. Whilst I know I said that some operators will use the NHVAS to get around the regulations and mandatory annual inspections. That is a risk for the scheme, and I know for a fact that has occurred. But, by and large 90% of operators that have a NHVAS sticker on the side of the truck, have got into it because they want to bring their business up and get into the bigger market. They want a contract; they want to do that sort of thing. They want to bring their standards up, or they are already 80% there. What I am saying is that we wont see people that just don't do maintenance. (Auditor 02)

...talking to operators and the people I deal with nationally tend to be the ones that do the right thing or if they're a little bit off track they get made to do the right thing...(Auditor 05)

So here we see accreditation rewarding compliant firms and acting as a pull factor, influencing firms at the margin with an existing predisposition for better compliance practice (Gunningham 1998). The economic incentives and benefits of being in NHVAS push the decision making of these firms over the line, encouraging them to join the program. These are important characteristics that a two-track regulatory system can draw on to motivate firms towards higher compliance standards. A two-track system can offer firms longer-term, strategic business benefits. As with NHVAS, firms are not just driven by immediate economic returns. Auditor 02 argues;

They want a return on their investment. But there is another incentive to it. If they think they can get into the bigger end of the market and get the bigger contracts then that is an incentive for them to get into accreditation. (Auditor 02)

A two-track system will offer these incentives through regulations. Firms operating in the higher track will have access to greater regulatory flexibility and be known as running more reliable, compliant businesses that meet higher safety and environmental standards. These features are the pull factors that encourage lower track firms to move into the higher track regulation.

6. Developing a Two-track Regulatory System

The research evidence suggests that the introduction of NHVAS has allowed heavy vehicle regulation to respond to the differentiated capacity of participants in the

industry. Enforcement practices aim to recognize and treat such participants differently. Firms that have the capacity to cope with higher levels of regulatory complexity are accommodated and rewarded through NHVAS. The remaining participants in the industry are managed within a one-size-fits-all regime. This differentiation in the regulatory and enforcement approach tends to correlate with the emerging sophistication of the top end of the heavy vehicle industry. Whilst few in number, transport conglomerates are increasingly dominating logistics and integrated transport systems (BTRE 2003a). The professionalism of these firms means they are far more able to operate within complex regulatory environments and regulators have responded to this capacity by introducing schemes such as NHVAS.

Drawing on these findings this paper argues that a more comprehensive and fundamental two-track regulatory system may be a viable model for regulating into the future. Such a system would allow regulators to more effectively respond to the changing nature of markets and industry demands and at the same time manage government and community calls for stronger evidence that risks are being properly managed.

A two-track regulatory system allows regulators to integrate a range of concession based schemes into a more comprehensive framework that has stringent and consistent requirements on how to manage risk. This would allow the model of regulation to move away from an ad-hoc, smorgasbord approach where operator specific schemes are developed to address niche industry concerns, to a more integrated and coordinated approach. The high track model of regulation would ensure the consistent application of safety, efficiency and environmental performance principles. Such an approach would ensure a common application and assessment process and integrate standardized monitoring and reporting technologies. More sophisticated enforcement practices can be integrated into the high track system where greater engagement between regulator and operator is common. Such engagement would have a focus on experimentation and building industry compliance capability.

At the base track enforcement practices and industry initiatives should be aimed at building and incentivising operators to improve compliance levels to move into the higher track regulatory scheme. Enforcement should act to push the willing and capable firms up into the higher standard regulatory scheme and once within this framework firms would then be eligible to access more generous regulatory limits. An effective way of ensuring firms remain compliant within such a regime is the threat of sanction and return to the base track system that relies on more stringent and less generous prescriptive limits. How such a regulatory system might operate is illustrated in Figure 3 below.

Formally developing a two-track regulatory system enables regulation to respond to the changing structure of the road transport industry. Generally, larger firms and the more innovative small and medium sized companies would be able to move into the high track system. The two-track framework also recognizes the fundamental structure of the industry, noting that the majority of operators are small and engaged in local work. For many of these predominantly ancillary operators the prescriptive regulatory regime is adequate and appropriate given the nature of the tasks they undertake and the simplicity of their business systems and operational capacity. The

two-track regulatory framework recognizes that there is high turnover in the industry with ease of entry and exit for many operators. Standard prescriptive regulation and enforcement practices remain appropriate for a large proportion of the industry and this scheme allows such approaches to continue.

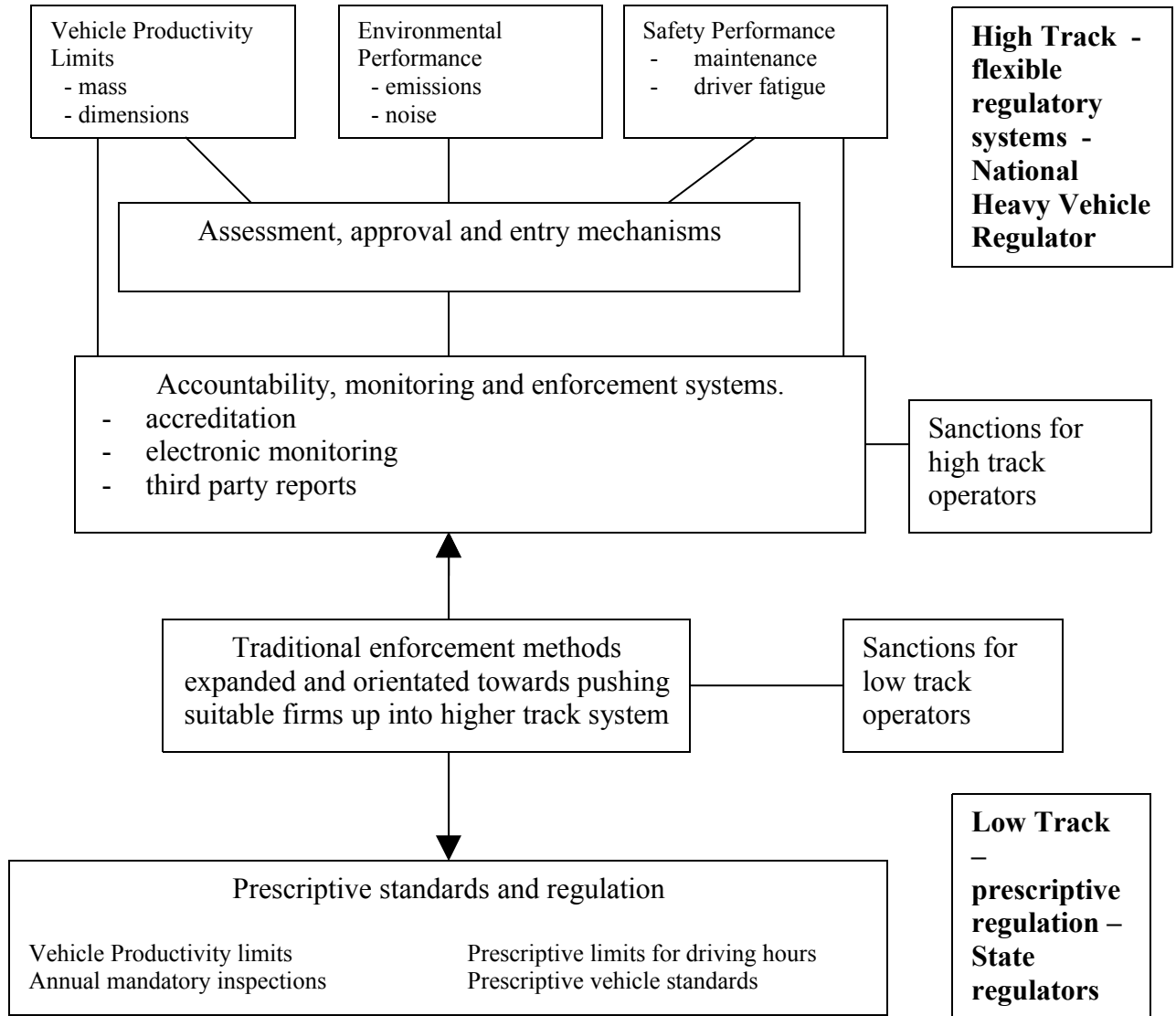


Figure - 3 Two-track Regulatory System for the Heavy Vehicle Sector

Institutional Arrangements

The two-track regulatory system could also be effectively linked to the changing institutional framework developing around the regulation of the Australian heavy vehicle industry providing clearer delineation of roles amongst enforcement agencies. The proposed national heavy vehicle regulator (DITRD&LG 2008) could act as the responsible agency for the administration and enforcement of the higher track system. State road agencies could remain focused on the enforcement of the low track prescriptive regulatory system with which they have extensive familiarity. This institutional separation of regulatory regimes creates incentives for firms to improve their compliance performance and access more flexible limits. Arrangements would

also encourage state agencies to push firms with strong compliance capacity into the higher track system. The sector would therefore be subject to both market incentives as well as enforcement practices that are orientated to build the compliance capacity of trucking firms and move them up into the higher track regime.

A two-track system allows regulators to rebuild a regulatory framework that is culturally orientated towards higher levels of compliance and enables the introduction of more sophisticated monitoring and enforcement arrangements. These arrangements are likely to draw on a more elaborate mix of self-regulation and reporting, audit reports, third party monitoring, higher levels of engagement and joint problem solving between firms and the regulator. Advances in technology, in-vehicle systems and other surveillance and monitoring systems mean industry and regulators can more readily support sophisticated and complex arrangements that would inevitably go with a two-track regulatory system.

7. Weakness of the Two-track Approach

Unfair Competition - Establishing a two-track system also presents difficulties. Such a system is likely to be highly complex to administer for regulators and presents challenges for industry in terms of participation. It moves the regulatory model away from the principal of 'one rule for all', which is fundamental to equity and fairness and therefore introduces aspects of unfair competition. This may be potentially serious where such inequity between businesses is reinforced by the state through regulation. Managing this issue would require careful attention from regulators (including competition authorities) and industry.

Complex Enforcement - A two-track system creates complexity and difficulties for enforcement staff. Whilst discussion has suggested this can be managed with the institutional differentiation that will occur with the establishment of the national heavy vehicle regulator, governing and regulating across federal systems is inherently complex. It is inevitable that unscrupulous operators will appeal to alternative jurisdictions to exploit loopholes and technical opportunities presented by a complex and tiered regulatory framework.

Costly Implementation - Instituting regulatory incentives for heavy vehicle operators to lift their compliance performance and then subject operators to a higher system of regulation requires comprehensive, strong and sophisticated enforcement of both tracks. This may prove costly for regulators and place additional demands on the compliance and enforcement program. Governments may be reluctant to fund the expansion of enforcement agencies and thus the system may never reach its full potential as a regulatory framework.

Ritualism, Abuse and Game Playing - Models of self-regulation are always exposed to abuse and manipulation (Braithwaite et al. 2007). Many firms may simply engage in ritualistic forms of documentation and auditing without actually changing day-to-day practice. In an environment where enforcement is under resourced, the opportunities for exploitation and abuse increase. If instituted but not appropriately resourced, a situation could arise where the regulatory framework is subject to more abuse and game playing than under the current regime.

8. Conclusion

Regulation is a dynamic and complex process. It is a process that may engage and work with industry in complex and sophisticated programs that deliver a range of positive outcomes for the community and firms. At the extreme end of the spectrum regulation provides prescriptive guidance for firms on minimum requirements for safe and legally compliant operations. For many firms regulatory agencies are distant bodies and engagement is kept to an absolute minimum (Braithwaite 2003). The experience of stakeholder groups in the Australian heavy vehicle sector suggests that accreditation programs such as NHVAS provide opportunities for regulatory innovation and higher levels of engagement between industry and operators. This relatively new model of regulatory practice suggests that significant opportunity exist to develop and build a comprehensive regulatory regime orientated towards innovation and flexibility. However, the interest and capacity of trucking firms to participate in such a system is not universal. For this reason a two-track regulatory system has appeal. The high track builds on the experience of NHVAS evolving it into a comprehensive flexible regulatory system. The low track remains the standard prescriptive system. This base system caters for all participants in the sector representing the minimum requirements for operators. Instituting a two-track regulatory system will help incentivise compliance and enforcement strategies towards building operator capacity to better understand regulatory requirements, meet these requirements, and where possible, move beyond the minimum limits to enter a high track system that continues to push the boundaries, both for industry and the community. Developing such a system has risks and also presents great opportunities.

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